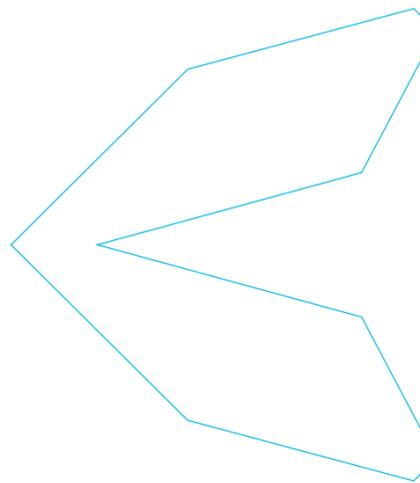


# Journal of Scientific Exploration

Anomalistics and Frontier Science



## GUEST EDITORIAL

582 The Yin-Yang of Spirituality: An Introduction to the Special Issue  
**CARRIE CHILDS & CHRIS HOWARD**

## RESEARCH ARTICLES

- 586 Death, Ghosts, and Spiritual Tourism: Conceptualizing a Dark Spiritual Experience Spectrum for the Paranormal Market  
**RACHAEL IRONSIDE**
- 602 Perceptual Bandwagon Effects With "Deep" Imaginary Companions  
**RENSE LANGE, JAMES HOURAN, NEIL DAGNALL, KENNETH DRINKWATER, & GIOVANNI B. CAPUTO**
- 616 Facing Death Anxiety: Effects of Professional Exposure to Death and Dying  
**KELLY A. CURTIS, NEIL DAGNALL, KEN DRINKWATER, & ANDREW DENOVA**
- 633 Interdisciplinary Review of Demonic Possession Between 1980 and 2023: A Compendium of Scientific Cases  
**ÁLEX ESCOLÀ-GASCÓN, MARIA ALEJANDRA OVALLE, & LUKE J. MATTHEWS**

## ESSAYS

- 665 The Dark Spirit of the Trickster Archetype in Parapsychology  
**LANCE STORM**
- 683 The Darker Side of Near-Death Experiences  
**BRUCE GREYSON**

## BOOK AND MULTIMEDIA REVIEWS

- 699 The Heyday of Mental Mediumship 1880s-1930s: Investigators Mediums and Communications  
**JAMES MCCLENON**
- 702 Toward a Science of Clinical Psychology: A Tribute to the Life and Works of Scott O. Lilienfeld  
**TANA DINEEN**
- 705 Ghosted! Exploring the Haunting Reality of Paranormal Encounters  
**CHRISTINE SIMMONDS-MOORE**
- 714 Traumas of the Mind-Brain-Body: PTSD: Lonely Pioneers  
**HENRY BAUER**

720 The Elusive Force: A Remarkable Case of Poltergeist Activity and Psychokinetic Power  
**ROSEMARIE PILKINGTON**

## SPECIAL SUBSECTION

- 722 Editor-In-Chief's Preface to the Target Article Section  
**JAMES HOURAN**
- 724 From 'Baby Doctor' to 'Witch Doctor': A Retrospective of Charles Tramont's Work with Spirit Releasement Therapy  
**NANCY SMOOT TRAMONT**
- 737 Confronting the Boggle Threshold of Tramont's "Spirit Releasement Therapy"  
**JACK HUNTER**
- 740 Science and Spiritual Practices: How Far Can The Dialogue Proceed? Tramont's Spirit Releasement Therapy as a Case Study  
**EVERTON DE OLIVEIRA MARALDI**
- 747 The Neuroscience of Spirits: A Spark in the Dark  
**PETER BRUGGER**
- 751 Commentary on "From Baby Doctor to Witch Doctor"  
**ROBERT D. KLAUBER**
- 755 Meaning Responses and "Rituals of the Mind"? A Nuanced Critical Analysis of an Unconventional Therapeutic Approach  
**MADELEINE CASTRO**
- 761 Response to Commentaries on "From 'Baby Doctor' to 'Witch Doctor'"  
**NANCY SMOOT TRAMONT**
- 766 Data Versus Belief - Interpretation, Ideology, and the Limits of Science: Afterword to the Special Subsection  
**BRIAN LAYTHE**

## CLOSING EDITORIAL

776 Championing "Exchange and Cooperation" Efforts in Frontier Science: Epilogue to the Special Issue  
**JAMES HOURAN & MALCOLM SCHOFIELD**

## ANNOUNCEMENTS

787 Announcements



Journal of Scientific Exploration  
ANOMALISTICS AND FRONTIER SCIENCE  
Volume 37, Issue 4  
ISSN 0892-3310 (836)  
[journalofscientificexploration.org](http://journalofscientificexploration.org)



A Publication of the  
**SOCIETY FOR SCIENTIFIC EXPLORATION**

**VOLUME 37**  
**ISSUE 4**  
**Winter 2023**



**Editor-in-Chief:** James Houran, Editor@ScientificExploration.org

---

**Guest Editor:** Carrie Childs, c.childs@derby.ac.uk

**Guest Editor:** Chris Howard, c.howard1@derby.ac.uk

**Guest Editor:** Malcolm B. Schofield, m.schofield@derby.ac.uk

**Managing Editor:** Brian Laythe, Journal@ScientificExploration.org

**Manuscript Submission:** <http://journalofscientificexploration.org/index.php/jse/>

**Published by** the Society for Scientific Exploration (SSE)—<https://www.scientificexploration.org>

**Chair, SSE Publications Committee:** Garret Moddel, University of Colorado, Boulder

**Book and Multimedia Reviews Editor:** P. David Moncrief, pdmoncrief@yahoo.com

**JSE Media Specialist:** Cindy Little, jsemedia@scientificexploration.org

### **JSE EDITORIAL BOARD**

Imants Barušs, University of Western Ontario, London, Ontario, Canada

Robert Bobrow, Stony Brook University, Stony Brook, New York, USA

Jeremy Drake, Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts, USA

Álex Escolà-Gascón, Comillas Universidad Pontificia, Madrid, Spain

Hartmut Grote, Cardiff University, United Kingdom

Rachael Ironside, Robert Gordon University, Aberdeen, United Kingdom

Rense Lange, Instituto Politécnico de Gestão e Tecnologia, Vila Nova de Gaia, Portugal

James G. Matlock, Parapsychology Foundation

Jeff Meldrum, Idaho State University, Pocatello, ID, USA

Julia Mossbridge, University of San Diego, San Diego, CA, USA

Roger D. Nelson, Princeton University, Princeton, New Jersey, USA

Mark Rodeghier, Center for UFO Studies, Chicago, Illinois, USA

Paul H. Smith, Remote Viewing Instructional Services, Cedar City, Utah, USA

Harald Walach, Viadrina European University, Frankfurt, Germany

N. C. Wickramasinghe, University of Buckingham, UK; University of Ruhuna, Sri Lanka

**Subscriptions & Previous Journal Issues:** Order at [scientificexploration.org](http://scientificexploration.org)

**Copyright:** Authors share copyright (JSE has first serial rights). While under JSE review, articles may not be published elsewhere except on the author's website. JSE has the right to make accepted articles available online and through print subscription. Content may be reused with proper citation, noncommercially.

**Aims and Scope:** The *Journal of Scientific Exploration* is an Open Access journal, which publishes material consistent with the Society's mission: to provide a professional forum for critical discussion of topics that are for various reasons ignored or studied inadequately within mainstream science, and to promote improved understanding of social and intellectual factors that limit the scope of scientific inquiry. Topics of interest cover a wide spectrum, ranging from apparent anomalies in well-established disciplines to rogue phenomena that seem to belong to no established discipline, as well as philosophical issues about the connections among disciplines. See Author Guidelines at <https://journalofscientificexploration.org/index.php/jse/about/submissions>

**Open Access:** The *Journal of Scientific Exploration* is a Platinum Open Access journal as of 2018 with a CC-BY-NC Creative Commons license, shared copyright journal. Platinum Open Access means there are no fees to readers and no fees to authors—neither page charges (APCs) nor open access fees. CC-BY-NC means Creative Commons open access license 4.0, with full attribution, no commercial use (except excerpts). Excerpts and reuse are allowed with no changes and with a full citation of the original work. An entire article cannot be resold. Shared copyright means the Society for Scientific Exploration shares copyright with its JSE authors. The Journal of Scientific Exploration is indexed in the Directory of Open Access Journals (DOAJ), Elsevier Abstracts, and Scopus.



**GUEST EDITORIAL**

- 582 The Yin-Yang of Spirituality: An Introduction to the Special Issue  
**CARRIE CHILDS & CHRIS HOWARD**

**RESEARCH ARTICLES**

- 586 Death, Ghosts, and Spiritual Tourism: Conceptualizing a Dark Spiritual Experience Spectrum for the Paranormal Market  
**RACHAEL IRONSIDE**
- 602 Perceptual Bandwagon Effects With “Deep” Imaginary Companions  
**RENSE LANGE, JAMES HOURAN, NEIL DAGNALL, KENNETH DRINKWATER, & GIOVANNI B. CAPUTO**
- 616 Facing Death Anxiety: Effects of Professional Exposure to Death and Dying  
**KELLY A. CURTIS, NEIL DAGNALL, KEN DRINKWATER, & ANDREW DENOVA**
- 633 Interdisciplinary Review of Demonic Possession Between 1980 and 2023: A Compendium of Scientific Cases  
**ÁLEX ESCOLÀ-GASCÓN, MARIA ALEJANDRA OVALLE, & LUKE J. MATTHEWS**

**ESSAYS**

- 665 The Dark Spirit of the Trickster Archetype in Parapsychology  
**LANCE STORM**
- 683 The Darker Side of Near-Death Experiences  
**BRUCE GREYSON**

**BOOK AND MULTIMEDIA REVIEWS**

- 699 The Heyday of Mental Mediumship 1880s-1930s: Investigators Mediums and Communications  
**JAMES MCCLENON**
- 702 Toward a Science of Clinical Psychology: A Tribute to the Life and Works of Scott O. Lilienfeld  
**TANA DINEEN**
- 705 Ghosted! Exploring the Haunting Reality of Paranormal Encounters  
**CHRISTINE SIMMONDS-MOORE**
- 714 Traumas of the Mind-Brain-Body: PTSD: Lonely Pioneers  
**HENRY BAUER**
- 720 The Elusive Force: A Remarkable Case of Poltergeist Activity and Psychokinetic Power  
**ROSEMARIE PILKINGTON**

**SPECIAL SUBSECTION**

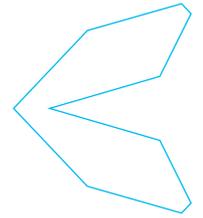
- 722 Editor-In-Chief’s Preface to the Target Article Section  
**JAMES HOURAN**
- 724 From ‘Baby Doctor’ to ‘Witch Doctor’: A Retrospective of Charles Tramont’s Work with Spirit Releasement Therapy  
**NANCY SMOOT TRAMONT**
- 737 Confronting the Boggle Threshold of Tramont’s “Spirit Releasement Therapy”  
**JACK HUNTER**
- 740 Science and Spiritual Practices: How Far Can The Dialogue Proceed? Tramont’s Spirit Releasement Therapy as a Case Study  
**EVERTON DE OLIVEIRA MARALDI**
- 747 The Neuroscience of Spirits: A Spark in the Dark  
**PETER BRUGGER**
- 751 Commentary on “From Baby Doctor to Witch Doctor”  
**ROBERT D. KLAUBER**
- 755 Meaning Responses and “Rituals of the Mind”? A Nuanced Critical Analysis of an Unconventional Therapeutic Approach  
**MADELEINE CASTRO**
- 761 Response to Commentaries on “From ‘Baby Doctor’ to ‘Witch Doctor’”  
**NANCY SMOOT TRAMONT**
- 766 Data Versus Belief - Interpretation, Ideology, and the Limits of Science: Afterword to the Special Subsection  
**BRIAN LAYTHE**

**CLOSING EDITORIAL**

- 776 Championing “Exchange and Cooperation” Efforts in Frontier Science: Epilogue to the Special Issue  
**JAMES HOURAN & MALCOLM SCHOFIELD**

**ANNOUNCEMENTS**

- 787 Announcements



GUEST EDITORIAL

# The Yin-Yang of Spirituality: An Introduction to the Special Issue

Carrie Childs

University of Derby

orcid.org/0000-0002-5199-9710



Chris Howard

University of Derby



The concept of *spirituality* has a long and winding history. The term is rooted in Christianity, where “the spiritual” was initially contrasted with that “of the flesh,” meaning everything that is contrary to the Spirit of God. The “spiritual person” was someone who lived under the influence of the Spirit of God and had “the mind of Christ” (1 Corinthians 2:15–16). In contrast, “the flesh profits nothing,” meaning that there is no hope of salvation or spiritual insight that can be achieved through human effort. Throughout the Middle Ages, the “spiritual” was living in line with a set of Christian values regulated and controlled through the centralized power of the Church. The grip of the Church eventually eroded through a series of crises from the Black Death, famine, the breakdown of the feudal system, the rise of Protestantism, and the fall of the Holy Roman Empire. Spirituality, in turn, shifted from the authority of the Church to an internal experience that included the mental aspects of life (Sheldrake, 2013).

In the 21st century, the concept of spirituality strayed from its conventional religious foundation and is now understood as a broad and multifaceted concept. In Western countries particularly, people increasingly identify as spiritual but not religious and are turning towards secular and more individual forms of spirituality (Fuller, 2001). These include diverse practices such as fasting to achieve control over one’s desires and senses for the sake of spiritual transformation, seeking spiritual experiences in nature to appreciate the beauty and interconnectedness of the natural world, and astrology as a spiritual tool to develop a deeper understanding of the self and the world. The task of providing a *true* definition of spirituality is a “moving target,” as definitions continue to shift and expand (Bregman, 2020), although most researchers broadly characterize it as *the search for, or communion with, the sacred* (Kapuscinski & Masters, 2010; Pargament et al., 2013). We are therefore left to understand how this notion of spirituality— as manifested via attitudes, beliefs, or experiences— has been studied and explored within an extensive research literature.

An overwhelming dominance of research has explored the “positive” or efficacious aspects of spirituality on psychological well-being and health-related behaviors (Bozek et al., 2020). The take-home message is that the more spiritual that we claim to be, the better we tend to feel about ourselves. Spirituality has thus become a bedrock of the “positive sciences” where the darker aspects of human existence are disavowed in favor of how our spiritual life can be probed and poked as a variable to find how best it can improve our health and welfare (Roussiau et al. 2023). These assumptions are embedded within popular culture and the self-help industry, where spirituality has exclusively been aligned with improving one’s well-being. As Humphrey (2015) noted, “the literature is replete with monopolar models which celebrate only the light and love awaiting spiritual seekers” (p. 2377).

<https://doi.org/10.31275/20233231>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.



But this perspective is arguably short-sighted, as an awareness of the darker side to spirituality helps provide a more holistic understanding and appreciation of the human condition. There is a dialectical tension at play in spirituality, where a path to enlightenment and salvation is riddled with sacrifice and sometimes self-destruction. In this sense, there is no “yin” without “yang.” This is exemplified in the 2019 film *Saint Maude*, directed by Rose Glass. Katie, who refers to herself as Maud, is a devout Christian who works as a palliative care nurse in a seaside town in Britain for an ex-dancer, Amanda, who is dying of cancer. Amanda lives a life of excess and often mocks Maud’s spirituality. Maud draws on her spirituality to give her personal strength, but by the end (sorry for spoilers), she sets herself on fire for the “glory of God” and is left screaming in agony as she burns alive. Here, we have spirituality literally engulfed in both positivity and negativity; we cannot simply neglect one for the other. It is at this juncture, to provide a counterbalance, that we are interested in the darker side of spirituality.

Distinctions have likewise been made between healthy and pathological spirituality, with the latter being practices that cause harm to oneself or others (Crowley & Jenkinson, 2009). For instance, consider Persinger’s (1997) study that strikingly found “of the men who reported a religious experience, attended church weekly, and displayed elevated complex partial epileptic like signs (5.7% of 629 surveyed males), 44% stated they would *kill another person if God told them to do so*” (p. 128, emphasis added). Other sobering examples of stress and suffering in spirituality abound, including different forms of “ecstatic pain” related to fasting, celibacy, tattoos, fire walking, body mortification, blood-letting, snake handling, or self-flagellation. Extreme rituals like these and others are not limited to arcane cults but can be found within the mystery traditions in Christianity, Islam, and Judaism, as well as the customs of some secular communities (Xygalatas, 2022).

Relatedly, Glucklich (2014) reviewed a broad selection of mystical writings to identify two fundamental dimensions in ecstatic mystical experience —a feeling of self-transcendence and an extremely high level of positive affect. It seems that “pain” is instrumental in promoting both experiences and is thus extremely pervasive among mystics who report ecstatic states of consciousness. On a more practical level, Xygalatas et al. (2019) reported that some extreme rituals even serve as culturally-prescribed remedies for a variety of maladies, and especially those related to mental health. Other times, the prosocial effects of darker expressions or activities of spirituality facilitate social bonding (e.g., Munson et al., 2014) or the moral cleansing of collective groups (e.g., Mitkidis et al., 2017). This view echoes Hobson et al. (2018), who characterized

the function of rituals in terms of regulating emotions, performance goal states, and social connection.

Darker forms of spirituality also include the concept of “offensive spirituality,” which refers to presenting oneself as “spiritually developed” to induce a false sense of superiority and using spiritual practices in a way that limits someone else’s actions or choices (Battista, 1996). You can see this played out with sex and death cults that function through “prophetic and enlightened” leaders. The Jonestown massacre in 1978 is a harrowing reminder of the power of words when spoken from the mouths of cult leaders. When Jim Jones uttered the words “*drink the Kool-Aid*,” it sparked a mass suicide of over 900 people. Offensive spirituality, therefore, functions through the cult leader as an ego-ideal for their followers who is instilled as a “father” (it is not surprising then that we find most cult leaders are men) that lays down the law and offers a means of identification. The image of the cult leader becomes one to emulate and aspire to for the followers. This is well recognized within the make-up of cults themselves, for example, The Family International’s (formerly Children of God) “Love Charter” has devised a scoring system which measures members’ spiritual and practical progress within the group and their willingness to follow leadership.

Cultic groups (typically referred to in the research literature as psychologically manipulative groups) have been extensively studied within psychology and related fields (e.g., Castaño et al., 2022, Stein, 2021) and are a very real social phenomena with significant psychological, social and legal implications. The cult, as discussed above, needs the symbolic father figure who gives spiritual enlightenment and commands the sacrifice of the body of their followers in a ritualized act (e.g., sex orgies or mass suicide). The cult, therefore, functions through a ‘give and take’, but there are other forms of dark spirituality that are cannibalistic in nature and operate purely through consumption. It is to this end we see the emergence of the “energy vampire,” a metaphorical concept which has entered common parlance and refers to people who are typically close to us, such as friends, family, or coworkers, who either consciously or unconsciously feed off others’ emotional or mental energy. The concept has been reified, and energy vampires are positioned as a threat to spiritual and emotional health, as they leave us feeling drained and despondent, forgetful of who we are and what our purpose is. Energy vampire characteristics include always wanting to be the center of attention, lacking empathy, and blaming others for everything.

The energy vampire has become a popular device in film and TV, for example, with the character of Colin Robinson played by Mark Proksch in the series *What We Do In The Shadows*, exemplifying this. There is the use of both met-

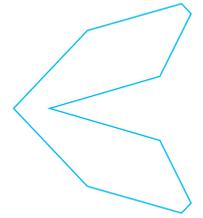
aphor and metonymy where Colin works (both financially and to feed) in the corporate world by draining the life of his co-workers through extended monologues during the daily grind of routines when at the water machine, filing cabinet, or by the printer. The energy vampire symbolically serves as a means of draining the life from us, just like working through the repetition of boring activities. Navigating energy vampires is a huge issue in pop psychology, which is awash with signs to watch out for and strategies to banish energy vampires. For example, Alla Svirinskaya (2019), energy healer to the stars, described energy as “a precious part of your identity” (back cover, emphasis added). She recommended that to ward off energy vampires, people discover their own auras and tune into the auras of others, being alert to all negativities. The energy vampire, nonetheless, has become a spirituality focused on self-growth and enjoyment from feeding and draining of the desires, hopes, and goals of others. Given the 21<sup>st</sup> century focus on the individual and self-growth, where we are told to look after “Number 1,” the energy vampire comes as no surprise as it feels like a symptom of how we presently live.

This Winter 2023 Special Issue provides the forum to explore what darker spiritualities entail in the modern era. The editorial has set the scene with the mutation of dark spiritualities from their religious origins that provided a moral compass on how to live our lives. We have argued that dark spiritualities take different forms, from cults to energy vampires, and are reproduced in films and modern culture. Whilst these darker spiritualities are secular in the 21<sup>st</sup> century, they still retain an ethical focus on how best to take care of oneself. The answer seemingly tends toward self-sacrifice or the sacrifice of others for your own self-growth. It is a “dog eat dog” world, and at this juncture, the special issue takes up the challenge of addressing how these darker spiritualities appear and function, what they tell us about people, our spiritual beliefs, and the wider culture to which we belong. The topics and contexts presented across the papers are both broad and diverse in scope, ranging from demonic possession, dark tourism, death exposure to hypnotic sessions, but they retain a focus on darker spirituality that pulls them together.

## REFERENCES

- Battista, J. R. (1996). Offensive spirituality and spiritual defenses. In B. W. Scotton, A. B. Chinen, & J. R. Battista (Eds.), *Textbook of transpersonal psychiatry and psychology* (pp. 250–260). Basic Books.
- Božek, A., Nowak, P. F., & Blukacz, M. (2020). The relationship between spirituality, health-related behavior, and psychological well-being. *Frontiers in Psychology, 11*, Article 1997. <https://doi.org/10.3389/fpsyg.2020.01997>
- Bregman, L. (2020). Spirituality definitions: A moving target. In *Spirituality: Theory, praxis and pedagogy* (online ed.). Brill. [https://doi.org/10.1163/9781848880917\\_002](https://doi.org/10.1163/9781848880917_002). Accessed 19 Aug. 2023.
- Castañó, Á., Bélanger, J. J., & Moyano, M. (2022). Cult conversion from the perspective of families: Implications for prevention and psychological intervention. *Psychology of Religion and Spirituality, 14*, 148–160. <https://doi.org/10.1037/rel0000410>
- Crowley, N., & Jenkinson, G. (2009). Pathological spirituality. In C. Cook, A. Powell, & A. Sims (Eds.), *Spirituality and psychiatry* (pp. 254–272). RCPsych Publications.
- Fuller, R. C. (2001). *Spiritual, but not religious: Understanding unchurched America*. Oxford University Press. <https://doi.org/10.1093/0195146808.001.0001>
- Glass, R. (Director). (2019). Saint Maud [Film]. A24.
- Glücklich, A. (2014, Feb. 3). Pain and ecstatic religious experience. In *Oxford handbook topics in religion* (online ed.). Oxford Academic. <https://doi.org/10.1093/oxfordhb/9780199935420.013.38>. Accessed 16 Aug. 2023.
- Hobson, N. M., Schroeder, J., Risen, J. L., Xygalatas D., & Inzlicht, M. (2018). The psychology of rituals: An integrative review and process-based framework. *Personality and Social Psychology Review, 22*, 260–284. <https://doi.org/10.1177/1088868317734944>
- Humphrey, C. (2015). Shadows along the spiritual pathway. *Journal of Religion and Health, 54*, 2376–2388. <https://doi.org/10.1007/s10943-015-0037-2>
- Kapuscinski, A. N., & Masters, K. S. (2010). The current status of measures of spirituality: A critical review of scale development. *Psychology of Religion and Spirituality, 2*(4), 191–205. <https://doi.org/10.1037/a0020498>
- Mitkidis, P., Ayal, S., Shalvi, S., Heimann, K., Levy, G., Kyselo, M., Wallot, S., Ariely, D., & Roepstorff, A. (2017). The effects of extreme rituals on moral behavior: The performers-observers gap hypothesis. *Journal of Economic Psychology, 59*, 1–7. <https://doi.org/10.1016/j.joep.2016.12.007>
- Munson, J., Amati, V., Collard, M., & Macri, M. J. (2014). Classic Maya bloodletting and the cultural evolution of religious rituals: Quantifying patterns of variation in hieroglyphic texts. *PLoS One, 9*, Article e107982. <https://doi.org/10.1371/journal.pone.0107982>
- Pargament, K. I., Mahoney, A., Exline, J. J., Jones, J. W., & Shafranske, E. P. (2013). Envisioning an integrative paradigm for the psychology of religion and spirituality. In K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), *APA handbook of psychology, religion, and spirituality (Vol. 1): Context, theory, and research* (pp. 3–19). American Psychological Association. <https://doi.org/10.1037/14045-001>

- Persinger, M. A. (1997). "I would kill in God's name:" Role of sex, weekly church attendance, report of a religious experience, and limbic lability. *Perceptual and Motor Skills*, 85, 128–130. <https://doi.org/10.2466/pms.1997.85.1.128>
- Sheldrake (2013). *Spirituality: A brief history*. John Wiley & Sons.
- Stein, A. (2021). *Terror, love and brainwashing: Attachment in cults and totalitarian systems*. Routledge. <https://doi.org/10.4324/9781003030959>
- Svirinskaya, A. (2019). *Own your energy: Develop immunity to toxic energy and preserve your authentic life force*. Hay House, Inc.
- Xygalatas, D. (2022). *How seemingly senseless acts make life worth living*. Profile Books.
- Xygalatas, D., Khan, S., Lang, M., Kundt, R., Kundtová-Kloková, E., Krátký, J., & Shaver, J. (2019). Effects of extreme ritual practices on psychophysiological well-being. *Current Anthropology*, 60, 699–707. <https://doi.org/10.1086/705665>



RESEARCH  
ARTICLE

# Death, Ghosts, and Spiritual Tourism: Conceptualizing a *Dark Spiritual Experience Spectrum* for the Paranormal Market

Rachael Ironside

r.j.ironside@rgu.ac.uk

orcid.org/0000-0003-2513-0998

Robert Gordon University

## HIGHLIGHTS

Dark and paranormal tourism involves secular-looking, commercial activities with characteristics that can create intense spiritual experiences.

## ABSTRACT

Paranormal tourism is a lucrative market offering visitors the opportunity to engage with enchanting experiences and stories in destinations around the world. Specifically, ghost tourism connects people to the dead (and death) through dark narratives, supernatural legends, and participatory experiences. Previous scholarship has suggested that ghost tourism exhibits characteristics of dark tourism (by visiting dark places) and spiritual tourism (by engaging in spiritual practices); however, this relationship has not been fully explored. The purpose of this conceptual paper is to consider where the experiential and motivational characteristics of dark, spiritual, and paranormal tourism converge, and to consider whether this convergence produces a dark spiritual experience for consumers. Three dimensions are identified as contributing towards the degree of dark experience offered by ghost tourism: place, promotion and production, and participation. To conclude, a *Dark Spiritual Experience Spectrum* is proposed, illustrating the characteristics of each dimension and their influence on the degree of dark spiritual experience offered to consumers. It is argued that these dimensions have the potential to impact the tourist experience, influence visitor motivations, and, consequently, drive an evolving paranormal market.

SUBMITTED October 17, 2023

ACCEPTED November 23, 2023

PUBLISHED December 31, 2023

<https://doi.org/10.31275/20233227>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## KEYWORDS

Paranormal tourism, spiritual tourism, dark tourism, ghost tourism, place, dark spirituality.

## INTRODUCTION

Paranormal tourism has grown exponentially in recent years (Bader, Baker & Mencken, 2017; Obradović et al., 2021). Driven by a growing consumer market for the supernatural and otherworldly, a wide variety of tourism, events, and hospitality experiences have emerged, offering visitors the opportunity to engage in an evolving 'enchantment economy' (Houran et al., 2020, p. 18). The term

*paranormal* alone is complex (Waskul & Eaton, 2018) and may encompass a wide variety of beliefs and experiences, including psi, after death communication, reincarnation, UFOs, and mythical creatures. In the context of tourism, it is considered a form of special interest or niche tourism in which people visit places "that embody belief systems beyond normal rational views" (Pharino, Pearce & Price, 2018, p. 21). Under the umbrella of paranormal tourism sits a range of potential travel experiences, which may in-



clude the search for UFOs, Bigfoot, mythical animals, and ghosts. For business and destinations, the supernatural offers a unique opportunity for branding and experiential diversification (Davies, 2007; Houran et al., 2020). For cities and towns, ghost tours provide an opportunity to present the history and culture of a location through a spectral lens. Roswell, Transylvania, and Salem all provide examples of places transformed by the commodification of supernatural legends (Candrea et al., 2016; Gen-carella, 2007; Light, 2007; Meehan, 2008). Hotels may brand themselves based on their haunted status, and the events industry has capitalized on the desire for immersive experiences that cater to a supernatural theme. The paranormal industry is lucrative, offering the potential for significant revenue (Houran et al., 2020) and brand personality (Hill et al., 2018; 2019). As Hill et al. (2018) define, ghostly narratives have enduring qualities that are versatile, adaptable, participatory in nature, universal, and scalable (VAPUS), which make them particularly well-suited to the tourism market. Furthermore, the immersive and participatory nature of paranormal tourism aligns it with a growing consumer trend for experiential and transformative experiences (Houran et al., 2020; Pine & Gilmore, 1999).

Arguably, ghost tourism has received the greatest attention from academic scholarship and may be defined as “the desire to encounter ghosts, interest in the supernatural, and visitation of places associated with the spirit world such as cemeteries, haunted houses, castles, and historic towns” (Garcia, 2012, p. 14). The tourism, hospitality, and events industry have evolved to accommodate ghost tourism, offering “leisure, investigation, services, products, or conventions” (Haynes, 2016, p. 3) across a range of experiences and venues, including historic buildings, hotels, restaurants, museums, and tours (Ironside, 2018; Houran et al., 2020). Popular forms of ghost tourism include ghost tours/ walks, which guide visitors around cities or buildings relaying the supernatural legends, and ghost hunting (or paranormal investigations), which invite visitors to ‘experience ghosts’ through a combination of spiritual and pseudo-scientific practice (Ironside, 2016). While novelty and entertainment are considered factors for participation in ghost tourism (Garcia, 2012; Thompson, 2008), scholars have also observed more complex motivations that connect ghost tourism to aspects of dark and spiritual tourism. Education and learning about past events (Gentry, 2007; Holloway, 2010), confronting mortality and difficult heritage (Ironside, 2018), spiritual questing and the affirmation of belief and experience (Eaton, 2015; Ironside, 2018), and the search for emotional and cognitive experiences (Dancausa, Hernández & Pérezc, 2020) may all pull visitors

towards ghost tourism. Additionally, a general interest in visiting dark places (Garcia, 2012; Thompson, 2010), the type of experience and guide hosting the event (Holloway, 2010; Krisjanous & Carruthers, 2018; Thompson, 2010), the popularity and propensity of the stories (Hill, 2011; Hill et al, 2019) and the attraction and organization of the experience (Dancausa et al., 2020), have also been considered pull-factors.

Pharino, Pearce, and Price (2018) framed paranormal tourism as a travel phenomenon overlapping aspects of dark and spiritual tourism. The historic routes of ghost tourism in the Spiritualist era (Holzhauser, 2015), its association with a rising spiritual quest culture, and ability to evoke meaningful spiritual encounters (Eaton, 2015), illustrate its connection to some of the characteristics of spiritual tourism. Likewise, the tendency for ghost tourism to be intertwined with dark narratives and human tragedy connect it with the wider dark tourism industry (Houran et al., 2020; Ironside, 2018; Garcia, 2012; Sharpley & Stone, 2009). However, while the relationship between paranormal, spiritual, and dark tourism has been implied, an examination of the points of convergence between these concepts has yet to be fully explored. This paper seeks to rectify this gap in the scholarship and to conceptualize where the (1) experiential and (2) motivational characteristics of dark tourism, spiritual tourism, and paranormal converge. In doing so, this paper considers whether this convergence produces a *dark spiritual experience* for consumers, which drives an evolving paranormal market. Due to the connection between ghost tourism, dark tourism, and spiritual practice, this study will focus on ghost tourism as a specific subset of paranormal tourism.

## Death, Ghosts, and Dark Tourism

Haunted places are generally considered to have a dark, uncanny, or morbid connection. As Eaton (2019) considers, our understanding of haunted spaces emerges from pre-existing cultural representations in folklore and the media. Traditionally, these narratives affirm that hauntings occur in places of “war, slavery, untimely death, criminal activities, or burial” (p3) and may occur due to “improper burial, traumatic or sudden death, unfinished business, revenge, and attachment to material objects, among other causes” (p2). It is unsurprising, then, that dark tourism and paranormal tourism are interconnected.

Visiting sites associated with death have been referred to as “black spot tourism” (Rojek, 1993), “morbid tourism” (Blom, 2000), and “thanatourism” (Seaton, 1996). It has also been linked to an established body of literature concerning ‘dissonant heritage’ (Tunbridge &

Ashworth, 1996) and explored contextually in relation to specific subsets of heritage tourism, including battlefield tourism (Baldwin & Sharpley, 2009), Holocaust tourism (Beech, 2000), and prison tourism (Barton & Brown, 2015). In their seminal paper, Foley and Lennon (1996) introduced the term *dark tourism*, which they defined as “the presentation and consumption (by visitors of real and commodified) of death and disaster sites” (p.198). In the same special issue, Seaton (1996) introduced the term thanatourism as “travel to a location wholly, or partially, motivated by the desire for actual or symbolic encounters with death, particularly, but not exclusively, violent death” (p.240). Thus, while the two terms share similarities, thanatourism has become more narrowly focused on sites specifically associated with death, whereas dark tourism encapsulates a wider array of places connected to death *and* suffering. Over the years, the suitability of the term dark tourism has been critiqued and debated (see Light, 2017), yet it has gained scholarly traction. Due to its ability to capture a wider breadth of death-related travel phenomenon, *dark tourism* will be used for the purposes of this study.

Lennon and Foley (2000) theorize that dark tourism is predominantly a postmodern phenomenon. They argue that visiting sites of death is a contemporary practice and links to events in living memory. However, as Light (2017) considers, this perspective has received criticism since its conceptualization. Travel to witness or contemplate death (“thantopsis”) is considered to have a much longer history (Seaton, 1996; 2009; Bowman & Pezzullo, 2010). The gladiatorial games, pilgrimage, and public execution are often cited as examples of people traveling to bear witness to the death of others. However, despite arguments that thantopsis has influenced travel throughout history, it is also recognized that contemporary society has changed the nature of death-related travel consumption. Stone (2018) considered this to be a “spectacularisation” of death, “in which significant death of Others is commodified as a spectacle within visitor economies and, subsequently, consumed as tourist experiences” (p. 190). As a result, the dark tourism economy has evolved, offering a range of tourism experiences in different death-related sites from those with a more educational focus (such as visiting Auschwitz-Birkenau) to those with an entertainment lens (such as ghost tours or horror-themed events).

As a result, scholars have sought to unpack the complexities of contemporary dark tourism. Strange and Kempa (2003) proposed that there may be multiple shades of darkness across dark tourism sites, Miles (2002) also distinguished between ‘dark’, ‘darker’, and the ‘darkest’ sites dependent on the authenticity of a location. Places in

which dark tourism emerges have formed a considerable focus of research as scholars seek to unpack nuances at the supply-end of dark tourism. Stone’s (2006) typology is perhaps most notable in this regard, presenting a spectrum of dark tourism supply. He proposes that a continuum of dark tourism exists in which those sites of death and suffering are located at the darkest end compared to those *associated* with death and suffering at the lightest end. Along this spectrum, Stone identifies binaries related to authenticity, time from the event, education/ entertainment, and the level of power and ideological significance. Due to the commodification of ghostly narratives for entertainment purposes, paranormal tourism is often positioned towards the lighter end of Stone’s dark tourism spectrum (Garcia, 2012; Wyatt, Leask & Barron, 2021).

Examination of dark tourism supply and an attempt to classify sites dominated early research. However, as Ashworth and Isaac (2015) note, distinguishing between different types of dark tourism through a supply-lens has been hindered by a lack of investigation into visitor experience and behaviour. As they state:

The fatal flaw in these attempts to impose a system of classification upon tourism sites, first separating them into discrete dichotomy of dark from light and then sub-classifying in an increasingly complex hierarchical system, is that the same site evokes different experiences for different visitors – simply, what one visitor finds dark, another does not. (p318)

Others have also noted the lack of focus on the demand of dark tourism (Isaac & Çakmak, 2014; Lennon & Foley, 2000; Stone & Sharpley, 2008), leading to a growing body of research exploring tourist experience, behaviour, and motivation.

In particular, the departure of dark tourism from the usual hedonistic motives associated with tourism has fascinated researchers (Biran & Buda, 2018). Naturally, dark tourism’s association with death, suffering, and macabre subjects led to an assumption that a morbid curiosity or fascination with death would be needed to visit such places. Indeed, dark tourism has been considered by some to be a deviant behavior (Biran & Poria 2012; Stone & Sharpley 2013). However, while an interest in death has been noted as a potential motivating factor (Stone & Sharpley, 2009), it is by far the sole, or prominent motivation documented in contemporary studies. As Chanuanthong and Batra (2016) determine, a wide range of motivations may exist that ‘push’ and ‘pull’ visitors towards dark tourism attractions. Push factors may include education, historic awareness, fact-finding, commemo-

ration, and the search for national and cultural identity (Baidwann, 2022; Dunkley, Morgan, & Westwood, 2011; Farmaki, 2013; Hall, Basarin, & Lockstone-Binney, 2010). While pull factors may be influenced by the media, curiosity, patriotism, personal heritage, or family ties (Foley & Lennon, 1996; Hyde & Harman, 2011; Isaac & Çakmak, 2014; Kokkranikal et al., 2015). The popularisation of sites of dark tourism through film, TV, and social media channels also plays a considerable role in putting dark tourism 'on the map' as well as shedding light on the term dark tourism in popular discourse (Lewis, Schrier, & Xu, 2021). Furthermore, ghosts may act as a draw to places of dark tourism (Pharino, Pearce, & Price, 2018). Ghosts may form part of the wider "spectro-geography" of dark places, manifesting through the troubled memories, materials, and landscapes of a location (McCormack, 2010). Yet, dark places may also become haunted through their association with *literal ghosts* due to their dark heritage narratives and spiritual connection to the spaces of the deceased.

### Spirituality, Spiritualism, and Tourism

Spirituality is closely associated with religiosity or religiousness (Zinnbauer et al., 1997). Both connect to ideas of the sacred and belief, and religion may also provide a framework through which spirituality emerges (Gall, Malette, & Guirguis-Younger, 2011). Spirituality has, however, come to be understood in its own terms, both conceptually and in general discourse. In Roof's (2001) study, he noted a growing subset of the population that recognized themselves as "spiritual but not religious." While both are associated with some form of personal belief, Zinnbauer et al. (1997) observed that religion was more highly associated with formal structure, including religious institutions, rituals, and practices. Spirituality, on the other hand, is often described in personal and experiential terms and may include characteristics such as: a belief system, the search for purpose, connection, self-transcendence and wholeness, existential reality or meaning and way of being in life, and the presence of a unifying force or energy (Chiu et al., 2004; Delgado, 2005). As Johnston and Mayers (2005, p. 386) put it:

Spirituality can be defined as the search for meaning and purpose in life, which may or may not be related to a belief in God or some form of higher power. For those with no conception of supernatural belief, spirituality may relate to the notion of a motivating life force, which involves an integration of the dimensions of mind, body and spirit. This personal belief or faith also

shapes an individual's perspective on the world and is expressed in the way that he or she lives life. Therefore, spirituality is experienced through connectedness to God/a higher being; and /or by one's relationships with self, others or nature.

As such, while spirituality may relate to aspects of religion, it may also sit outside of a religious framework. In its place, however, has emerged an evolving spiritual marketplace that caters towards a growing consumer sensibility to engage in practices and activities that provide spiritual exploration (Eaton, 2015; Roof, 2001).

Spiritual tourism is recognized as an important and growing sector within the wider travel industry. As Heelas and Woodhead (2005) acknowledged, travel has become an important practice in an emerging spiritual marketplace. Despite arguments that tourism is a relatively superficial and frivolous affair grounded in in-authentic experiences or 'pseudo-events' (Boorstin, 1964), it is argued that tourism may exhibit complex, spiritual motives (MacCannell, 1973; Cohen, 1979). Notably, MacCannell (1973) first recognized the ritual aspects of tourism, which he argues "absorbs some of the social functions of religion into the modern world" (p. 589). In their Special Issue, *The Search for spirituality in Tourism: Toward a Conceptual Framework for spiritual tourism*, Cheer, Belhassen, and Kujawa (2017) situate the growth in spiritual tourism within a wider cultural shift towards 'reflexive spirituality' (Roof, 2001) in which the boundaries and doctrines that have traditionally defined spiritual practice are reduced or removed. As they discuss, spiritual tourism is well-positioned to offer opportunities in which, "individuals can examine, consider and practice spirituality...in a way that is not always available in daily life" (Cheer, Belhassen, & Kujawa, 2017, p. 252). The growth and commodification of Yoga tourism (Bowers & Cheer, 2017), drug tourism (Prayag et al., 2016), and meditation retreats (Norman & Pokorny, 2017) offer clear examples. Spiritual tourism is, therefore, disentangled from religious tourism by multiple authors who recognize a distinction between religious and spiritual motives (Cheer et al., 2017; Kujawa, 2017; Wilson, McIntosh & Zahra, 2013). In their conceptual framework for spiritual tourism, Cheer, Belhassen, and Kujawa (2017), argue that spiritual drivers are grounded in secular motivations that focus on the self, including wellness, adventure, self-development, and recreation. In contrast, religious drivers are influenced by motivations of religious observance, cultural performance, reaffirmation of identity, and ritualized practice. Furthermore, spiritual drivers are highly commodified and packaged compared to religious drivers, which are highly institutionalized. Halim, Tatoglu, and Hanefar (2021) support

this, illustrating a 'Religious-Spiritual Tourism Continuum' in which religiosity is associated with visiting places of sacred significance and spirituality being more closely aligned with the search for personal meaning. On review of multiple studies, they propose a conceptual framework for spiritual tourism which recognizes seven key themes: meaning/ purpose in life, consciousness, transcendence, spiritual resources, self-determination, reflection – soul purification, and spiritual coping.

Place is a central component for spiritual tourists. As Cohen (1979) denotes, tourists seeking alternative spiritual experiences out with mainstream religious belief (i.e., "experimental tourists") do so by engaging with authentic spaces and the practices of "others." The character and authenticity of a place may also render it to have a distinctive "spiritual geography" (Henderson, 1993), "sacred" (Sharma, 2022), or "magical" (Singleton, 2017) qualities that evoke extraordinary and meaningful personal encounters. As multiple studies have shown, spiritual experiences may arise in a variety of places, including (although not exclusively) *routes of traditional pilgrimage* (Lopez, González & Fernández, 2017), *natural landscapes* (Bremer, 2021) and *heritage sites* (di Giovine, 2021). Spiritual experience may also be evoked in places associated with dark tourism by bringing visitors in close proximity to death to reflect, commemorate, and form connections with the dead (Hosseini, Cortes-Macías, & Almeida-García, 2022). It is in these dark places that ghost tourism has emerged, offering individuals the opportunity "to pursue spiritual meaning in their own ways" (Eaton, 2015, p. 409) by harnessing a multitude of discourses across science, New Age belief, and the decline of organized religion. In particular, the historic routes of ghost tourism in the Spiritualist movement of the nineteenth century continue to influence discourse and practices, including the use of mediumship, seances, and spiritual cleansing to invoke connections with the spirit world (Eaton, 2015). Like other spiritual spaces, dark places may become sacred spaces (Seaton, 1999; Sharma, 2020), which engender meaningful and transformative personal experiences (Dunkley, 2011). Indeed, Hanks (2015) recognizes ghost tourism, and especially the commercial ghost hunt, as a form of secular pilgrimage, providing the opportunity for individuals to visit places that may transform them from a non-believer into a believer in ghosts. As such, dark tourism and spiritual tourism may intersect in their experiential and place-bound offering to travelers.

Previous studies have generally focused on the connection between spirituality and tourism as being beneficial, particularly in relation to personal well-being and psychological development (Coghlan, 2015; Morgan,

2010). Others have recognized connectedness (Fisher, Francis, & Johnson, 2000; Jarrat & Sharpley, 2017; Steiner & Reisinger, 2006), spiritual growth (Heintzman, 2013; Robledo, 2015), self-awareness (Little & Schmidt, 2006) and altruism (Smith & Diekmann, 2017) as important outcomes. In these studies, the leisure activities that have led to these outcomes have been grounded in pleasant, wholesome, or awe-inspiring environments. Jarratt and Sharpley (2017), for instance, explore spiritual tourist experiences at the seaside, whereas Heintzman (2013) examined spiritual retreat centers. However, the dimensions of spiritual tourism, as recognized by Halim, Tatoglu, and Hanefar (2021), may also be found in environments that are considered uncomfortable, challenging, or 'darker' in nature. Examples of this may be found in forms of tourism that encompass physical and mental challenges. Kunchambo and Little (2022) observe this amongst ecotourists who seek out risk and challenge within natural environments to strengthen a sense of self. Likewise, mountain-based adventure tourism has been linked to eudaimonic well-being development (Ritpanitchajaval, Ashton, and Apollo, 2023). Yet while these experiences may be challenging, unlike ghost tourism, they do not (explicitly at least) illicit encounters with content or places which may be considered 'dark' in nature.

### Dark Spiritual Places

Like all forms of tourism, ghost tourism involves travel from one place to another (Gilbert, 2004). The desirability of place, therefore, plays a significant role in the potential success of attractions and destinations. Place, however, is a complex, multifaceted concept (Creswell, 2015). While it may be determined geographically, different meanings and an alternative sense of place may emerge through our social interactions within it (Massey, 2005). Places are, therefore, not static concepts; they are constantly in movement (Hjorth & Pink, 2014). Paranormal places are, therefore, not intrinsically strange or otherworldly, but may become so through socially constructed practices. A process akin to the "sacralization" of sacred spaces recognized by Sharma (2022) – a "paranormalization". As Edwards (2019) observes, paranormal media plays a considerable role in transforming our understanding of ghosts and the places that they inhabit. Landscapes may be transmogrified by folklore narratives, visitor interaction, and contemporary media practices (Inglis & Holmes, 2003; Houran et al., 2020), which may lend credibility and authenticity to their haunted reputation (Eaton, 2019).

Paranormal places have a natural affinity with sites of dark tourism. This is to say, for places to be *authentically*

haunted and for the potential of paranormal experiences to be realized, they must also be places of “death, suffering and the seemingly macabre” (Stone, 2006, p. 146), at least in the case of ghost tourism. Due to this, popular ghost sites often arise around places of dark heritage, such as ancient cities, cemeteries, hospitals, prisons, and asylums (Garcia, 2012; Thompson, 2010). Sobaih and Nageib (2022) observe how places such as these possess distinguished characteristics that build a haunted environment for people. This “terroir” (Smith, 2015) may be constituted by the physical landscape but also the mood, feeling, history, and stories of a place (Houran et al., 2020; Ironside, 2018). The connection between death and the potential spiritual aspects of place may also denote these spaces as sacred or enchanted. As Drinkwater et al. (2022) considered:

Sacred, enchanted, or haunted spaces can be understood as psychological constructions built from situational and sociocultural context, ambiguous stimuli (i.e., unexpected, unpredictable, or anomalous), and a supposition of supernatural or transcendent agency (p. 203).

In this way, haunted spaces share similarities with spiritual spaces. Drinkwater et al. (2022) draw on the concept of extraordinary architectural experiences (EAEs) in their study of paranormal tourism. These spaces, which may include cathedrals, chapels, temples, and retreats, can induce psychological shifts and facilitate transformational experiences (Bermudez, 2009). Similarly, scholars have observed that the characteristics of paranormal places can induce experiences of “situational-enchancement” (Drinkwater et al., 2022; Houran et al., 2022). They hypothesise situational-enchancement as a complex state of arousal in which competing themes of “Emotional, Sensorial, Timeless, Rational, and Transformative” arousal emerge. These states may trigger a mixture of both pleasant and unpleasant emotional states. This juxtaposition of emotions, triggered by the environment, creates a sudden, unexpected feeling of connection to a “transcendent agent or ultimate reality” (p216). A feeling that is evoked by the sensuous and affective components of haunted spaces (Holloway, 2006; Matless, 2008). The psychological impact of haunted places may also influence the detection and interpretation of subjective (e.g., feelings, sensations) and objective (e.g., objects moving, sounds) paranormal experiences (Houran et al., 2023).

However, while spiritual and haunted spaces may evoke similar feelings of transcendence and enchantment, arguably, places commercialized by the paranormal industry offer something different to tourists in compar-

ison to the generally positive, psychological experiences offered by spiritual tourism (Coghlan, 2015; Morgan, 2010). As ghost experiences tend to be associated with places where the deceased, often tragically, died, there is a *darkness* constructed in paranormal places. This may be particularly true for ghost hunting investigations where visitors are motivated to interact with the dead in the locations associated with their deaths. In some cases, this may be very locale-specific such as a specific room, object, or piece of furniture linked to the death of the individual (Eaton, 2019). Death is, then, part of the terroir of ghost tourism, contributing to the sensuous and affective environment, as well as the perceived authenticity of ghostly narratives and experience.

The darkness of paranormal places is a motivational factor for tourists choosing to participate in ghost tourism (Garcia, 2012; Thompson, 2010). In addition to an association with tragic death, the darkness of paranormal places may also emerge from the folklore and legends attributed to place. As Ironside (2018) argues, paranormal tourism evokes forms of legend-tripping to dark places to experience and ‘test’ the legend. In some places, legends emerge from historically dark events such as murder and sacrifice, or supernatural associations to witchcraft and devil worship. For instance, The Ancient Ram Inn, UK, a renowned paranormal destination first popularised in the early-2000s, became a desirable paranormal location because of its association with pagan sacrifice and series of reputedly tragic deaths. Likewise, the Amityville House in Amityville, New York, remains a site of paranormal pilgrimage due to its associations with the reputed demonic and paranormal activity linked to the DeFeo murders in 1974. As Dancasua et al. (2020) observe, the type of paranormal attraction is a strong pull motivation for visitors, and those attractions that have gained notoriety through their appearance in the media become popular ‘hotspots’ for paranormal tourism (Hill, 2011; Hill et al., 2018; Hill et al., 2019; Holloway, 2010; Houran et al., 2020).

It may be hypothesized, therefore, that paranormal places exist along a continuum of darkness which is constructed from (1) the dark narratives associated with its legends and death history, (2) the historical authenticity of death in a location and its associated terroir, and (3) the sacredness of a space and its potential to evoke spiritual connections with the deceased.

### Dark Spiritual Promotion and Production

Paranormal media plays an integral role in the promotion of haunted sites (Eaton, 2019; Hill, 2011). Reality television shows such as *Most Haunted* and *Ghost Adventures* perpetuate folkloric tropes and can transform

viewers' understanding of a place and its supernatural associations (Eaton, 2019; Edwards, 2019). These media representatives may become part of the "brand identity" (Davies, 2007, p. 64) of place compelling types of visitors and commercial activity. The dark history and narratives of place are regularly drawn upon to shape the uncanny potential of paranormal places represented in the media. Likewise, paranormal media draws upon visual and aural signifiers such as dark narratives, liminal spaces, and unsettling features to destabilize and frame places in uncanny ways (Smith & Ironside, 2022). This may influence how sites become seen, understood, and interpreted by visitors and may heighten their expectation of a paranormal experience and enhance their attractiveness for potential visitors (Houran et al., 2020). As such, while the 'promise' of experiencing a ghost can never truly be guaranteed, organizations draw on the possibility of extraordinary experiences with the dead in their marketing and experiential offering (Houran et al., 2020; Ironside, 2018). Some of the most popular paranormal attractions draw upon particularly dark narratives of human tragedy. The Lizzie Borden House, a B&B in Massachusetts (USA), is a well-known paranormal destination which promotes the gruesome double axe-murder that occurred onsite. The B&B hosts nightly ghost tours and hunts. Waverley Hills Sanatorium is reputed to be the site of over 163,000 deaths and hosts a haunted house alongside regular paranormal tours and events. Each location promotes its dark history alongside the propensity of spiritual experiences encountered in the venue. In doing so, human tragedy becomes a compelling promotional narrative for enhancing the reputation and spiritual potential of a location.

The mediatization and commodification of paranormal tourism, however, leaves it open to a mythologizing of the dead. As Hanks (2010) explores, ghost stories may become part of a site's 'mythico-history' (Malkki, 1995) in which the true history underpinning a ghost story and mythmaking converge. The commercial drive for entertainment in the paranormal industry contributes to the style and playfulness of how ghost tourism is produced and delivered (Thompson, 2010). Likewise, the sharing of ghostly experiences through online platforms provides the opportunity for engagement and (re)interpretation of paranormal experiences and haunted places by the people that visit (Hill, 2017; Hill et al., 2018; Hill et al., 2019; Lauro & Paul, 2013). As a result, ghosts and their stories can be transformed and re(presented) through tourism. They may even become darker through the production of new narratives and experiences. As Garcia (2012: 18) observed in her examination of ghost tours in Toledo and Edinburgh, tours may rely on the "trivialization of gore and human suffering" to capture the interest of

audiences. Likewise, Miles (2015) considered how ghost tours appropriate and skew historic narratives in favor of sensational and macabre narratives for commercial gain. Dark tourism has faced similar criticism (Barton & Brown, 2015; Heuermann & Chhabra, 2014); however, arguably, the integration of dark histories and supernatural legend in paranormal places presents an increased opportunity for the playful interpretation, production and darkening of ghost stories to appeal to contemporary audiences.

As such, it is hypothesized that the darkness of paranormal tourism is also influenced by media representation and commercial production. Paranormal attractions may become seen and understood as darker through (1) the scope and propensity of dark histories and spiritual experience promoted by marketing and the media, and (2) the degree of (re)interpretation of dark narratives for experiential purposes.

### Dark Spiritual Connection and Experience

Dark tourism encourages a connection with the dead. Tourists may be compelled to visit sites that connect them to the deceased and their own personal heritage (Dunkley, Morgan, & Westwood, 2011; Mowatt & Chancellor, 2011). They may also seek a wider connection to the dead through commemorative practices (Baldwin & Sharpley, 2009; Farmaki, 2013; Hyde & Harman, 2011; Kokkranikal et al., 2015; Dore, 2006; Hall, Basarin, & Lockstone-Binney, 2010). This connection to the dead (and death) is achieved through engagement with learning, knowledge, and the affective experience of place (Martini & Buda, 2020; Stone, 2012).

Like dark tourists, paranormal tourists are motivated to connect with the dead. As Thompson (2010) and Drinkwater et al. (2022) note, supernatural settings evoke extraordinary experiential possibilities and a sense of connectedness to the otherworldly. However, different forms of ghost tourism (e.g., ghost hunting, ghost tours) encourage different levels of connection which inform visitor motivations, expectation, and experience. The tendency to operate ghost tourism in authentic places of death or previous supernatural activity, evokes the possibility of seeing a ghost for visitors (Dancausa et al., 2011; Garcia, 2012). A motivation that Thompson (2010) notes as a key driver. Ghost tours often present this opportunity, while also enabling a connection to be made through the dead via the transmission of knowledge about past events and dark histories (Gentry, 2007; Holloway, 2010). In this sense, connecting to the dead during ghost tours is more akin to dark tourism, where representations of the dead are drawn upon to establish emotional engagement and empathy (Abraham, Pizam, & Medeiros, 2022; Hos-

seini, Cortes-Macías, & Almeida-García, 2022).

Ghost hunting (or paranormal investigation), however, engenders a direct form of spiritual connection with the dead. By drawing upon spiritual and pseudo-scientific practices, visitors participate in direct interactions with the dead (Eaton, 2015; Ironside, 2016). This may include participating in seances, Ouija Board sessions, and utilizing technology (e.g., digital cameras, EVP, EMF readers). Visitors play a direct role in constructing their own experiences during these encounters, which may help to shape a haunted place (Houran et al., 2020) but also inform the development of otherworldly narratives and how, and with whom, ghostly connections are made in the future. Forming these direct connections with the dead can offer profound spiritual, emotional, and transformative experiences (Ashworth & Isaac, 2015; Biran, Poria, & Oren, 2011). The combination of positive and negative emotions evoked by dark tourism sites (such as sorrow, shock, and depression) have the potential to foster spiritual meaning (Zheng et al., 2019). As Pharino, Pearce, and Price (2018) note, negative emotions play a significant role in constructing the experience for paranormal tourists. Fear and the opportunity to encounter scary experiences may also drive some tourists toward the paranormal market (Holloway, 2010) and form part of the experience (Pharino, Pearce & Price, 2018). As such, ghost tourism (like dark tourism) offers a unique experience to visitors in which there may be an expectation and intention, to experience uncomfortable psychological states.

Ghost tourism, therefore, offers different participatory opportunities to visitors dependent on the experiential offering. Using Pine and Gilmore's (1999) experiential realms, they may be positioned along a spectrum between passive or active participation, and absorptive or immersive engagement, dependent on the level of interaction with the dead. The co-productive and participatory nature of ghost hunting in dark places, however, has potential consequences. As discussed, popular sites for paranormal tourism often link to those places that harbor a dark or unsettling history. Paranormal tourism offers the opportunity to connect with dark histories, and the deceased people associated with them. As such, visitors may find themselves fully immersed and actively participating in activities that 'connect' them with victims or perpetrators of crimes (e.g., the victims of murder at the Lizzie Borden house) or interacting with supernatural forces of a demonic or unsettling nature (e.g. the incubus/succubus reported to haunt the Ancient Ram Inn). As such, while dark tourism offers an emotional connection to the victims of atrocities and tragedy through reflection and commemoration (Zheng et al., 2019), it does not put visitors in direct communication with them. Likewise, con-

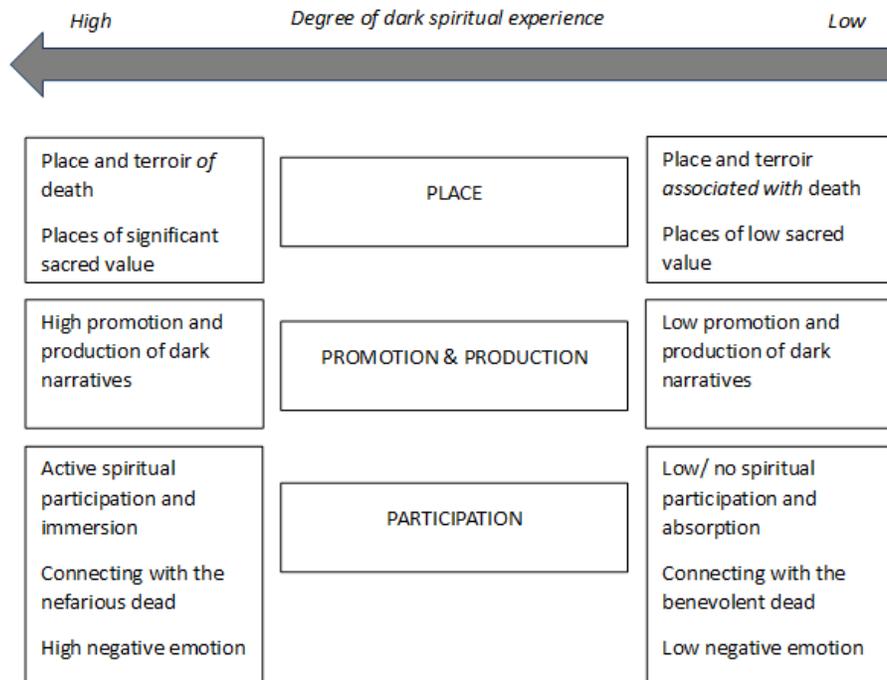
ventional spiritual tourism is generally associated with positive connections that promote personal well-being (Coghlan, 2015; Morgan, 2010), spiritual growth (Heintzman, 2013; Robledo, 2015), and self-awareness (Little & Schmidt, 2006). In contrast, ghost tourism evokes a form of *dark spiritual connection and experience* in which the dead and their dark histories are conjured through emotional engagement (Dancausa, Hernández, & Pérez, 2020), interaction (Ironside & Wooffitt, 2022), immersion (Pine & Gilmore, 1999) and enactive processes (Drinkwater et al., 2019; Eaton, 2019; Hill et al., 2018, 2019).

This paper, therefore, hypothesizes that ghost tourism evokes a form of *dark spiritual connection and experience* through *participatory practices*. The darkness of the paranormal attraction may be influenced by (1) the degree of active spiritual participation to connect with the dead, (2) the type of dead sought through this connection and (3) the level and degree of negative emotional experience.

### Conceptualizing a Dark Spiritual Experience Spectrum

Ghost tourism offers individuals the opportunity to engage in experiences that confront and mediate the darker aspects of humanity (Ironside, 2018). While it is evident that ghost tourism can act as a form of entertainment and thrill (Garcia, 2012; Thompson, 2008), in this paper, I argue that it may also exhibit complex, darker, experiential, and motivational facets. Pharino, Pearce, and Price (2018) positioned dark, spiritual, and paranormal tourism as overlapping forms of niche tourism. By drawing upon this model, I argue that it is in the point of convergence between these aspects of tourism that darker forms of spiritual experience may emerge. Fig.1. conceptualizes three dimensions of paranormal tourism that influence the 'darkness' of the paranormal attraction and its experiential offering.

This model illustrates that: place, promotion and production, and participation influence the type of experience and potential motivations that may underpin paranormal tourism. *Dark spiritual places* emerge from *authentic* connections to the dead, in places where death and suffering have occurred. Like Stone's (2006) Dark Tourism Spectrum, those sites that demonstrate a higher degree of authenticity (those sites of death) present a darker experience to visitors. For paranormal tourists, authentic sites of death offer the greatest possibility of a ghostly experience, operating as dark, *sacred* spaces, where a spiritual connection may be sought with the deceased. The degree of connection between tourists and dark spiritual spaces will likely differ dependent on the



**Figure 1.** Dark Spiritual Experience Spectrum

experiential offering and visitor motivation. Ghost tours, for instance, offer a more transient experience where the possibility of a ghostly encounter is implied, and the focus is centered towards entertainment and education (Gentry, 2007; Holloway, 2010; Thompson, 2008). Alternatively, ghost hunting offers an immersive experience where the potential for a ghostly encounter is all but promised (Ironside, 2018).

Dark narratives and supernatural legends imbue places with ghostly potential but may also influence the type of experience and motivation to visit sites through *dark spiritual promotion and production*. Media narratives regularly draw upon horror and human tragedy, as well as visual signifiers of the uncanny, to frame paranormal places (Smith & Ironside, 2022). The co-productive nature of reality paranormal television shows invites viewers (and potential future tourists) to engage in forms of “belief in Spiritism, mediums and hauntings” (Hill 2011: 171). As such, places develop a brand personality (Hou-ran et al., 2020) due to their potential to evoke spiritual experiences embedded in dark histories and folklore. Businesses may draw upon these darker aspects due to their popularity and market potential, inviting visitors to participate in contemporary forms of legend-tripping through tourism activities (Ironside, 2018). The experiential offering of places leans into dark narratives through the (re)interpretation of history in their tourism product and marketing activities (Garcia, 2012). Those attractions that invest the most in the promotion and production of

dark narratives have the potential to offer a darker spiritual experience to visitors.

Finally, *dark spiritual connections and experience* also emerge through the participatory nature of ghost tourism. While, arguably, all forms of ghost tourism connect people to the dead, forms of ghost tourism that offer a greater degree of participation in spiritual practices in authentically dark places (such as ghost hunts) provide greater opportunities for dark spiritual connections to emerge. The promotion and production of dark narratives also establish *which dead* visitors may have the opportunity to connect with. In some locations, the dead are framed as either nefarious or benevolent, evil or good, and with whom and how connections are established has the potential to influence the degree of dark experience that emerges. These literal connections with the dead have the potential to evoke a breadth of psychological responses (Drinkwater et al., 2022), including both positive and negative emotions. As Dancausa, Hernández, and Pérezc (2020) observed, cognitive experience is a key motivator for paranormal tourists, however, negative emotion (such as sadness or fear) has the potential to impact how people draw meaning and understanding from their experience. A more frightening experience, for instance, has the potential to be perceived as darker in nature than those that evoke pleasant emotions.

Drawing on existing literature, the *Dark Spiritual Experience Spectrum* conceptualizes that ghost tourism offers experiences to visitors that vary in their perceived

degree of 'darkness'. The degree of darkness may also influence the motivations of visitors who may (or may not) seek out darker spiritual experiences. Influenced by Stone's (2006) Dark Tourism Spectrum, the model seeks to recognize that a continuum of dark spiritual experience exists across the ghost tourism industry. It purposefully does not position subsets of the industry along this spectrum (e.g., ghost hunting at the highest end and ghost tours at the lowest) to acknowledge the nuances that exist between different tourist offerings. For instance, it is quite possible that a ghost tour may visit dark spiritual places of death and draw upon a high degree of dark spiritual promotion and production, yet not encourage active participation from visitors. However, it does seek to illustrate how these dimensions (place, promotion and production, participation) influence the experiential and motivational facets of ghost tourism and may drive the production and consumption of experiences within the wider paranormal market.

## DISCUSSION

By exploring existing scholarship, this paper aimed to consider where the experiential and motivational characteristics of dark, spiritual, and paranormal tourism converge, and to consider whether this convergence produces a dark spiritual experience for consumers. Due to the complexity of the paranormal tourism market, ghost tourism was selected as an appropriate focus for this study due to the extent of previous scholarship and its close association with dark tourism and spiritual practice. Three dimensions are identified as contributing towards the degree of darkness offered by ghost tourism: place, promotion and production, and participation. From this, a *Dark Spiritual Experience Spectrum* is conceptualized to illustrate the characteristics of these three dimensions and their influence on the degree of dark spiritual experience offered to consumers. It is argued that these dimensions have the potential to impact the tourist experience, influence visitor motivations, and drive the production and consumption of experiences in the wider paranormal market.

It is acknowledged that the *Dark Spiritual Experience Spectrum* is conceptual. Its purpose is partly to illustrate the nuances of ghost tourism, which, I argue, extend beyond its positioning at the lightest end of Stone's (2006) dark tourism spectrum (Garcia, 2012; Wyatt, Leask, & Barron, 2021). In addition, the model seeks to extend the work of Pharino, Pearce, and Price (2018) and others (Houran et al., 2020; Ironside, 2018; Garcia, 2012; Sharp-ley & Stone, 2009) who have acknowledged a relationship between dark, spiritual, and paranormal tourism, and to

rectify a gap in scholarship by unpacking these connections further. There are limitations to this study. A North American and European perspective is adopted to explore ghost tourism, and it is acknowledged that the findings from this conceptual paper may be challenged by different cultural understandings of ghosts, hauntings, and place (see Kwon, 2008 and Rittichainuwat, 2011). Likewise, by exploring ghost tourism through the lens of dark tourism, certain parameters are imposed on the research. As others have observed, the wider heritage (Hanks, 2015), social (Ironside & Wooffitt, 2022), psychological (Houran et al., 2020), and environmental (Houran et al., 2022) context of ghost tourism has the potential to shape cultural behavior in different ways which are not fully explored in this study. To further investigate the conceptual argument presented in this paper, the Dark Spiritual Experience Spectrum model requires testing. Qualitative and quantitative data collection to determine the degree of impact that each dimension has on the experience will be important to establish their relevancy and effect. Furthermore, it would be interesting to establish whether 'darkness' is a conscious motivator for tourists and if cultural differences shape the degree of dark spiritual experience encountered. As such, this paper invites further investigation into the three dimensions identified (place, promotion and production, participation) and their interconnected relationships, to advance scholarship on the darker qualities and characteristics of ghost tourism, and to extend our understanding of its experiential and motivational facets. Furthermore, the focus on ghost tourism within this paper limits its application to wider forms of paranormal tourism which may not exhibit the same dimensions or 'degrees of dark experience'. An exploration of how this model extends to UFO tourism or vampire tourism, for instance, would be insightful.

Importantly, while this paper seeks to illustrate the darker qualities of ghost tourism, it does not attempt to imply that participation in, or production of, ghost tourism is in some way nefarious or deviant. Although it may be possible that some visitors seek out paranormal tourism for deviant means or indeed lead to nefarious outcomes [see, for instance Waskul & Waskul's (2016) discussion on the Witch Cemetery], the darkness explored in this study aligns with Stone's (2006) use and implies a continuum of experience based on death-related travel. Indeed, the suggestion that paranormal tourism represents a darker side to spiritual tourism may position it in an interesting crossroads to offer meaningful, and even transformative, experiences for tourists. In her discussion on the dark side of spirituality, de Souza (2012) recognizes that:

What is needed to balance current studies is the

recognition that *the positive must have a negative in order to be identified as positive*. Hence, there is always the *other side* to any single thing and this is a requirement if any single thing is to be seen as a whole. Logically, then, there must be both positive and negative aspects of spirituality (p. 294) [original emphasis]

Drawing on the work of Jung and the shadow self, de Souza (2012) considered the importance of identifying and understanding the darker sides of ourselves to achieve spiritual wholeness. As she stated, “the shadow complements the light in personality, and likewise, the dark is needed to balance the light side of spirituality” (p. 295). Collins (2007) also recognized the value of embracing the darker side of spirituality in his discussion on therapeutic practice, where he calls for therapists to embrace self-reflection to help identify their own ‘shadows’. Scholars have recognized that dark tourism has the potential to evoke emotional and spiritual engagement with places to “develop self-identity processes” (Hosseini, Cortes-Macías, & Almeida-García, 2022, p. 11) and initiate existential and self-reflection (Stone & Sharp-ley, 2008). Like dark tourism, paranormal tourism offers the opportunity for individuals to engage in experiences that confront and mediate the darker aspects of humanity. Yet, the explicit intention for spiritual engagement in ghost tourism through connection and immersion in dark sites elicits the possibility for a darker spiritual experience to emerge. By providing the opportunity to engage spiritually with the historic shadows of our society, ghost tourism may, therefore, also encourage contemplation on the darker sides of ourselves.

## IMPLICATIONS AND APPLICATIONS

This conceptual paper has endeavored to connect dark, spiritual, and paranormal tourism and to consider whether the convergence between these three areas produces a dark spiritual experience for tourists. In doing so, it contributes towards a growing body of scholarship on paranormal tourism (Houran et al., 2020; Ironside, 2018; Pharino et al., 2018) and challenges the perception of ghost tourism as a form of lighter dark tourism (Garcia, 2012; Wyatt, Leask, & Barron, 2021). Wyatt, Leask, and Barron (2021) acknowledge that lighter-dark tourism attractions have received significantly less scholarly attention due to the perception that they are less worthy of academic scrutiny than their ‘darker’ counterpart. This study helps to illustrate the experiential complexities and nuances of a dark tourism activity that has often been considered ‘entertainment-focused’, and therefore en-

courages further serious investigation into the full spectrum of dark tourist experiences. Perhaps the more stark and extreme immersive tourism experiences found with dark-paranormal tourism provide secular pathways to spiritual (transcendent) experiences -- somewhat similar to what people report who engage in extreme sports (Brymer & Schweitzer, 2017). Indeed, such athletes talk about how time slows down, and they seem to become one with their surroundings. This sounds much like enchantment reported during ghost hunts and paranormal tours (Houran et al., 2022). Thus, while amateur ghost-hunters use technical equipment and investigation protocols that arguably function as props in what are essentially spiritual rituals (Eaton, 2015), paranormal tourists might be more casual or unwitting secular spiritualists. More broadly, this study thus has implications for the study of spiritual experience. As de Souza (2012) recognized, dark spirituality is an under-researched concept. There is a very limited understanding of its form, importance, and resonance for people, how it manifests psychologically, or its applicability within our social and cultural world. This paper contributes to the discussion on the role of *both* positive and negative emotions in constructing meaningful, desirable, and enchanting experiences (Holloway, 2008; Houran et al., 2023; Pharino et al., 2018; Zheng et al., 2019). By proposing a model of dark spiritual experience within a tourism context, it also offers a conceptual framework for application and critique in wider leisure and cultural settings.

## REFERENCES

- Abraham, V., Pizam, A., & Medeiros, M. (2022). The impact of attitudes, motivational factors, and emotions on the image of a dark tourism site and the desire of the victims’ descendants to visit it. *Journal of Heritage Tourism*, 17(3), 264-282. <https://doi.org/10.1080/1743873X.2021.1955892>
- Alalade, F. M. (2021). Dark tourism: An exploration of the Chernobyl disaster and its rising popularity as a tourist destination. *Journal of Academic Reviews*, 7(1), 18-23.
- Ashworth, G. J., & Isaac, R. K. (2015). Have we illuminated the dark? Shifting perspectives on ‘dark’ tourism. *Tourism Recreation Research*, 40(3), 316-325. <https://doi.org/10.1080/02508281.2015.1075726>
- Bader, C. D., Baker, J. O., & Mencken, F. C. (2017). *Paranormal America* (2<sup>nd</sup> ed.). New York University Press. <https://doi.org/10.2307/j.ctt1gk08qb>
- Baidwan, S. (2022). A light in the dark—Black consumer motivation in dark tourism. *Journal of Teaching in Travel & Tourism*, 22(3), 312-324. <https://doi.org/10.1080/>

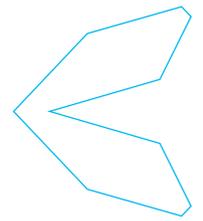
- 15313220.2022.2098221
- Baldwin, F., & Sharpley, R. (2009). Battlefield tourism: Bringing organized violence back to life. In R. Sharpley, & P. R. Stone (Eds.), *The darker side of travel: The theory and practice of dark tourism* (pp. 186-206). Channel View.
- Barton, A. & Brown, A. (2015). Show me the prison! The development of prison tourism in the UK. *Crime, Media, Culture*, 11(3), 237-258. <https://doi.org/10.1177/1741659015592455>
- Beech, J. (2000). The enigma of holocaust sites as tourist attractions—The case of Buchenwald. *Managing Leisure*, 5(1), 29-41. <https://doi.org/10.1080/136067100375722>
- Bermudez, J. (2009). The extraordinary in architecture: Studying and acknowledging the reality of the spiritual. *2A—Architecture and Art Magazine*, Autumn (12), 46-49.
- Biran, A., & Buda, D. (2018). Unravelling fear of death motives in dark tourism. In P. R., Stone, R. Hartmann, T. Seaton, R. Sharpley, & L. White (Eds.), *Handbook of dark tourism* (pp. 515–532). Palgrave Macmillan. [https://doi.org/10.1057/978-1-137-47566-4\\_21](https://doi.org/10.1057/978-1-137-47566-4_21)
- Biran, A., & Poria, Y. (2012) Reconceptualising dark tourism. In R. Sharpley & P. R. Stone (Eds) *Contemporary tourist experience: Concepts and consequences* (pp. 59-70). Routledge.
- Biran, A., Poria, Y., & Oren, G. (2011). Sought experiences at (dark) heritage sites. *Annals of Tourism Research*, 38(3), 820-841. <https://doi.org/10.1016/j.annals.2010.12.001>
- Blom, T. (2000). Morbid tourism—A postmodern market niche with an example from Althorp. *Norsk Geografisk Tidsskrift e Norwegian Journal of Geography*, 54(1), 29-36. <https://doi.org/10.1080/002919500423564>
- Boorstin, D. J. (1992). *The image: A guide to pseudo-events in America*. Vintage.
- Bowers, H., & Cheer, J. M. (2017). Yoga tourism: Commodification and western embracement of eastern spiritual practice. *Tourism Management Perspectives*, 24, 208-216. <https://doi.org/10.1016/j.tmp.2017.07.013>
- Bowman, M. S., & Pezzullo, P. C. (2009). What's so 'dark' about 'dark tourism'? Death, tours, and performance. *Tourist Studies*, 9(3), 187-202. <https://doi.org/10.1177/1468797610382699>
- Bremer, T. S. (2021). The religious and spiritual appeal of national parks. In T. S. Bremer (Ed.), *The Routledge handbook of religious and spiritual tourism* (pp. 166-178). Routledge. <https://doi.org/10.4324/9780429201011-14>
- Brymer, E., & Schweitzer, R. D. (2017). Evoking the ineffable: The phenomenology of extreme sports. *Psychology of Consciousness: Theory, Research, and Practice*, 4(1), 63–74. <https://doi.org/10.1037/cns0000111>
- Candrea, A. N., Ispas, A., Untaru, E. N., & Nechita, F. (2016). Marketing the Count's way: How Dracula's myth can revive Romanian tourism. *Bulletin of the Transylvania University of Brasov. Series V: Economic Sciences*, 9(1), 83-90.
- Chanuanthong, R., & Batra, A. (2016). Dark tourism: Push–pull motivations, satisfaction experience and post behavioral intention—sites of death railway tragedy Kanchanaburi province, Thailand. *AU-GSB e-JOURNAL*, 9(1), 25-40.
- Cheer, J. M., Belhassen, Y. & Kujawa, J. (2017). The search for spirituality in tourism: Toward a conceptual framework for spiritual tourism. *Tourism Management Perspectives*, 24, 252-256. <https://doi.org/10.1016/j.tmp.2017.07.018>
- Chiu, L., Emblen, J. D., Van Hofwegen, L., Sawatzky, R., & Meyerhoff, H. (2004). An integrative review of the concept of spirituality in the health sciences. *Western Journal of Nursing Research*, 26(4), 405-428. <https://doi.org/10.1177/0193945904263411>
- Coghlan A. (2015). Tourism and health: Using positive psychology principles to maximise participants' well-being outcomes – A design concept for charity challenge tourism, *Journal of Sustainable Tourism*, 23, 382–400. <https://doi.org/10.1080/09669582.2014.986489>
- Cohen, E. (1979). A phenomenology of tourist experiences. *Sociology*, 13(2), 179–201. <https://doi.org/10.1177/003803857901300203>
- Collins, M. (2007). Spirituality and the shadow: Reflection and the therapeutic use of self. *British Journal of Occupational Therapy*, 70(2), 88-90. <https://doi.org/10.1177/030802260707000208>
- Cresswell, T. (2015): *Place: An introduction*. John Wiley & Sons.
- Dancausa, G., Hernández, R. D., & Pérez, L. M. (2023). Motivations and constraints for the ghost tourism: A case study in Spain. *Leisure Sciences*, 45(2), 156-177. <https://doi.org/10.1080/01490400.2020.1805655>
- Davies, O. (2007). The future for ghosts. In *The haunted: A social history of ghosts* (pp. 241-249). Palgrave Macmillan UK. [https://doi.org/10.1057/9780230273948\\_10](https://doi.org/10.1057/9780230273948_10)
- Delgado, C. (2005). A discussion of the concept of spirituality. *Nursing Science Quarterly*, 18(2), 157-162. <https://doi.org/10.1177/0894318405274828>
- de Souza, M. (2012). Connectedness and connectedness: The dark side of spirituality – Implications for education, *International Journal of Children's Spirituality*, 17(4), 291-303. <https://doi.org/10.1080/1364436X.2012.752346>
- Di Giovine, M. A (2021). Religious and spiritual world

- heritage sites. In D. H. Olsen & D. J. Timothy (Eds.) *The Routledge handbook of religious and spiritual tourism* (pp. 204–221). Routledge. <https://doi.org/10.4324/9780429201011-17>
- Dore, L. (2006). Gallipoli: A visitor profile. *Historic Environment, 19*(2), 46–51.
- Drinkwater, K., Massullo, B., Dagnall, N., Laythe, B., Boone, J., & Houran, J. (2022). Understanding consumer enchantment via paranormal tourism: Part I—Conceptual review. *Cornell Hospitality Quarterly, 63*(2), 195–215. <https://doi.org/10.1177/1938965520967920>
- Dunkley, R., Morgan, N., & Westwood, S. (2011). Visiting the trenches: Exploring meanings and motivations in battlefield tourism. *Tourism Management, 32*(4), 860–868. <https://doi.org/10.1016/j.tourman.2010.07.011>
- Eaton, M. A. (2015). “Give us a sign of your presence”: Paranormal investigation as a spiritual practice. *Sociology of Religion, 76*(4), 389–412. <https://doi.org/10.1093/socrel/srv031>
- Eaton, M. A. (2019). Manifesting spirits: Paranormal investigation and the narrative development of a haunting. *Journal of Contemporary Ethnography, 48*(2), 155–182. <https://doi.org/10.1177/0891241618756162>
- Edwards, E. D. (2020). Morbid curiosity, popular media, and thanatourism. *Australian Journal of Parapsychology, 20*(2), 113–138.
- Farmaki, A. (2013). Dark tourism revisited: A supply/demand conceptualisation. *International Journal of Culture, Tourism and Hospitality Research, 7*(3), 281–292. <https://doi.org/10.1108/IJCTHR-05-2012-0030>
- Fisher J., Francis L., & Johnson P. (2000). Assessing spiritual health via four domains of spiritual well-being: The Spiritual Health in Four Domains Index (SH4DI). *Pastoral Psychology, 49*(2), 133–145. <https://doi.org/10.1023/A:1004609227002>
- Foley, M., & Lennon, J. J. (1996). JFK and dark tourism: A fascination with assassination. *International Journal of Heritage Studies, 2*(4), 198–211. <https://doi.org/10.1080/13527259608722175>
- Gall, T. L., Malette, J., & Guirguis-Younger, M. (2011). Spirituality and religiousness: A diversity of definitions. *Journal of Spirituality in Mental Health, 13*(3), 158–181. <https://doi.org/10.1080/19349637.2011.593404>
- Garcia, B. R. (2012). Management issues in dark tourism attractions: The case of ghost tours in Edinburgh and Toledo. *Journal of Unconventional Parks, 4*(1), 14–19. <http://juptrr.asp.radford.edu/Volume4/Management%20Issues.pdf>
- Gencarella, S. O. (2007). Touring history: Guidebooks and the commodification of the Salem Witch Trials. *Journal of American Culture, 30*(3), 271–284. <https://doi.org/10.1111/j.1542-734X.2007.00556.x>
- Gentry, G. & Alderman, D. (2015). “A city built upon its dead”: The intersection of past and present through ghost walk tourism in Savannah, Georgia.” *South Carolina Review, 47*(2), 49–64.
- Gilbert, D. C. (2004). Conceptual issues in the meaning of tourism. In S. Williams (Ed.) *Tourism: Critical concepts in the social sciences* (pp. 45–69). Routledge.
- Hall, J., Basarin, V. J., & Lockstone-Binney, L. (2010). An empirical analysis of attendance at a commemorative event: Anzac Day at Gallipoli. *International Journal of Hospitality Management, 29*(2), 245–253. <https://doi.org/10.1016/j.ijhm.2009.10.012>
- Hanks, M. M. (2010). Re-imagining the national past: Negotiating the roles of science, religion, and history in contemporary British ghost tourism. In H. Silverman (Ed.), *Contested cultural heritage: Religion, nationalism, erasure, and exclusion in a global world* (pp. 125–139). Springer New York. [https://doi.org/10.1007/978-1-4419-7305-4\\_5](https://doi.org/10.1007/978-1-4419-7305-4_5)
- Haynes, E. D. (2016). *Paranormal tourism: Study of economics and public policy*. Masters thesis, Department of Landscape Architecture/Regional and Community Planning, Kansas State University. <http://hdl.handle.net/2097/32634>
- Heelas, P., & Woodhead, L. (2005). *The spiritual revolution: Why religion is giving way to spirituality*. Blackwell Publishing.
- Heintzman P. (2013). Retreat tourism as a form of transformational tourism. In Y. Reisinger (Ed.), *Transformational tourism: Tourist Perspectives* (pp. 68 – 81). CABI International. <https://doi.org/10.1079/9781780642093.0068>
- Henderson, M. L. (1993). What is spiritual geography? *Geographical Review, 83*(4), 469–472. <https://doi.org/10.2307/215827>
- Heuermann, K., & Chhabra, D. (2014). The darker side of dark tourism: An authenticity perspective. *Tourism Analysis, 19*(2), 213–225. <https://doi.org/10.3727/108354214X13963557455766>
- Hill, A., 2010. *Paranormal media: Audiences, spirits and magic in popular culture*. Routledge. <https://doi.org/10.4324/9780203836392>
- Hill, S. A., O’Keeffe, C., Laythe, B., Dagnall, N., Drinkwater, K., Ventola, A., & Houran, J. (2018). “Meme-spirited”: I. The VAPUS model for understanding the prevalence and potency of ghost narratives. *Australian Journal of Parapsychology, 18*(2), 117–152.
- Hill, S. A., Laythe, B., Dagnall, N., Drinkwater, K., O’Keeffe, C., Ventola, A., & Houran, J. (2019). “Meme-spirited”: II. Illustrating the VAPUS model for ghost narratives. *Australian Journal of Parapsychology, 19*(1), 5–43.
- Holloway, J. (2010). Legend-tripping in spooky spaces:

- Ghost tourism and infrastructures of enchantment. *Environment and Planning D: Society and Space*, 28(4), 618-637. <https://doi.org/10.1068/d9909>
- Holzhauser, E. (2015). Paranormal tourism in Edinburgh: Storytelling, appropriating ghost culture and presenting an uncanny heritage. Doctoral dissertation, University of St Andrews. <http://hdl.handle.net/10023/6922>
- Hosseini, S., Cortes-Macías, R., & Almeida-García, F. (2022). Extending the memorable tourism experience construct: An investigation of tourists' memorable dark experiences. *Journal of Vacation Marketing*, advance online publication. <https://doi.org/10.1177/13567667221113078>
- Houran, J., Hill, S. A., Haynes, E. D., & Bielski, U.A. (2020). Paranormal tourism: Market study of a novel and interactive approach to space activation and monetization. *Cornell Hospitality Quarterly*, 61(3), 287-311. <https://doi.org/10.1177/1938965520909094>
- Houran, J., Lange, R., & Laythe, B. (2022). Understanding consumer enchantment via paranormal tourism: Part II-Preliminary Rasch validation. *Cornell Hospitality Quarterly*, 63(2), 216-230. <https://doi.org/10.1177/1938965520971276>,
- Houran, J., Laythe, B., Lange, R., Hanks, M., & Ironside, R. (2023). Immersive study of gestalt variables in uncanny geographies. *Journal of the Society for Psychological Research*, 87(2), 65-100.
- Hjorth, L., & Pink, S. (2014). New visualities and the digital wayfarer: Reconceptualizing camera phone photography and locative media. *Mobile Media & Communication*, 2(1), 40-57. <https://doi.org/10.1177/2050157913505257>
- Hyde, K. F., & Harman, S. (2011). Motives for a secular pilgrimage to the Gallipoli battlefields. *Tourism Management*, 32(6), 1343-1351. <https://doi.org/10.1016/j.tourman.2011.01.008>
- Inglis, D., & Holmes, M. (2003). Highland and other haunts: Ghosts in Scottish tourism. *Annals of Tourism Research*, 30(1), 50-63. [https://doi.org/10.1016/S0160-7383\(02\)00031-2](https://doi.org/10.1016/S0160-7383(02)00031-2)
- Ironside, R. (2016). Interactional dynamics and the production of collective experience: The case of paranormal research groups. Doctoral dissertation, Dept. of Sociology, University of York. <https://etheses.whiterose.ac.uk/13209/>
- Ironside, R. (2018). The allure of dark tourism: Legend tripping and ghost seeking in dark places. In D. Waskul, D. & M. Eaton (Eds.) *The supernatural in society, culture and history* (pp. 95-115). Temple University Press. <http://tupress.temple.edu/book/20000000009554>
- Ironside, R., & Wooffitt, R. (2022). *Making sense of the paranormal: The interactional construction of unexplained experiences*. Springer Nature. <https://doi.org/10.1007/978-3-030-88407-9>
- Isaac, R. K. & Çakmak, E. (2014). Understanding visitor's motivation at sites of death and disaster: the case of former transit camp Westerbork, the Netherlands. *Current Issues in Tourism*, 17(2), 164-179. <https://doi.org/10.1080/13683500.2013.776021>
- Jarratt, D., & Sharpley, R. (2017). Tourists at the seaside: Exploring the spiritual dimension. *Tourist Studies*, 17(4), 349-368. <https://doi.org/10.1177/1468797616687560>
- Johnston, D., & Mayers, C. (2005). Spirituality: A review of how occupational therapists acknowledge, assess and meet spiritual needs. *British Journal of Occupational Therapy*, 68(9), 386-392. <https://doi.org/10.1177/030802260506800902>
- Kokkranikal, J., Yang, Y.S., Powell, R., & Booth, E. (2016). Motivations in battlefield tourism: The case of '1916 easter rising rebellion', Dublin. In V. Katsoni & A. Stratigea (Eds.) *Tourism and culture in the age of Innovation. Springer Proceedings in Business and Economics* (pp. 321-330). Springer International Publishing. [https://doi.org/10.1007/978-3-319-27528-4\\_22](https://doi.org/10.1007/978-3-319-27528-4_22)
- Krisjanous, J., & Carruthers, J. (2018). Walking on the light side: Investigating the world of ghost tour operators and entrepreneurial marketing. *Qualitative Market Research*, 21(2), 232-252. <https://doi.org/10.1108/QMR-12-2016-0123>
- Kujawa, J. (2017). Spiritual tourism as a quest. *Tourism Management Perspectives*, 24, 193-200. <https://doi.org/10.1016/j.tmp.2017.07.011>
- Kunchambo, V., & Little, V. (2022). Four ecotourism archetypes: Expressing symbolic desires. *Journal of Ecotourism*, 22(4), 502-517. <https://doi.org/10.1080/14724049.2022.2077355>
- Kwon, H. (2008). The ghosts of the American War in Vietnam. *The Asia-Pacific Journal: Japan Focus*, 6(1), Article 2645. <https://apjif.org/-Heonik-Kwon/2645/article.html>
- Lewis, H., Schrier, T., & Xu, S. (2021). Dark tourism: Motivations and visit intentions of tourists. *International Hospitality Review*, 36(1), 107-123. <https://doi.org/10.1108/IHR-01-2021-0004>
- Light, D., (2007). Dracula tourism in Romania cultural identity and the state. *Annals of Tourism Research*, 34(3), 746-765. <https://doi.org/10.1016/j.annals.2007.03.004>
- Light, D. (2017). Progress in dark tourism and thanatourism research: An uneasy relationship with heritage tourism. *Tourism Management*, 61, 275-301. <https://doi.org/10.1016/j.tourman.2017.01.011>

- Little D. E., & Schmidt C. (2006). Self, wonder and God! The spiritual dimensions of travel experiences. *Tourism*, 54(2), 107-116. <https://hrcak.srce.hr/161460>
- Lopez, L., González, R. C. L., & Fernández, B. M. C. (2017). Spiritual tourism on the way of Saint James the current situation. *Tourism Management Perspectives*, 24, 225-234. <https://doi.org/10.1016/j.tmp.2017.07.015>
- MacCannell, D. (1973). Staged authenticity: Arrangements of social space in tourist settings. *American Journal of Sociology*, 79(3), 589-603. <https://doi.org/10.1086/225585>
- Malkki, L. H. (1995). Refugees and exile: From "refugee studies" to the national order of things. *Annual Review of Anthropology*, 24(1), 495-523. <https://doi.org/10.1146/annurev.an.24.100195.002431>
- Martini, A., & Buda, D. M. (2020). Dark tourism and affect: Framing places of death and disaster. *Current Issues in Tourism*, 23(6), 679-692. <https://doi.org/10.1080/13683500.2018.1518972>
- Massey, D. (2005). *For space*. Sage. <https://doi.org/10.12968/sece.2005.1.361>
- Matless, D. (2008). A geography of ghosts: The spectral landscapes of Mary Butts. *Cultural Geographies*, 15(3), 335-357. <https://doi.org/10.1177/1474474008091331>
- McCormack, D. P. (2010). Remotely sensing affective afterlives: The spectral geographies of material remains. *Annals of the Association of American Geographers*, 100(3), 640-654. <https://doi.org/10.1080/00045601003795004>
- Meehan, E. R. (2008). Tourism, development, and media. *Society*, 45, 338-341. <https://doi.org/10.1007/s12115-008-9111-7>
- Miles, T. (2015). Tales from the haunted south: Dark tourism and memories of slavery from the Civil War era. UNC Press Books. <https://doi.org/10.5149/northcarolina/9781469626338.001.0001>
- Miles, W. F. (2002). Auschwitz: Museum interpretation and darker tourism. *Annals of Tourism Research*, 29(4), 175-1178. [https://doi.org/10.1016/S0160-7383\(02\)00054-3](https://doi.org/10.1016/S0160-7383(02)00054-3)
- Morgan A. D. (2010). Journeys into transformation: Travel to an "other" place as a vehicle for transformative learning. *Journal of Transformative Education*, 8(4), 246-268. <https://doi.org/10.1177%2F1541344611421491>
- Mowatt, R. A., & Chancellor, C. H. (2011). Visiting death and life: Dark tourism and slave castles. *Annals of Tourism Research*, 38(4), 1410-1434. <https://doi.org/10.1016/j.annals.2011.03.012>
- Norman, A., & Pokorny, J. J. (2017). Meditation retreats: Spiritual tourism well-being interventions. *Tourism Management Perspectives*, 24, 201-207. <https://doi.org/10.1016/j.tmp.2017.07.012>
- Obradović, S., Pivac, T., Besermenji, S., & Tešin, A. (2021). Possibilities for paranormal tourism development in Serbia. *Eastern European Countryside*, 27(1), 203-233. <https://doi.org/10.12775/eec.2021.008>
- Pharino, C., Pearce, P., & Pryce, J. (2018). Paranormal tourism: Assessing tourists' onsite experiences. *Tourism Management Perspectives*, 28, 20-28. <https://doi.org/10.1016/j.tmp.2018.06.003>
- Pine, B. J., & Gilmore, J. H. (1999). *Welcome to the experience economy*. Harvard Business Review Press.
- Prayag, G., Mura, P., Hall, C. M., & Fontaine, J. (2016). Spirituality, drugs, and tourism: Tourists' and shamans' experiences of ayahuasca in Iquitos, Peru. *Tourism Recreation Research*, 41(3), 314-325. <https://doi.org/10.1080/02508281.2016.1192237>
- Ritpanitchajchaval, N., Ashton, A. S., & Apollo, M. (2023). Eudaimonic well-being development: Motives driving mountain-based adventure tourism. *Journal of Outdoor Recreation and Tourism*, 42, Article 100607. <https://doi.org/10.1016/j.jort.2023.100607>
- Rittichainuwat, B. (2011). Ghosts: A travel barrier to tourism recovery. *Annals of Tourism Research*, 38(2), 437-459. <https://doi.org/10.1016/j.annals.2010.10.001>
- Robledo M. A. (2015). Tourism of spiritual growth as a voyage of discovery. In D. Chambers & T. Rakić (Eds.), *Tourism research frontiers: Beyond the boundaries of knowledge* (Vol. 20; pp. 71-86). Emerald Group Publishing Limited. <https://doi.org/10.1108/S1571-504320150000020009>
- Rojek, C. (1993). *Ways of escape*. MacMillan. <https://doi.org/10.1057/9780230373402>
- Roof, W. C. (2001). *Spiritual marketplace: Baby boomers and the remaking of American religion*. Princeton University Press. <https://doi.org/10.1515/9781400823086>
- Seaton, A. V. (1996). Guided by the dark: From thanatopsis to thanatourism. *International Journal of Heritage Studies*, 2(4), 234-244. <https://doi.org/10.1080/13527259608722178>
- Seaton, T. (2009). Thanatourism and its discontents: An appraisal of a decade's work with some future issues and directions. In T. Jamal & M. Robinson (Eds.), *The Sage handbook of tourism studies* (pp. 521-542). <https://doi.org/10.4135/9780857021076.n29>
- Sharma, N. (2019). Interpreting the sacred in dark tourism. In D. H. Olsen, & M. Korstanje (Eds.), *Dark tourism and pilgrimage (CABI Religious Tourism and Pilgrimage Series)* (pp. 25-37). CABI Publishers.
- Sharpley, R., & Stone, P. R. (Eds.) (2009). *The darker side of travel: The theory and practice of dark tourism*. Multilingual Matters. <https://doi.org/10.21832/9781845411169>
- Singleton, A. (2017). The summer of the Spirits: Spiritual

- tourism to America's foremost village of spirit mediums. *Annals of Tourism Research*, 67, 48-57. <https://doi.org/10.1016/j.annals.2017.08.002>
- Smith, S. (2015). A sense of place: Place, culture and tourism. *Tourism Recreation Research*, 40(2), 220-233. <https://doi.org/10.1080/02508281.2015.1049814>
- Smith M. K., & Diekmann, A. (2017). Tourism and well-being. *Annals of Tourism Research*, 66, 1-13. <https://doi.org/10.1016/j.annals.2017.05.006>
- Smith, F., & Ironside, R. (2022). The uncanny place: A critical appraisal of popular paranormal TV shows. *Journal of Popular Television*, 10(1), 95-108. [https://doi.org/10.1386/jptv\\_00072\\_1](https://doi.org/10.1386/jptv_00072_1)
- Sobaih, A. E. E., & Naguib, S.M. (2022). Sustainable reuse of dark archaeological heritage sites to promote ghost tourism in Egypt: The case of the Baron Palace. *Heritage*, 5(4), 3530-3547. <https://doi.org/10.3390/heritage5040183>
- Sobihah Abdul Halim, M., Tatoglu, E., & Banu Mohamad Hanefar, S. (2021). A review of spiritual tourism: A conceptual model for future research. *Tourism and Hospitality Management*, 27(1), 119-141. <https://doi.org/10.20867/thm.27.1.8>
- Steiner C. J., & Reisinger, Y. (2006). Ringing the fourfold: A philosophical framework for thinking about wellness tourism. *Tourism Recreation Research*, 31(1), 5-14. <https://doi.org/10.1080/02508281.2006.11081242>
- Stone, P. R. (2006). A dark tourism spectrum: Towards a typology of death and macabre related tourist sites, attractions and exhibitions. *Tourism*, 54(2), 145-160.
- Stone, P. R. (2012). Dark tourism and significant other death: Towards a model of mortality mediation. *Annals of Tourism Research*, 39(3), 1565-1587. <https://doi.org/10.1016/j.annals.2012.04.007>
- Stone, P. R. (2018). Dark tourism in an age of 'spectacular death'. In R. Stone, P., Hartmann, R., Seaton, T., Sharpley, R., & White, L. (Eds.), *The Palgrave handbook of dark tourism studies* (pp.189-210). Palgrave Macmillan. [https://doi.org/10.1057/978-1-137-47566-4\\_8](https://doi.org/10.1057/978-1-137-47566-4_8)
- Stone, P., & Sharpley, R. (2008). Consuming dark tourism: A thanatological perspective. *Annals of Tourism Research*, 35(2), 574-595. <https://doi.org/10.1016/j.annals.2008.02.003>
- Stone, P. R., & Sharpley, R. (2013). Deviance, dark tourism and 'dark leisure'. In S. Elkington & S.J. Garmon (Eds.), *Contemporary perspectives in leisure: Meanings, motives and lifelong learning: Meanings, motives and lifelong learning* (pp. 54-64). Routledge.
- Strange, C., & Kempa, M. (2003). Shades of dark tourism: Alcatraz and Robben Island. *Annals of Tourism Research*, 30(2), 386-405. [https://doi.org/10.1016/S0160-7383\(02\)00102-0](https://doi.org/10.1016/S0160-7383(02)00102-0)
- Thompson, R. C. (2010). "Am I going to see a ghost tonight?": Gettysburg ghost tours and the performance of belief. *Journal of American Culture*, 33(2), 79-91. <https://doi.org/10.1111/j.1542-734X.2010.00735.x>
- Tunbridge, J. E., & Ashworth, G. J. (1996). *Dissonant heritage: The management of the past as a resource in conflict*. Wiley.
- Waskul, D. D., & Eaton, M. (2018). *The supernatural in society, culture and history*. Temple University Press.
- Waskul, D., & Waskul, M. (2016). *Ghostly encounters: The hauntings of everyday life*. Temple University Press. <https://doi.org/10.2307/j.ctvrd2jc>
- Wilson G. B., McIntosh A. J., & Zahra A. L. (2013). Tourism and spirituality: A phenomenological analysis. *Annals of Tourism Research*, 42, 150-168. <https://doi.org/10.1016/j.annals.2013.01.016>
- Wyatt, B., Leask, A., & Barron, P. (2021). Designing dark tourism experiences: An exploration of edutainment interpretation at lighter dark visitor attractions. *Journal of Heritage Tourism*, 16(4), 433-449. <https://doi.org/10.1080/1743873X.2020.1858087>
- Zerva, K. (2021). Dark tourism on Netflix: From place to person-dependent. *Tourism Management Perspectives*, 38, Article 100823. <https://doi.org/10.1016/j.tmp.2021.100823>
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G., Hipp, K., Scott, A. B., & Kardar, J. L. (2015). Religion and spirituality: Unfuzzifying the fuzzy. In W. Mirola, M. Emerson, & S. Monahan (Eds.), *Sociology of religion* (pp. 29-34). Routledge.
- Zheng, C., Zhang, J., Qiu, M., Guo, Y., & Zhang, H. (2019). From mixed emotional experience to spiritual meaning: Learning in dark tourism places. *Tourism Geographies*, 22(1), 105-126. <https://doi.org/10.1080/14616688.2019.1618903>



RESEARCH  
ARTICLE

# Perceptual Bandwagon Effects With “Deep” Imaginary Companions

**Rense Lange**

renselange@gmail.com

orcid.org/0000-0002-6798-3772

**James Houran**

editor@scientificexploration.org

orcid.org/0000-0003-1725-582X

**Neil Dagnall**

n.dagnall@mmu.ac.uk

orcid.org/0000-0003-0657-7604

**Kenneth Drinkwater**

k.drinkwater@mmu.ac.uk

orcid.org/0000-0002-4015-0578

**Giovanni B. Caputo**

giovanni.caputo@uniurb.it

orcid.org/0000-0002-8692-4786

SUBMITTED June 18, 2022

ACCEPTED September 9, 2022

PUBLISHED December 31, 2023

<https://doi.org/10.31275/20232645>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

‘[Entity] encounter experiences’ refer to perceived interactions with anomalous beings or sentient forces, including apparitions, angels, gods, demons, poltergeists, extraterrestrials, or folklore-type little people (Evans, 1987; Houran, 2000; Kumar & Pekala, 2001). Their dis-

## HIGHLIGHTS

Imaginary friends can represent a connection to an alternate reality that evolves from being a beneficial activity to something more troubling or sinister.

## ABSTRACT

Studies of the mediating factors of imaginary companions (ICs) in children and adults are well-represented in the literature. However, the nature and structure of behavioral expressions in IC characters have been less formally scrutinized. We examined these issues in a convenience sample of 389 adults. Of these, 155 self-reported childhood ICs and retrospectively characterized their IC phenomenology via a set of 14 items modified from previous research. Rasch analyses showed that IC experiences form a true probabilistic hierarchy whose structure varied little across respondents’ age, gender, having siblings, as well as the respondents’ number of past ICs, or their decision to inform others about their IC. This hierarchy starts with *shallow* (i.e., ostensibly ‘adaptive or positive’) experiences and transition to *deep* (i.e., relatively ‘maladaptive or negative’) contents at higher levels. Network analysis suggested that respondents invented ICs primarily to combat feelings of loneliness. However, contrary to the Rasch model, when comparing *shallow* vs *deep* IC experient’s answers, positive and negative perceptual contents lost their distinction, thereby severely distorting measurement. These distortions were sufficiently powerful to reliably predict respondents’ group membership. Results derived from retrospective accounts of childhood experiences, which might differ from IC contents and dynamics measured either in real-time or within adult populations. However, these findings suggest that ICs comprise a latent dimension of shallow-to-deep perceptions that might relate to schizotypal or dissociative phenomena manifesting in everyday contexts.

## KEYWORDS

Agency, dissociation, imaginary companions, liminality, Rasch scaling, entity encounter experiences.

tinctly positive or negative contents often produce strong psychological or transpersonal reactions that influence the belief systems and spirituality of experiencers (see e.g., Laythe, Houran, & Little, 2021). It is important to further note that while the literature in this area mostly references adults, encounter experiences also occur



to children. In fact, recent research has found intriguing links between reports of ‘fairies or ghosts’ and the well-known phenomenon of children’s ‘imaginary companions’ (ICs) (Drinkwater et al., 2022; Little et al., 2021; Young, 2018), particularly when ICs exhibit ‘spooky or independent’ actions (Laythe, Houran, & Little, 2021). This suggests, therefore, that some manifestations might be unrecognized varieties of encounter experiences and thus worthy of more detailed study and understanding.

In his *Origin of Consciousness in the Breakdown of the Bicameral Mind*, Julian Jaynes (1976/1990) boldly characterized ICs (or pretend friends) as “true hallucination” (pp. 396-397). Bonne et al. (1999) might concur with this view in referencing these constructions as a “...childhood fantasy, invisible to anyone but the child, who may be named, addressed, or played with” (p. 277). However, Svendsen (1934) arguably provided the most influential operationalization, i.e.,

an invisible character, named and referred to in conversation with other persons or played with directly for a period of time, at least several months, having an air of reality for the child, but no apparent objective basis. This excludes that type of imaginative play in which an object is personified, or in which the child himself assumes the role of some person in his environment (p. 988).

Researchers generally defer to this early definition, but recent studies indeed support an expanded view that also includes personified objects and pretend identities (Moriguchi & Todo, 2018; Taylor, et al., 2009) given that children with these additional constructions share similar abilities and personality characteristics that distinguish them from children lacking them (Taylor, 1999). For a recent review and discussion of ICs, we refer readers to Armah and Landers-Potts (2021).

It is curious that these complex and nuanced constructions can exhibit both ‘positive’ and ‘negative’ elements, which calls into question their ultimate nature or functions. Perhaps this phenomenon is more than mere fantasy play and instead involves a distinct altered or anomalous experience relevant to the issues of mental health, spirituality, and consciousness studies. For example, studies suggest that children with ICs exhibit better *attentional focus* (Mauro, 1991), *social cognition* and *competence* (Davis et al., 2011; Mauro, 1991; Roby & Kidd, 2008; Seiffge-Krenke, 1997; Taylor & Carlson, 1997), *creativity* (Hoff, 2005; Schaefer, 1969; Seiffge-Krenke, 1997), and *language skills* (Bouldin et al., 2002). Manosevitz et al., (1973) also found that children with ICs participated

in more *family activities*, whereas Singer and Singer (1990) reported that such children showed more *positive affect* in their play with other children. The high *fantasy-proneness* inherent to IC play (Wilson & Barber, 1983) might further allow children to practice and expand creative thought, thereby promoting intellectual and creative growth (Somers & Yawkey, 1984). This agrees with findings that children with ICs are capable of constructing more *complex narratives* (Trionfi & Reese, 2009) as well as *sharing details* about their IC experiences with interested adults (Gleason, 2004).

However, childhood ICs also correlate with loneliness, trauma, and emotional distress (Taylor et al., 2004) and could be a marker of childhood Schizotypal Personality Disorder (Jones et al., 2015). Elaborated play identities are likewise common in children with dissociative identity disorders (DID) (Taylor et al., 2004), and researchers have thus found a high incidence of ICs in adult individuals with DID (Hornstein & Putnam, 1992; Trujillo et al., 1996). In fact, Pica (1999) proposed that DID advances in three stages that center on ICs. He argued that children predisposed to ICs may develop DID if they experience trauma during a developmental window in early childhood. In the first stage, in which the child experiences trauma, aspects of the traumatic experience are deferred to the IC. At the second stage, an IC takes over for the child during periods of anxiety or threat. By the third stage, ICs standing in during anxious situations transform into distinct personality states called ‘alter personalities.’

According to this character progression across stages, distorted perceptual and cognitive contents in ICs (i.e., high vividness, persistent impersonation, and autonomy of ICs; McLewin & Muller, 2006) might parallel, respectively, the derealization, depersonalization, and dissociative identity anomalies that manifest even when healthy (non-clinical) individuals participate in eye- or mirror-gazing tasks (for a review, see Caputo, Lynn, & Houran, 2021). Therefore, we speculate that positive ICs in childhood can take control over the subject’s original ego (i.e., the ‘core’ personality) when trauma produces a detachment of the subject’s bodily-self (i.e., depersonalization) and detachment of external reality (i.e., derealization) —thus evolving into pathological DID in adulthood (i.e., multiple personalities). Indeed, research indicates that IC behaviors range from *shallow* (i.e., the IC is basically a copy of the child who created it) to *deep* (i.e., the IC appears to have autonomy, an independent personality, and will) (e.g., Fernyhough et al., 2019; Hoff, 2005; Laythe, Houran, & Little, 2021). Experiences of ‘deep’ ICs can be profound in a psychospiritual sense and motivate attributions to paranormal agencies or entities (Laythe, et al., 2021).

In the context of paranormal belief and experiences,

Lange et al. (2019) reported distortions due to the emergence of a secondary factor as respondents took more extreme (high) positions. Specifically, this *bandwagon* effect involved strong believers who tended to endorse paranormal belief and experience statements as if they were interchangeable. This resulted in smaller variations in the questionnaire items' endorsement rates. 'Bandwagons' resemble 'halo-effects' in that judgments are distorted to achieve consistency, thereby undermining validity and reliability (Fiscaro & Lance, 1990; Lange, Martinez-Garrido, & Ventura, 2017). Similarly, in a persuasive communication context, Lange and Fishbein (1983) and Fishbein and Lange (1990) observed that inducing disagreement consolidated receivers' conflicting views into a single opinion. *Bandwagons* likewise occur in economic branding (Lange, Oliva, & McDade, 2001) and delusional ideations (Lange & Houran, 2000). We expect that similar effects also play a role in IC character formation. As we explain later, bandwagon effects also raise important measurement issues.

### The Present Study

The cumulative literature suggests that IC phenomena comprise a latent dimension ranging from *shallow* to *deep* character formation (cf. Hoff, 2005), and as IC phenomena become *deeper*, they also become increasingly linked to more negative (e.g., schizotypal or dissociative) processes (cf. Pica, 1999). The notion that experiences beyond *shallow* IC phenomena lead to negative outcomes implies that behavioral expressions of ICs form a statistical hierarchy. Also, since *deeper* IC phenomena ostensibly reflect negative/ maladaptive processes — and by implication, *shallow* IC phenomena reflect positive/ adaptive processes — positive contents are expected to precede negative contents. Establishing the hierarchical nature of IC character formation or behavior in this way would have important conceptual and practical implications for the clinical evaluation of ICs in children (see, e.g., Armah & Landers-Potts, 2021; Jones et al., 2015; Taylor, 1999).

We test the above ideas using Rasch (1960/1980) scaling. This method has proved useful in a variety of past investigations of altered or anomalous experiences (e.g., Houran et al., 2019; Lange, Greyson, & Houran, 2004; McCutcheon, et al., 2002) and for an overview of related research we refer readers to Lange (2017). A complete introduction to Rasch scaling is beyond the scope of this paper, and for a detailed overview and discussion, see Bond and Fox (2015). We note that Rasch scaling's main objective is to create a latent dimension along which items as well as persons assume a location at an interval level scale of measurement. Items' and persons' locations

are expressed in a common metric called 'Logits.' We are mainly interested here in the items' locations as these reflect the semantics of IC phenomena (e.g., Lange, Irwin, & Houran, 2001). However, if IC items form a true Rasch hierarchy, then it is possible to quantify the 'intensity' (or perceptual depth) of respondents' IC experiences as well.

According to the (binary) Rasch model, if we represent items'  $P$  and  $Q$  'difficulty' by  $D_p$  and  $D_q$ , then whenever  $D_p < D_q$  — i.e., item  $P$  is easier than item  $Q$  — item  $P$  has a greater probability of being endorsed than does item  $Q$ . The model implies that easier items *always* have a greater probability of endorsement than do harder items, regardless of persons' locations along the latent dimension.

Thus, in a probabilistic sense, the item hierarchy (i.e., the order of items' relative likelihood of endorsement) is the same for all individuals, at least within the bounds of statistical estimation error. This implies that the item hierarchy should be *invariant* across subgroups of respondents (e.g., men vs women). Finding a stable item hierarchy is not guaranteed, and statistical tests can determine whether items' hierarchies differ significantly across subgroups of respondents. In practice,  $DIF > 0.25$  is deemed noteworthy, and differences  $> 0.5$  are deemed to matter materially, especially when statistically significant. Based on the preceding, we tested five hypotheses:

1. IC experiences form a probabilistic Rasch hierarchy as defined above, and we will use Network analysis to support our interpretation of this hierarchy.
2. The hierarchy of IC experiences is such that *shallow* perceptual contents precede *deep* perceptual contents, i.e., on average,  $D_{shallow} < D_{deep}$ . *Shallow* experiences tend to be pleasant and constructive, whereas *deep* experiences tend to be negative and maladaptive. This hypothesis follows previous speculations (e.g., Hoff, 2005; Pica, 1999) but adds the requirement that the relationship between *shallow* and *deep* IC experiences is probabilistic.
3. The hierarchy of IC experiences does not vary significantly across external factors, including respondents' age, gender, having siblings, respondents' number of past ICs, or their decision to inform others about their ICs.

The following hypotheses also concern the IC hierarchy, but they are treated separately as they contradict the item hierarchy invariance implied by Hypothesis 3:

4. The negative and unpleasant nature of *deep* perceptual contents has the *bandwagon* effect of casting all other perceptual contents in a negative light as well. Accordingly, for respondents who endorse *deep* ICs,

the item location estimates  $D$  will show *less* variation than do the locations as estimated using non-extreme (*shallow*) respondents.

- Hypothesis 4 implies that *shallow* IC experiencers have different Rasch model residuals than do experiencers reporting *deep* ICs. This hypothesis is tested based on the accuracy of the prediction of respondents' group membership in the *shallow* vs *deep* IC groups using Logistic regression.

Since Hypotheses 4 and 5 imply that items' locations actually *do* vary with an external factor (i.e., *shallow* vs *deep* respondents) they contradict the assumptions of Rasch scaling and also Hypothesis 3. Basically, their validity implies that the estimation of respondents' trait levels will be selectively distorted. It is, therefore, instructive to gauge the impact of such item shifts.

## METHOD

### Respondents

Data were derived from a convenience sample of 389 volunteer respondents ( $M_{age} = 40.41$ ,  $Md = 40.0$ ,  $SD = 14.05$ , range = 18-83 yrs.) recruited via Internet-mediated research. The link to the study was shared by universities in the UK, USA, and Australia, who disseminated the information to potentially interested parties. Participants answered advertisements for participation via a weblink and encouraged others to complete the survey in a snowball sampling approach. Our sample specifically comprised individuals identifying as male ( $n = 99$ , 25.4%,  $M_{age} = 44.47$ ,  $Md = 46.0$ ,  $SD = 14.46$ , Range = 18-75 yrs), female ( $n = 277$ , 71.2%,  $M_{age} = 39.18$ ,  $Md = 39.0$ ,  $SD = 13.71$ , Range = 18-83 yrs), and non-binary ( $n = 13$ , 3.3%,  $M_{age} = 35.61$ ,  $Md = 37.0$ ,  $SD = 12.64$ , Range = 22-64 yrs).

### Measures

**Imaginary Companions.** The items used here are based on a literature search of existing IC instruments, including Hoff (2005), Majors and Baines (2017), and Silberg (2012). As is shown along the rows of Table 1, this yielded 14 "Yes/No" statements that asked respondents about different behavioral expressions of their ICs (see Figure 1). Of these, items 1, 2, 9, 11, 13, 14, and 15 were *a priori* classified as *shallow*, and items 3, 4, 5, 6, 7, 8, and 10 were classified as *deep*.

To determine whether respondents actually had an IC during childhood, they were shown Taylor, Cartwright, and Carlson's (1993) definition ("*Pretend friends are ones that are make-believe, that you pretend are real*"), followed by Auton, Pope, and Seeger's (2003) screening question

"*Did you ever have an imaginary friend growing up?*" If respondents answered "No," they skipped the remainder of this study. Those responding "yes" were asked to indicate the number of imaginary companions they had. Those reporting multiple companions, were told to focus in the remainder on their most "significant" imaginary friend (cf. Silberg, 2012). Of the 389 respondents, a subset of 155 (40%) reported having an imaginary friend when growing up, and only the data of this subset was analyzed in the following.

### Procedure

This research was part of a broader study on the perceptual-personality profiles of IC experiencers (cf. Drinkwater et al., 2022). The Participant Information Sheet (PIS) was accessed via a web link hosted by the Qualtrics survey administration tool. The PIS presented a brief outline of the study and an overview of ethical procedures. If respondents consented to participate, they then progressed to the study measures. These requested that respondents attempt all items, work through sections at their own pace, reply honestly, and carefully read all instructions and questions. The materials comprised sections on demographics (i.e., age and preferred gender), imaginary companions, and various cognitive-perceptual measures not considered here.

Respondents were debriefed on completion of the survey. We employed procedural strategies to reduce potential method effects. To negate order effects, the sequence of both sections and scales rotated across respondents. Since the study used a cross-sectional design, where data collection occurred at one point in time, the study directions emphasized that each question set was unique and different. This technique has been successfully used in other work to counter 'common method variance' (CMV) (Spector, 2019). CMV is always a concern when respondents answer different scale items in the same testing session because proximity can inflate perceived relationships between different constructs (Podsakoff et al., 2003). Finally, to lessen the possible influence of social desirability, the study brief emphasized responses should reflect individual opinions and perceptions, since there were no correct responses.

### Rasch Modeling

We used Linacre's (2021) *Winsteps*® software to Rasch scale the data via the Conditional Maximum Likelihood Estimation approach. In addition to estimating items' and persons' locations and their respective standard errors of estimate ( $SE$ ), *Winsteps* also computes items' and persons' Outfit. Both types of fit reflect the average

**Table 1.** Summary of Rasch Scaling Analyses

	Loca- tion	SE	Outfit	z-Out- fit	Gen- der	Item Shift (Logits)			Told Oth- ers	Shallow -Deep
						Age	No. of friends	Have Sib- lings		
<b>Shallow Items</b>										
11:My imaginary friend played with me when I was lonely.	-3.05	0.28	1.64	1.40	1.44	0.13	-0.50	0.07	0.00	<b>2.51</b>
15:My imaginary friend came to me when I was happy.	-2.62	0.25	1.29	0.86	0.84	0.53	-0.05	-0.24	-0.08	<b>2.34</b>
13: My imaginary friend helped me when I was afraid.	-2.00	0.22	1.02	0.16	1.03	0.36	0.70	-0.06	0.11	1.17
9:My imaginary friend had skills or abilities that I did not have.	-1.39	0.20	1.02	0.16	-0.30	0.17	0.31	0.50	0.61	0.07
1:My imaginary friend was more than just a make-believe friend.	-0.92	0.19	<b>1.70</b>	<b>3.29</b>	-0.25	-0.72	-0.17	-0.22	0.51	0.95
2:My imaginary friend gave good advice.	-0.78	0.19	0.95	-0.22	-0.15	-0.56	0.21	0.00	0.30	0.76
14:My imaginary friend came to me when I was angry.	-0.39	0.19	1.35	1.90	0.68	0.60	-0.81	0.23	-0.84	0.66
<b>Deep items</b>										
8: My imaginary friend had knowledge about my life that did not have.	0.56	0.21	0.96	-0.07	-0.63	-0.61	0.00	-0.16	-0.03	-1.07
10:My imaginary friend did not like others to know about him/her.	0.99	0.23	0.77	-0.72	-1.25	-0.91	-0.45	-0.15	<b>-1.20</b>	-0.88
6:My imaginary friend told me to keep secrets.	1.13	0.23	0.51	-1.71	-0.64	0.24	0.25	-0.35	0.51	<b>-2.41</b>
7:My imaginary friend tried to boss me around.	1.65	0.27	1.08	0.32	0.00	0.51	-0.08	-0.24	0.42	-1.99
3:I had more than one imaginary friend and they disagreed.	1.86	0.28	0.71	-0.53	1.27	1.18	<b>2.76</b>	0.73	0.11	-1.10
4:My imaginary friend annoyed me and I wished it would go away.	2.10	0.30	1.14	0.43	-0.11	0.36	-1.08	0.44	-0.26	-2.11
5:My imaginary friend took over and made me do things I did not want to do.	2.87	0.40	1.86	1.26	-1.41	-0.09	-0.98	-0.57	-0.45	-1.00

Gender: Positive = over endorsed by women, Negative = over-endorsed by men

Age: Positive = over-endorsed by younger respondents, Negative = over-endorsed by women

No. of Friends: Positive = over-endorsed by those with > 1 IC, Negative = over-endorsed by those with just 1 IC

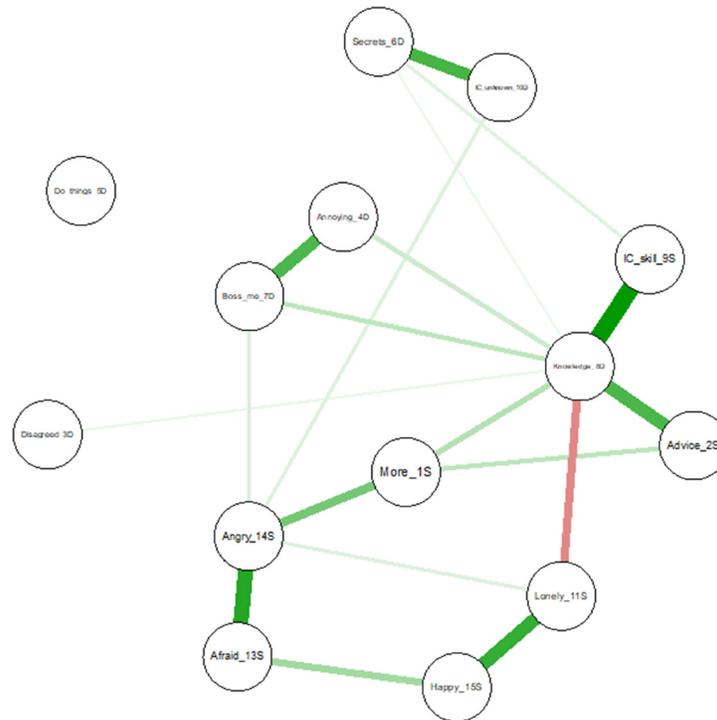
Have Siblings: Positive = over-endorsed by those with siblings, Negative = over-endorsed by those without siblings

Told Others: Positive = over-endorsed when told others about IC, Negative = over-endorsed when other were not told

Shallow vs Deep: Positive = over endorsed by those selecting 2 or more deep items, Negative = over endorsed by those who selected 1 or fewer deep items

mean-squared difference between the predicted actual scores across items and persons, respectively (Lange et al., 2017).” Under perfect model fit, Outfit statistics have the value 1, whereas larger values are indicative of ‘noisy’ response patterns. Naturally, Outfit values are subject to random variation, and Outfit excursions beyond 1.4 are considered problematic (Linacre, 2021), especially when statistically significant. *Winsteps* can also evaluate the invariance of the item hierarchy with statistical tests for pairwise comparison of items’ locations *D*

across subgroups. Here, we created subgroup pairs based on respondents’ Gender and Age (“up to/over 40 years”), having siblings (“no/yes”), number of past ICs, and respondents’ decision to inform others about their IC (“no/yes”). As well, we will consider shallow vs. deep related item shifts, where ‘deep’ persons are those endorsing two or more deep items and shallow persons are defined as the converse.



**Figure 1.** Network Structure of the 14 IC Questionnaire Items.

## Networks of Items

To aid in the interpretation of the IC item hierarchy, we use ‘network modeling’ (see, e.g., Epskamp et al., 2017; van Borculo et al., 2014) that has proved useful in studies of attitudes, intelligence, and psychopathology. A computationally efficient model for estimating the graph structure of binary items is described by van Borculo and Epskamp (2016) and is implemented in their R-based *IsingFit* software. *IsingFit* yields an undirected graph whose vertices reflect the strength of the relations between a set of items, as represented by its nodes. Although the strength of the relations may vary, no causality should be inferred. Our hypotheses imply that *shallow* IC items should be more connected than *deep* IC items. However, clustering is mainly used for descriptive purposes, and no other predictions are offered.

## RESULTS

### Hypothesis 1

Table 1 summarizes the basic scaling properties of the fourteen IC items. The Outfit column of this table shows that all but three items showed acceptable fit to the Rasch model (i.e., *Outfit* < 1.4). Of these, only the Out-

fit value of Item 1, “*My imaginary friend was more than just a make-believe friend*” significantly deviates from 1 (Outfit = 1.70,  $z = 3.29$ ,  $p < 0.001$ ) – i.e., this item was ‘noisier’ than would be expected based on the Rasch model. We suspect that Item 1 was deemed ambiguous, because one possible reading suggests that the IC is a real friend, while another suggests that the IC relationship is possibly non-platonic. With these caveats, the data support Hypothesis 1, i.e., the fourteen IC items’ fit to the Rasch model is sufficient to contend that they form a probabilistic hierarchy. However, recall that Hypotheses 4 and 5 must also be considered.

### Hypothesis 2

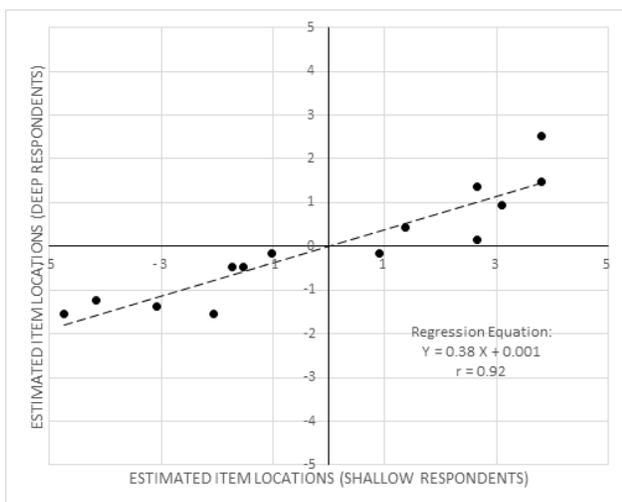
Table 1 lists the IC items in order of increasing endorsement difficulty, as expressed by the items’ Logit values listed in the ‘Location’ column – i.e., the items near the top were endorsed more often than those near the bottom. This ordering defines the semantics of the latent IC character formation dimension. That is, the *shallow* items at the lowest difficulty levels concern positive (adaptive) issues such as “playing” with the IC when lonely, supporting and “helping,” followed by the IC having “skills or abilities,” giving “good advice,” and having a soothing role when the person is angry. By contrast, the

deep items with higher difficulty levels increasingly refer to negative (maladaptive) topics, ranging from the IC wanting privacy and desiring to keep secrets, to “bossing around” the experient, disagreement among multiple ICs, being annoying, and taking over the experient’s lives.

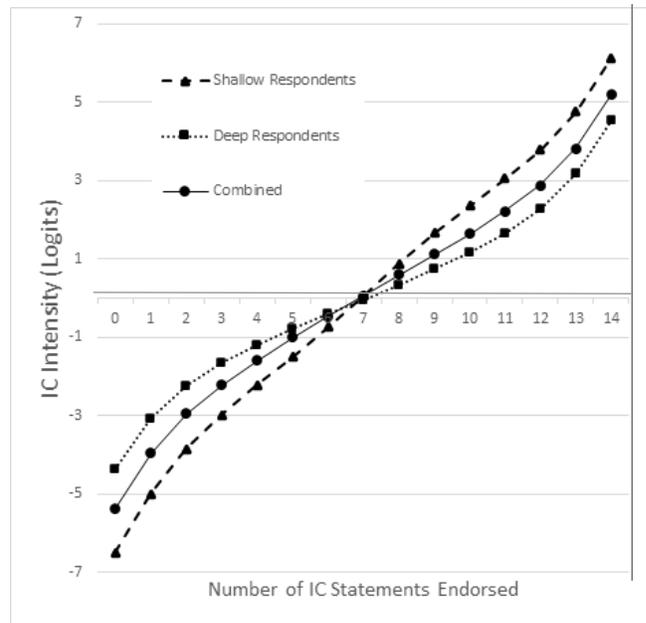
Thus, in support of Hypothesis 2, the hierarchy starts with friendly, supportive behaviors by the IC characters, but these actions progress to unfriendly and manipulative actions that cast the ICs in a bad light. As the items form a true hierarchy (Hypothesis 1), it follows that deep (negative, maladaptive) experiences likely are accompanied by shallow (positive, adaptive) experiences. By contrast, shallow experiences occur mostly in isolation. Hypothesis 2 was addressed via a *t*-test over the Logit magnitudes of the shallow items’ (top of Table 1) vs the deep items (bottom of Table 1). The means of the shallow and deep item groups are -1.59 and 1.59 Logits, respectively, and this difference is statistically significant ( $t(12) = -6.68, SE_{dif} = 0.48, p < .001$ ).

**Ancillary Analyses.** Figure 1 shows the estimated network structure of the 14 IC items. Short item descriptions are suffixed by their number in Table 1, as well as a type-indicator —deep IC items finish with the letter ‘D’ and the shallow IC items with ‘S.’ As predicted, deep IC items are intra-connected by far fewer links than shallow IC items, a topic to which we return in later sections. Here, we focus on the pattern of the items’ relations, as reflected by the girth of the graph’s vertices: positive relations are shown in black, negative relations are shown as boxes only, and thin lines reflect weak relationships.

As is indicated by the girth of the vertices, IC items dealing with similar contents tend to be highly related:



**Figure 2.** Items Location Estimates using Shallow vs Deep IC Respondents.



**Figure 3.** Raw Score to Rasch Logit Transformation Based on Three Respondent Groups.

“keeping secrets” (Item 6) and the “IC being unknown” (Item 10), “IC helps when experient is angry” (Item 4) and “IC helping when experient is afraid” (Item 7), etc. All but one of these vertices are black, indicating that these IC experiences tend to co-occur. The exception is the relation between Items 11 (“My imaginary friend played with me when I was lonely”) and 8 (“My imaginary friend had knowledge about my life that I did not have”), which show a negative relation. Thus, *not* being lonely and being understood by the IC are positively related. Since Item 8 is the ‘central node’ in the graph, we conclude that an IC’s most important role is to support an experient during periods of loneliness.

**Hypothesis 3**

Statistical tests were performed to determine whether the IC item hierarchy varied across respondents’ gender, age, number of claimed imaginary friends, presence of siblings, and their decision to tell others about the ICs. The column entries under ‘Item Shifts’ in Table 1 show the group differences in Logits between the pairs of subgroups, and the footnote to this table indicates how the five variables were re-coded to obtain just two categories. As is indicated by the boldface entries, just one of the 70 (i.e., 14 x 5) pairwise comparisons reached statistical significance ( $p < .01$ ). Such a finding is to be expected since the probability of obtaining one or more significant effects among 70 “trials” with  $P_{success} = 0.01$  is quite high ( $p > 0.15$ , determined via the binomial distribution and assuming independence). Thus, in support of Hypothesis

3, there is little evidence that the IC item hierarchy varies materially across the five subgroup variables.

### Hypothesis 4

Testing Hypothesis 4 involves a comparison of item location as estimated for *deep* respondents who endorsed *two or more deep IC items vs. shallow* respondents who endorsed *fewer than two deep items*. The entries of the right-most column of Table 1 reveal that 9 of the 14 items show large location differences (greater than 1 Logit) between the *deep* and *shallow* respondent groups. The boldface entries in the right-most column of Table 1 indicates that three of these differences reached statistical significance at  $p < .01$ . Also, entries in cursive type indicate that the group difference across another six items is marginally significant ( $p < .05$ ).

Figure 2 plots the item locations obtained for *shallow* respondents along the X-axis, whereas items' locations for *deep* respondents are plotted along Y. Table 1 likely obscured the fact that items' locations for *shallow* and *deep* IC respondents are, in fact, highly correlated ( $r = 0.91, p < 0.001$ ) as items' hover around a straight line. However, indicative of the hypothesized *bandwagon* effect for *deep* IC respondents, the slope of the regression line (0.38) is far below unity, which indicates that the items' locations of *deep* IC respondents vary less ( $SD_{deep} = 1.24$ ) than do the location estimates obtained for *shallow* IC respondents ( $SD_{shallow} = 2.98$ ). Squaring these SDs and dividing yields  $F(13,13) = 5.73$  —i.e., the variance of the item locations for *shallow* IC respondents is over five times larger than that for *deep* IC respondents. In support of Hypothesis 4, this effect is statistically significant ( $p < 0.01$ ); thus, *deep* IC respondents indeed tended to regard the items as more similar to each other than did the *shallow* IC respondents.

This bandwagon effect has dramatic consequences on the estimates of respondents' IC intensity levels. Figure 3 shows three translation of respondents' raw sum (i.e., the number of endorsed statements, X-axis) into their estimated location along the latent Rasch dimension in Logits (Y-axis), and these translations differ according to whether *shallow* IC respondents, the *deep* IC respondents, or their *combined* data were used. In particular, the Log-

it range for the *shallow* IC respondents (-6.49 to 6.13 = 12.62 Logits) is far greater than that obtained for the *deep* IC respondents (-4.37 to 4.54 = 8.91 Logits), whereas the range for the combined is intermediate. We further note that the *shallow* curve (triangular markers) and *deep* curve (square markers) for 11 of the 15 possible raw score values differ by more than their standard error of measurement (SE).

Also, as is shown on the right side of Figure 3, consider respondents with a raw sum of 12. If the *combined* sample estimation is used, then the estimated IC intensity is 2.87 Logits. However, for a raw sum of 12, the estimates according to the *deep* and *shallow* calibrations vary from 2.27 to 3.78 Logits, respectively, both with an SE of around 0.9 Logits. Conversely, an estimated IC intensity of about 3 Logits is obtained for raw sums of 11, 12, and 13 for the *shallow*, *combined*, and *deep* calibrations, respectively. Because (a) the *same* raw sum produces different estimates, and (b) nearly identical trait estimates are obtained for different raw sums, estimation has become inconsistent.

### Hypothesis 5

Using Pedregosa et al.'s (2011) Python-based *Scikit-learn* software, we randomly and independently divided respondents into Training ( $n = 124$ ) and Validation ( $n = 31$ ) samples. Next, using only their 14 response residuals, we used Logistic Regression to predict respondents' membership of the *Shallow vs Deep* IC groups for the Training set only. Although we found no clear interpretation of the regression model, when applied to the Validation set, this model reached 84% accuracy (see Table 2). This exceeds the baseline predictive accuracy of 74% by 12%, and this effect is statistically significant ( $\chi^2(1) = 8.26, p < .01$ ). Thus, consistent with Hypothesis 5, the *Shallow vs Deep* hierarchy shifts proved to be sufficiently strong to produce different response misfit patterns in the two respondent groups. These findings also suggest that items' borderline acceptable fit (see Table 1) might partly be due to the distortions introduced by the item hierarchy differences obtained in the *Shallow vs Deep* IC respondent groups.

**Ancillary Analyses.** The success of Hypotheses 4 and 5 calls into question the distinction between *shallow* and *deep* IC items, as predicted by Hypothesis 2. We, therefore, sought to establish the hierarchical relation between *shallow* and *deep* items without any reliance on the Rasch model. To this end, we computed raw endorsement sums separately for the *shallow* and *deep* IC item subsets, thus obtaining for each person a pair (R, C) = (# *shallow* items endorsed, # *deep* items endorsed). Aggregating the (R, C) across all respondents yielded Table 3. It can be seen there that cells with  $R > C$  (below the diagonal)

**Table 2.** Accuracy of Group Membership Prediction in Validation Sample

		Predicted		
		Shallow	Deep	Total
Actual	Shallow	20	3	23
	Deep	2	6	8
	Total	22	9	31



**Table 3.** Cross-table of *Shallow* ICs Raw Sum x *Deep* ICs Raw Sum Frequencies (see text).

		Raw sum for the seven deep items								
		0	1	2	3	4	5	6	7	Total
Raw sum for the seven shallow items	0	0	0	0	0	0	0	0	0	0
	1	6	0	0	1	0	0	0	0	7
	2	10	1	1	0	0	0	0	0	12
	3	12	5	2	1	0	0	0	0	20
	4	15	5	5	1	1	0	0	0	27
	5	15	5	8	1	1	1	0	0	31
	6	13	8	7	2	1	1	0	2	34
	7	3	8	4	5	2	1	0	1	24
Total		74	32	27	11	5	3	0	3	155

tend to occur with greater frequency than those with  $R < C$  (above the diagonal), i.e., the endorsement of *shallow* items indeed consistently precedes those of the *deep* items. This relation holds in all but one case [i.e.,  $\#(6,7) > \#(7,6)$ ].

To obtain a statistical test, we compared the summed frequencies below the diagonal vs the sum of the diagonal + above diagonal entries against the Null Hypothesis of equality. In support of Hypothesis 2, this test easily reached statistical significance ( $\chi^2(1) = 168.57, p < .001$ ). Thus, not only are *shallow* ICs indeed endorsed more often, but the *shallow vs deep* IC endorsement pattern has the hypothesized hierarchical properties.

### CONCLUSIONS AND LIMITATIONS

This research showed that *shallow* (i.e., ‘benign and controllable’) and *deep* (‘negative and with seemingly autonomous agency’) ICs are not two separate classes of altered experiences. Rather, they form a reasonably robust hierarchy with shallow IC characters and behaviors reliably preceding their deeper and more troubling forms. In fact, there is statistical evidence that percipients of deep ICs show bandwagon effects that preclude any distinctions between shallow and deep IC experiences. This structured evolution of perceptual contents could indicate psychopathological risks in the maturation of a child’s character or personality. Our findings are thus not merely theoretical but have important clinical value. Moreover, we speculate that children experiencing deep ICs (especially due to loneliness) often rely on religio-cultural cues or other social influences to contextualize their perceptions as encounters with paranormal entities like “ghosts or fairies” (cf. Laythe, Houran, & Little, 2021; Little et al., 2021; Young, 2018).

However, our study has several important limitations. Most notably, the results should be replicated using larger and more diverse samples to ensure the consistency and stability of our IC model. We also note that while network models provide useful information, this statistical information does not have inferential validity, so interpretations are confined to the description of nodes and interrelationships between variables. Another possible limitation concerns the items of the questionnaire. The current items might be extended to better cover the different facets of dissociation and dissociative states. Particularly, *derealization* (i.e., detachment of external reality from mental representations) and *depersonalization* (i.e., detachment of internal bodily feeling from mental representations). Future versions of the questionnaire, therefore, could be more precise in the clinical diagnosis based on ICs, for example, in the prognosis of schizotypy vs. schizophrenia vs. DID. Relatedly, we did not directly measure schizotypal-dissociative tendencies in our respondents. It will thus be important for new research to explicitly link our IC model to increases in these tendencies. We are nonetheless encouraged by independent studies that have started to establish such connections (e.g., Drinkwater et al., 2022; Zarei et al., 2022).

### GENERAL DISCUSSION

Notwithstanding potential confounds with retrospective studies (e.g., Ayhan & İşiksal, 2004; Talari & Goyal, 2020; Van Der Vaart et al., 1995), the empirical findings here consistently supported our theory-driven hypotheses. *First*, Rasch scaling and non-parametric methods alike showed that IC perceptions form a true (probabilistic) hierarchy. *Second*, the endorsement hierarchy of IC experiences varied little across respondents’ age, gen-

der, having siblings, as well as the respondents' number of past ICs or their decision to inform others about their IC. *Third*, the IC experience hierarchy starts with *shallow* (ostensibly adaptive) perceptions that appear to be under the control of the experiencers, which transition into *deep* perceptions at higher levels of IC intensity while becoming progressively negative (ostensibly maladaptive) in the contents and involving ICs with autonomous wills and actions. This agrees with previous speculations on IC character formation (Hoff, 2005; Pica, 1999), although it adds the observation that IC experiences form a hierarchy such that 'negative/deep' forms were nearly always preceded by 'positive/shallow' forms —but not vice versa. Further, the network analyses indicated that, loosely speaking, respondents ostensibly invented ICs to combat their loneliness.

However, the preceding picture is marred by the finding of significant Rasch hierarchy shifts in respondents reporting two or more deep beliefs, as is entailed by the remaining two hypotheses. Consistent with the notion that *deep* ICs comprise perceptions that involve cognitive bandwagon effects, we found that the distinction between positive and negative experiences (largely) disappears for those endorsing *deep* IC items (Hypothesis 4). The resulting measurement distortions are sufficiently powerful to successfully identify shallow vs deep IC experiencers (Hypothesis 5). Together, this caused inconsistencies in the estimation of respondents' IC intensity that cannot be corrected using more complex Item Response models (e.g., Carlson, 2021) or non-parametric scaling approaches (e.g., Molenaar, 2002). Although this was not further pursued, the use of 'Saltus' type models, as pioneered by Wilson (1989), appears an appropriate option here.

Affirming Hypotheses 1, 2, and 3 implies that IC experiences are basically innocuous, with more intense or negative IC experiences being no more than "too much of a good thing." However, the support for Hypotheses 4 and 5 suggests that deep ICs induce marked perceptual distortions. Thus far, we have described these distortions in terms of deep vs shallow ICs, cognitive bandwagon effects, and measurement inconsistencies — and, at least for our sample, it seems likely that ICs did not reflect explicit psychopathology. Nonetheless, the entire range of IC experiences might still involve dissociation-schizotypal type processes (cf. Drinkwater et al., 2022; Giesbrecht et al., 2007; Zarei et al., 2022). For instance, future studies might discover that the research and theory on mirror-gazing provides a suitable framework to describe and understand the hierarchy of IC character formation (for reviews, see Caputo, 2019; Caputo et al., 2021; Lange et al., 2022; Martiniz-Conde & Macknik, 2019).

Particularly, perceptual distortions predictably occur even when healthy (non-clinical) subjects stare intently into a mirror or into another individual's face for about ten minutes under conditions of low illumination. The reported experiences include (a) *derealization* (i.e., changes in sensory maps of external world processing; hence, visual deformations in perceptions, such as distorted facial features, animal faces, and cartoon-like faces); (b) *depersonalization* (i.e., changes of multisensory integration on bodily-self; hence, out-of-body experiences, and 'sensed presences,' which may eventually be embodied beyond or behind a specular image); and (c) *dissociative identity* (i.e., changes with self-concept, thus 'projections' of strange personalities in place of the subject's real face reflected in the mirror, experiences of double or multiple personalities, and idealized characters such as visions of a child or an adolescent).

Although more research is needed to disentangle these three dissociative phenomena potentially influencing the phenomenology of ICs, we propose that the 14 IC items represent measures of the different facets of *dissociative-identity*. For example, the 'shallow-to-deep' dichotomy could reflect the increase of *depersonalization* in the deep items. In fact, when ICs show independent autonomy, aka 'agency' (e.g., Item 8, "My imaginary friend had knowledge about my life that I did not have"), this could be the proof that a depersonalization occurred and that the IC takes over the experiencer's agency, which is the high-level component of the minimal-self (Gallagher, 2000). Similarly, the other component of minimal-self — which is body-ownership and 'sense of presence' — might be involved even at other stages of IC deepening (e.g., Item 10: "My imaginary friend did not like others to know about him/her" or Item 6: "My imaginary friend told me to keep secrets"). In fact, when "secrets" are required from the IC experiencer, this possibly presupposes that ICs have obtained body-ownership and consequently a 'sense of presence' that the experiencer does not grasp for him/herself and, thus, the autonomous IC can direct the experiencer.

This line of thinking offers several testable hypotheses. For example, we expect that structural equation modeling will find that reported IC experiences intensify in accordance with scores on measures of schizotypy or dissociation, and that IC contents parallel the progression of perceptions reported during eye or mirror-gazing protocols, i.e., the chain of 'derealization → depersonalization → dissociative identity' (Lange et al., 2022). Of course, future studies would need to measure the perceptual contents of IC experiences more comprehensively by adding items that more distinctly reference putative derealization, depersonalization, and dissociative identity.

This approach can also permit refinements in new questionnaire statements that aim to explore whether ICs can comprise ‘negative/shallow’ and ‘positive/deep’ forms, which would run counter to the modeling and findings reported here. We are actively exploring these issues and will prepare follow-up reports in due course.

## IMPLICATIONS AND APPLICATIONS

The study and understanding of deep ICs are not limited to isolated lines of research or theory. The contents of these experiences suggest application to many areas, including transpersonal psychology, parapsychology, altered states of consciousness, and even spirituality, when people’s interpretations of deep ICs involve supernatural agents with seemingly benevolent or sinister motives. In fact, ICs could offer a greenfield of research opportunities that advance our understanding of encounter experiences that seem outwardly different but share similar perceptual contents and narrative structures. Thus, we fully expect that the IC model discussed here can inform these other related phenomena—especially in contexts where the ostensibly ‘anomalous beings or sentient forces’ show ostensibly independent agency, involve distressing perceptual contents, or persist over time (see, e.g., Laythe et al., 2021).

The study of ICs likewise has practical implications for assessment in clinical practice (Armah & Landers-Potts, 2021; Taylor, 1999). A case in point is the Melbourne Assessment of Schizotypy in Kids (MASK), which contains two items about childhood ICs that purportedly reflect ‘positive’ schizotypal symptoms (Jones et al., 2015, Table 3), i.e.: (a) “Refers to imaginary characters, creatures, or events” and (b) “Imaginary characters, creatures, or events appear important to the child, more so than actual friends or events.” With regards to (a), we note that simply referring to imaginary agents is probably useless for clinical diagnostics. Statement (b) is more appropriate as it points to experiences beyond superficial or transactional behaviors.

Recall, however, that our network model identified Item 8 (i.e., “My imaginary friend had knowledge about my life that I did not have”) as the most central node, and we suggest adding items related to this topic as neither (a) nor (b) touch this crucial issue that hints at autonomy in IC agency that perhaps suggests an anomalous, altered, or pathological experience. Thus, this theme might delineate the point at which ICs with adaptive or positive contents are at risk for (if not already evolving to) more maladaptive forms. Treatment considerations are relevant since the need to diagnose prodromal dissociative disturbances and DID early in its course of development,

before trauma, might initiate detachment of bodily-self and detachment of external reality, thus before compartmentalization of an alter personality begun fighting for the subject’s control.

## ACKNOWLEDGMENTS

We thank the Guest Editors for recognizing the value of our topic for inclusion in this Special Issue, as well as Associate Editor Dr. Àlex Escolà-Gascón for facilitating the independent peer-review of this paper. We declare no external funding or other conflicts of interest that could have potentially influenced our findings. The raw data from this study are available to qualified researchers.

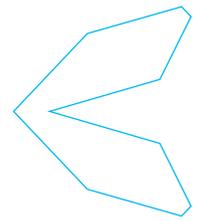
## REFERENCES

- Armah, A., & Landers-Potts, M. (2021). A review of imaginary companions and their implications for development. *Imagination, Cognition, and Personality*. Advance online publication, <https://doi.org/10.1177/0276236621999324>
- Auton, H. R., Pope, J., & Seeger, G. (2003). It isn’t that strange: Paranormal belief and personality traits. *Social Behavior and Personality*, 31, 711–719. <https://doi.org/10.2224/sbp.2003.31.7.711>
- Ayhan, Ö., & İşiksal, S. (2004). Memory recall errors in retrospective surveys: A reverse record check study. *Quality and Quantity*, 38, 475–493. <https://doi.org/10.1007/s11135-005-2643-7>
- Bond, T. G., & Fox, C. M. (2015). *Applying the Rasch model: Fundamental measurement in the human sciences*. (3rd ed.). L. Erlbaum.
- Bonne, O., Canettie, L., Bachar, E., DeNour, A.-K., & Shalev, A. (1999). Childhood imaginary companionship and mental health in adolescence. *Child Psychiatry and Human Development*, 29, 277–286. <https://doi.org/10.1023/A:1021345015520>
- Bouldin, P., Bavin, E. L., & Pratt, C. (2002). An investigation of the verbal abilities of children with imaginary companions. *First Language*, 22, 249–264. <https://doi.org/10.1177/014272370202206602>
- Caputo, G. B. (2019). Strange-face illusions during eye-to-eye gazing in dyads: Specific effects on derealization, depersonalization and dissociative identity. *Journal of Trauma and Dissociation*, 20, 420–444. <https://doi.org/10.1080/15299732.2019.1597807>
- Caputo, G. B., Lynn, S. J., & Houran, J. (2021). Mirror and eye gazing: An integrative review of induced altered and anomalous experiences. *Imagination, Cognition, and Personality*, 40, 418–457. <https://doi.org/10.1177/0276236620969632>
- Carlson, J.E. (2021). *Introduction to item response theo-*

- ry models and applications. Routledge. <https://doi.org/10.4324/9781003035886>
- Davis, P. E., Meins, E., & Fernyhough, C. (2011). Self-knowledge in childhood: Relations with children's imaginary companions and understanding of mind. *British Journal of Developmental Psychology*, 29, 680–686. <https://doi.org/10.1111/j.2044-835X.2011.02038.x>
- Drinkwater, K., Dagnall, N., Houran, J., Denovan, A., & O'Keeffe, C. (2022). Structural relationships among mental boundaries, childhood imaginary companions, and anomalous experiences. *Psychological Reports*. Advance online article <https://doi.org/10.1177/00332941221123235>.
- Epskamp, S., Borsboom, D., & Fried, E. I. (2017, January 20). Estimating psychological networks and their accuracy: A tutorial paper. arXiv: 1604.08463v4 [stat. AP]. <https://arxiv.org/pdf/1604.08462.pdf>
- Evans, H. (1987). *Gods, spirits, cosmic guardians: A comparative study of the encounter experience*. Aquarian.
- Fernyhough, C., Watson, A., Bernini, M., Moseley, P., & Alderson-Day, B. (2019). Imaginary companions, inner speech, and auditory verbal hallucinations: What are the relations? *Frontiers in Psychology*, 10, Article 1665. <https://doi.org/10.3389/fpsyg.2019.01665>
- Fiscaro, S.E. & Lance, C.E. (1990). Implications of three causal models for the measurement of Halo effects. *Applied Psychological Measurement*, December, 419–429. <https://doi.org/10.1177/014662169001400407>
- Fishbein, M., & Lange, R. (1990). The effects of crossing the midpoint on belief change: A replication and extension. *Personality and Social Psychology Bulletin*, 16, 189–199. <https://doi.org/10.1177/0146167290162001>
- Gallagher, S. (2000). Philosophical conceptions of the self: implications for cognitive science. *Trends in Cognitive Science*, 4, 14–21. [https://doi.org/10.1016/S1364-6613\(99\)01417-5](https://doi.org/10.1016/S1364-6613(99)01417-5)
- Giesbrecht, T., Merckelbach, H., Kater, M., & Sluis, A. F. (2007). Why dissociation and schizotypy overlap: The joint influence of fantasy proneness, cognitive failures, and childhood trauma. *Journal of Nervous and Mental Disease*, 195, 812–818. <https://doi.org/10.1097/NMD.0b013e3181568137>
- Gleason, T. R. (2004). Imaginary companions and peer acceptance. *International Journal of Behavioural Development*, 28, 204–209. <https://doi.org/10.1080/01650250344000415>
- Hoff, E. V. (2005). Imaginary companions, creativity, and self-image in middle childhood. *Creativity Research Journal*, 17, 167–280. [https://doi.org/10.1207/s15326934crj1702&3\\_4](https://doi.org/10.1207/s15326934crj1702&3_4)
- Hornstein, N. L., & Putnam, F. W. (1992). Clinical phenomenology of child and adolescent dissociative disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, 31, 1077–1085. <https://doi.org/10.1097/00004583-199211000-00013>
- Houran, J. (2000). Toward a psychology of “entity encounter experiences.” *Journal of the Society for Psychological Research*, 64, 141–158.
- Houran, J., Lange, R., Laythe, B., Dagnall, N., & Drinkwater, K., & O'Keeffe, C. (2019). Quantifying the phenomenology of ghostly episodes – Part II: A Rasch model of spontaneous accounts. *Journal of Parapsychology*, 83, 168–192. <https://doi.org/10.30891/jopar.2019.01.03>
- Jaynes, J. (1976/1990). *Origin of consciousness in the breakdown of the bicameral mind*. Houghton Mifflin Harcourt Publishing Company.
- Jones, H. P., Testa, R. R., Ross, N., Seal, M. L., Pantelis, C., & Tonge, B. (2015). The Melbourne assessment of schizotypy in kids: A useful measure of childhood schizotypal personality disorder. *BioMed Research International*, 2015, Article 635732. <https://doi.org/10.1155/2015/635732>
- Kumar, V. K., & Pekala, R. J. (2001). Relation of hypnosis-specific attitudes and behaviors to paranormal beliefs and experiences. In J. Houran, & R. Lange (Eds.), *Hauntings and poltergeists: Multidisciplinary perspectives* (pp. 260–279). McFarland & Co.
- Lange, R. (2017). Rasch scaling and cumulative theory-building in consciousness research. *Psychology of Consciousness: Theory, Research and Practice*, 4, 135–160. <https://doi.org/10.1037/cns0000118>
- Lange, R., Caputo, C. G., Lynn, S. J., & Houran, J. (2022). Mirror- and eye-gazing perceptions in advanced psychometric perspective. *Psychology of Consciousness: Theory, Research and Practice*, 9, 230–242. <https://doi.org/10.1037/cns0000328>
- Lange, R., & Fishbein, M. (1983). The effects of category differences on belief change and agreement with the source of a persuasive communication. *Journal of Personality and Social Psychology*, 44, 933–941.
- Lange, R., Greyson, B., & Houran, J. (2004). A Rasch scaling validation of a “core” near-death experience. *British Journal of Psychology*, 95, 161–177. <https://doi.org/10.1348/000712604773952403>
- Lange, R., & Houran, J. (2000). Modeling Maher's attribution theory of delusions as a cusp catastrophe. *Nonlinear Dynamics, Psychology, and Life Sciences*, 4, 235–254.
- Lange, R., Irwin, H. J., & Houran, J. (2001). Objective measurement of paranormal belief: A rebuttal to Vitulli. *Psychological Reports*, 88, 641–644. <https://doi.org/10.2466/pr0.2001.88.3.641>
- Lange, R., Martínez-Garrido, C., & Ventura, A. (2017). I'm scared to go to school! Capturing the effects of

- chronic daily fears on students' concept of self. *Journal of Applied Measurement*, 18, 420–433.
- Lange, R., Oliva, T.A., & McDade, S. (2001). An algorithm for estimating multivariate catastrophe models: GEMCAT II. *Studies in Nonlinear Dynamics and Econometrics*, 4(3), 137–168.
- Lange, R., Ross, R. M., Dagnall, N., Irwin, H. J., Houran, J., & Drinkwater, K. (2019). Anomalous experiences and paranormal attributions: Psychometric challenges in studying their measurement and relationship. *Psychology of Consciousness: Theory, Research, and Practice*, 6, 346–358. <https://doi.org/10.1037/cns0000187>
- Laythe, B., Houran, J., Dagnall, N., & Drinkwater, K. (2021). Conceptual and clinical implications of a “Haunted People Syndrome”. *Spirituality in Clinical Practice*, 8, 195–214. <https://doi.org/10.1037/scp0000251>
- Laythe, B., Houran, J., & Little, C. (2021). The ghostly character of childhood imaginary companions: An empirical study of online accounts. *Journal of Parapsychology*, 85, 54–74. <http://doi.org/10.30891/jop-ar.2021.01.07>
- Linacre, M. (2021). *Winsteps*® software. Beaverton OR: Winsteps.com. <https://www.winsteps.com/index.htm>
- Little, C., Laythe, B., & Houran, J. (2021). Quali-quantitative comparison of childhood imaginary companions and ghostly episodes. *Journal of the Society for Psychological Research*, 85, 1–30. <https://doi.org/10.30891/jopar.2021.01.07>
- Majors, K., & Baines, E. (2017). Children's play with their imaginary companions: Parent experiences and perceptions of the characteristics of the imaginary companions and purposes served. *Educational and Child Psychology*, 34, 37–56. <https://doi.org/10.53841/bpsecp.2017.34.3.37>
- Martinez-Conde, S. & Macknik, S.L. (2019), Locking eyes with a monster: Staring at somebody's face for ten minutes may give you nightmares. *Scientific American*, May 7, 2019. <https://blogs.scientificamerican.com/illusion-chasers/locking-eyes-with-a-monster/> consulted at 10/07/2021.
- Manosevitz, M., Prentice, N. M., & Wilson, F. (1973). Individual and family correlates of imaginary companions in preschool children. *Developmental Psychology*, 8, 72–79. <https://doi.org/10.1037/h0033834>
- Mauro, J. A. (1991). *The friend that only I can see: A longitudinal investigation of children's imaginary companions*. Unpublished doctoral dissertation. University of Oregon.
- McCutcheon, L., Lange, R., & Houran, J. (2002). Conceptualization and measurement of celebrity worship. *British Journal of Psychology*, 93, 67–87. <https://doi.org/10.1348/000712602162454>
- McLewin, L.A., & Muller, R.T. (2006). Childhood trauma, imaginary companions, and the development of pathological dissociation. *Aggression and Violent Behavior*, 11, 531–545. <https://doi.org/10.1016/j.avb.2006.02.001>
- Molenaar, I. W. (2002). Parametric and non-parametric item response theory models in health related quality of life measurement. In M. Mesbah, B. F. Cole, & M. L. T. Lee (Eds.), *Statistical methods for quality of life studies*. Springer. [https://doi.org/10.1007/978-1-4757-3625-0\\_12](https://doi.org/10.1007/978-1-4757-3625-0_12).
- Moriguchi, Y., & Todo, N. (2018). Prevalence of imaginary companions in children: A meta-analysis. *Merrill-Palmer Quarterly*, 64, 459–482. <https://doi.org/10.13110/merrpalmquar1982.64.4.0459>
- Pedregosa, F., Varoquaux, G., Gramfort, A., Michel, V., Thirion, B., Grisel, O., Blondel, M., Prettenhofer, P., Weiss, R., Dubourg, V., Vanderplas, J., Passos, A., Cournapeau, D., Brucher, M., Perrot, M., & Duchesnay, E. (2011). Scikit-learn: Machine learning in Python. *Journal of Machine Learning Research*, 12, 2825–2830.
- Pica, M. (1999). The evolution of alter personality states in dissociative identity disorder. *Psychotherapy: Theory, Research, Practice, Training*, 36, 404–415. <https://doi.org/10.1037/h0087838>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Rasch, G. (1960/1980). *Probabilistic models for some intelligence and attainment tests*. MESA Press.
- Roby, A. C., & Kidd, E. (2008). The referential communication skills of children with imaginary companions. *Developmental Science*, 11, 531–540. <https://doi.org/10.1111/j.1467-7687.2008.00699.x>
- Schaefer, C. E. (1969). Imaginary companions and creative adolescents. *Developmental Psychology*, 1, 747–749. <https://doi.org/10.1037/h0028270>
- Seiffge-Krenke, I. (1997). Imaginary companions in adolescence: Sign of a deficient or positive development? *Journal of Adolescence*, 20, 137–154. <https://doi.org/10.1006/jado.1996.0072>
- Silberg, J. L. (2012). *The child survivor: Healing developmental trauma and dissociation*. Routledge. <https://doi.org/10.4324/9780203830277>
- Singer, D. G., & Singer, J. L. (1990). *The house of make-believe: Children's play and developing imagination*. Harvard University Press. <https://doi.org/10.4159/9780674043688>

- Somers, J. U., & Yawkey, T. D. (1984). Imaginary play companions: Contributions of creative and intellectual abilities of young children. *Journal of Creative Behavior*, 18, 77–89. <https://doi.org/10.1002/j.2162-6057.1984.tb00370.x>
- Spector, P. E. (2019). Do not cross me: Optimizing the use of cross-sectional designs. *Journal of Business and Psychology*, 34, 125–137. <https://doi.org/10.1007/s10869-018-09613-8>
- Svendsen, M. (1934). Children's imaginary companions. *Archives of Neurology and Psychiatry*, 32, 985–999. <https://doi.org/10.1001/archneurpsyc.1934.02250110073006>
- Talari, K., & Goyal, M. (2020). Retrospective studies – Utility and caveats. *Journal of the Royal College of Physicians of Edinburgh*, 50, 398–402. <https://doi.org/10.4997/JRCPE.2020.409>
- Taylor, M. (1999). *Imaginary companions and the children who create them*. Oxford University Press.
- Taylor, M., & Carlson, S. M. (1997) The relation between individual differences in fantasy and theory of mind. *Child Development*, 68, 436–455. <https://doi.org/10.2307/1131670>
- Taylor, M., Carlson, S. M., Maring, B. L., Gerow, L., & Charley, C. M. (2004). The characteristics and correlates of fantasy in school-age children: Imaginary companions, impersonation, and social understanding. *Developmental Psychology*, 40, 1173–1187. <https://doi.org/10.1037/0012-1649.40.6.1173>
- Taylor, M., Cartwright, B. S., & Carlson, S. M. (1993). A developmental investigation of children's imaginary companions. *Developmental Psychology*, 29, 276–285 <https://doi.org/10.1037/0012-1649.29.2.276>
- Taylor, M., Shawber, A. B., & Mannering, A. M. (2009). Children's imaginary companions: What is it like to have an invisible friend? In K. D. Markman, W. P. Klein, & J. A. Suhr (Eds.), *Handbook of imagination and mental simulation* (pp. 211–224). Psychology Press.
- Trionfi, G., & Reese, E. (2009). A good story: Children with imaginary companions create richer narratives. *Child Development*, 80, 1301–1313. <https://doi.org/10.1111/j.1467-8624.2009.01333.x>
- Trujillo, K., Lewis, D. O., Yeager, C. A., & Gidlow, B. (1996). Imaginary companions of school boys and boys with dissociative identity disorder/multiple personality disorder. *Child and Adolescent Psychiatric Clinics of North America*, 5, 375–391. [https://doi.org/10.1016/S1056-4993\(18\)30372-9](https://doi.org/10.1016/S1056-4993(18)30372-9)
- van Borkulo, C. D., Borsboom, D., Epskamp, S., Blanken, T. F., Boschloo, L., Schoevers, R. A., & Waldorp, L. J. (2014). A new method for constructing networks from binary data. *Scientific Reports*, 4, Article 5918. <https://doi.org/10.1038/srep05918>
- van Borculo, C. D., & Epskamp, S. (2016, September 7). Fitting Ising models using the ELasso Method. Package 'Isingfit', V 0.3.1. CRAN repository. Accessed from <https://CRAN.R-project.org/package=IsingFit>
- Van Der Vaart, W., Van Der Zouwen, J., & Dijkstra, W. (1995). Retrospective questions: data quality, task difficulty, and the use of a checklist. *Quality and Quantity*, 29, 299–315 <https://doi.org/10.1007/BF01101976>
- Wilson, M. (1989). Saltus: A psychometric model for discontinuity in cognitive development. *Psychological Bulletin*, 105, 276–289. <https://doi.org/10.1037/0033-2909.105.2.276>
- Wilson, S. C., & Barber, T. X. (1983). The fantasy-prone personality: Implications for understanding imagery, hypnosis, and parapsychological phenomena. In A. A. Sheikh (Ed.), *Imagery: Current theory, research, and application* (pp. 340–387). John Wiley & Sons.
- Young, S. (2018). Children who see fairies. *Journal for the Study of Religious Experience*, 4, 81–98.
- Zarei, T., Pourshahbaz, A., & Poshtmashhadi, M. (2022). Childhood imaginary companions and schizotypy in adolescents and adults. *Journal of Anomalous Experience and Cognition*, 2, 166–189. <https://doi.org/10.31156/jaex.23812>



**RESEARCH  
ARTICLE**

# Facing Death Anxiety: Effects of Professional Exposure to Death and Dying

**Kelly A. Curtis**

kelly.a.curtis@stu.mmu.ac.uk

**Neil Dagnall**

n.dagnall@mmu.ac.uk

orcid.org/0000-0003-0657-7604

**Ken Drinkwater**

k.drinkwater@mmu.ac.uk

orcid.org/0000-0002-4015-0578

**Andrew Denovan**

a.denovan@mmu.ac.uk

orcid.org/0000-0002-9082-7225

SUBMITTED October 16, 2023

ACCEPTED November 11, 2023

PUBLISHED December 31, 2023

<https://doi.org/10.31275/20233225>

**PLATINUM OPEN ACCESS**



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## HIGHLIGHTS

Exposure to death and dying in professional settings coincides with lower reports of death anxiety, regardless of high-exposure vs. non-exposure professions.

## ABSTRACT

Previous research has examined the relationship between exposure to death and dying and death anxiety. However, the extent to which research in this area provides a coherent body of work is unclear. To investigate varied exposures of death and dying and to reproduce findings, a measure that encompasses the range of ways in which people can be exposed is necessary. Accordingly, this study developed a new measure, the Exposure to Death and Dying Scale (ED&DS), and investigated specifically how professional exposure to death and dying was related to death anxiety in high-exposure and non-exposure professions. Professional exposure is defined as exposure to death and dying in a professional setting, as opposed to in one's personal relationships or with one's self. The Death Anxiety Scale Extended (DAS-E) was used to provide a score for unease surrounding death. Participants ( $N = 468$ ) were separated into different groups based on their profession: non-exposure professions and high-exposure professions, which consisted of 6 sub-categories: mental health professionals, the general medical field, nursing, mortuary professionals, end-of-life care, and forensic professionals. Professional exposure rates to both death and dying were calculated, as well as death anxiety scores and time spent in each profession. Non-exposure professions were shown to have lower levels of exposure than all categories of high-exposure professions. One-way ANOVA revealed that exposure (vs. non) professionals had a lower level of death anxiety. High-exposure occupations varied in levels of death anxiety. The mental health group had the highest mean death anxiety (111.52), followed by the forensic professionals (107.36), general medical field (106.66), nurses (104.79), mortuary professionals (104.60), and end-of-life carers (93.89). Although there was a trend toward a decline in death anxiety with increasing time spent in high-exposure occupations, there was also an increase in death anxiety among individuals with the longest tenure in their field, indicating that this is not a clear linear relationship. Overall, this study showed that the higher professional exposure to death and dying, the lower that individual's reported death anxiety was, regardless of the type of exposure experienced.

## KEYWORDS

Exposure to death, exposure to dying, death anxiety, measurement, scale development.

## INTRODUCTION

In life, many of us, from one time or another, contemplate our own demise. Thus, the dilemma of life and our subsequent death affects us all as we strive to negotiate life's journey, and this may provide the drive needed to

achieve goals and survive or avoid death altogether. These competing factors (life and death) allied to a variety of beneficial and destructive behaviors/beliefs mediate our perception of what it is to exist whilst giving meaning to the life we inhabit. In order to appraise the emotional impact of this, several psychological theories have



emerged to explain how it materializes. Terror Management Theory (TMT) explains this disparity can be eased in various ways: cultural attachment, leaving a legacy through having children, confidence-building behaviors, and attaining social status and achievements, all with the aim of gaining a figurative immortality through avoiding a focus on death (Greenburg, 2012). Alternatively, Meaning Management Theory (MMT) contends that people do not alleviate the inevitability of death through avoidance, as with TMT, but rather acceptance is a means to assuage the anxiety that comes with inevitable death, resulting in a more ample and meaningful life (Wong, 2008; Wong & Tomer, 2011). What TMT and MMT have in common is both posit that awareness of death will result in connection to one's culture and the seeking out of self-esteem, reducing the impression that one is vulnerable to life threatening variables, but these outcomes will be due to contradictory reasons: minimizing terror versus maximizing meaning (Wong & Tomer, 2011). While there is the concept of a "death drive" proposed by Freud and other psychoanalysts, which is an initiative towards destruction and aggression, including with one's own life, this theory has remained largely rebuked and countered with the opinion that it is in our nature to uphold survival and any self-serving destructiveness exists only in pathology, whether inborn or due to trauma (Kernberg, 2009).

Being exposed to death and the process of dying, whether through cultural influence, the media, or personal experience, contributes to an awareness that there is an end to the experience of life. Research exploring how this exposure influences perceptions of life, death, and the afterlife is ripe for a variety of lenses to examine, including personal, relational, and societal views across the life span of life. The varying nature of one's relationship with death and dying before, during, and after an exposure can influence their approach to and outlook on life and death in considerable ways, depending on how and when an exposure occurred, under what circumstances, and what resources are available at the time (Bolaséll, Oliveira, & Kristensen, 2021; Keyes et al., 2014; Smith-Greenway, Weitzman, Lin, & Huss, 2023). Also, the frequency of exposure to death and dying has been shown to have an effect on individuals, including the potential for desensitization if at high volumes (Peal, Handal, & Gilner, 1981). This desensitization arguably exists as a function to deal with persistent exposure, reducing anxieties surrounding death, and furthering the complexity of how exposure to death and dying affects beliefs and perceptions.

## Death Anxiety

Both TMT and MMT acknowledge that awareness

of death relates to anxiety surrounding death. Templer (1970) described death anxiety as the apprehension of one's permanent elimination along with the uneasiness of the dying process. He thoroughly examined the idea of death anxiety in his 1970 research, which led him to develop a measure for death anxiety called the Death Anxiety Scale (DAS), and the extended version later in 2006 (DAS-E). These scales have allowed the concept of death anxiety to be used widely in death-related research with how it appears in different cultures (Jamadar & Kumari, 2019; Sharif-Nia, 2019), religions (Davoudi, 2022; Jong, 2020), age groups (Slaughter & Griffiths, 2007; Jong, 2020), and how it pertains to healthcare professionals (Clare, Elander, & Baraniak, 2022; Langa, 2018).

In contemporary Western society, Kastenbaum and Moreman (2018) postulate that there is a simultaneous acceptance and denial towards death, which creates cognitive dissonance surrounding death's impossibility and inevitability. This could be a contributing factor to death anxiety, which includes a variety of speculated variables: thoughts surrounding what it's like to experience the process of dying, what happens after death, the fear generated from the loss of everything one has known, the destruction of self, the cost of one's accomplishments and creations, losing control over the people in one's care, and the potential isolation during and after death (Gire, 2013). Death anxiety is a widely used term in death-related research which has resulted in a complex, multidimensional understanding of the phenomena (Pollak, 1980), and it is often used to describe a simultaneous phobia, or externally generated fear, and obsession, or internally generated fear (Lester & Templer, 1993).

Research exploring death anxiety in individuals has resulted in various trends and correlations. As highlighted by Templer's 2006 paper utilizing the DAS, death anxiety is often positively correlated with good adjustment, negatively correlated with psychopathology, and religious individuals tend to have lower death anxiety totals than the secular community. DAS scores tend to remain stable through most of life but lower during the elderly phase, families tend to have similar levels of death anxiety, and men tend to have lower DAS scores than women (Templer et al., 2006). Furthermore, periods of heightened stress can affect an individual's ability to adapt to the presence of death anxiety, creating an ebb and flow of its impact in one's life (Iverach, Menzies, & Menzies, 2014).

The impact death anxiety has on individuals can vary greatly as a function of factors such as culture, environment, social norms, and mental health. Studies show a relationship between death anxiety and an increased aggression toward those who threaten one's worldview (McGreggor et al., 1998), increased phobic and compul-

sive behaviors (Strachan et al., 2007), a variety of anxiety disorders (Arndt, Routledge, Cox, & Goldenberg, 2005), obsessive-compulsive disorder (Menzes, Sharpe, & Dar-Nimrod, 2020), and psychopathology (Maxfield, John, & Pyszczynski, 2014). So not only are there various points of influence on what is associated with death anxiety, but how death anxiety manifests in individual perceptions, beliefs, behaviors, and well-being can also differ.

### Measuring Exposure to Death and Dying

Awareness of death occurs through exposure to death or dying, whether first-hand experiences or vicariously via the media, storytelling, or other cultural outlets. Understanding how different types of exposure relate to death anxiety can shed light on how these various exposures to death and dying are associated with beliefs surrounding death, including death anxiety. With the idea that it's human nature to diminish anxieties about death, how exposure to death affects those efforts became a question of interest for this study.

To better understand how frequent exposure to death and dying affects various populations, there are limitations in previous research that need to be addressed. Most importantly, there is currently no universally used or accepted way to measure exposure to death and dying. The research that focuses on exposure to death and dying uses a wide variety of methods to determine subjects' level and types of exposure across studies. Because researchers are using such an array of measures, it results in an insufficient exploration of how exposure to death and dying impacts people, as well as the ability to replicate findings.

Previous research addressing exposure to death and dying tends to fall into one of the following, limited groupings: only measuring exposure to death, or exposure to dying, but not both (Linly & Joseph, 2005; Pirelli & Jeglic, 2009); measuring exposure to death and dying in the personal sphere, the professional sphere, or with the individual themselves, but not across all three areas (Dutta & Kaur, 2014; Hashemi, Oroojan, Rassouli, & Ashrafzadeh, 2023; Hoelter & Hoelter, 1981); using generalized participant reports of exposure to death and dying, such as asking participants to share approximate and ill-defined estimates of how much exposure they've experienced (Kane & Hogan, 1986); and relying on assumptions that all members of a certain population have the same levels or types of exposure, such as presuming that all nurses in a hospital have the same amount or types of exposure (Dutta & Karr, 2014; Peters, et al., 2013), or that all types of exposure are created equal (Hotchkiss, 2018).

These variants and deficits in looking at exposure to

death and dying from a broader perspective have led to the need for an exhaustive way to measure the diversity in which individuals can experience exposure that covers both death and dying, as well as exposure in personal relationships, the professional sphere, and with oneself. This will allow researchers to thoroughly investigate how different types of exposure relate to subjects' views on death in a standardized way and allow for replication studies to be more easily conducted and evaluated. Without a universal measure to determine exposure to death and dying, researchers are limiting themselves by not being able to look at the bigger, systematic picture.

### The Present Study

This research explored how professional exposure to death and dying relates to death anxiety. Professional exposure is defined as exposure to death and dying in a professional setting, as opposed to in one's personal relationships or with one's self. Explicitly, we investigated how levels of death anxiety differed between professions with high and low levels of exposure. Examined rates of death anxiety among various high-exposure professions. Explored if any variation in death anxiety existed between those exposed to death and those exposed to dying. Measured how death anxiety changes depending on the amount of time high-exposure professionals spend in their careers. How death anxiety manifests between different types of high-exposure professions, as well as differences in death anxiety between professional exposure to death and professional exposure to dying, have yet to be explored. However, previous research indicates that high exposure to both death and dying relates to positive attitudes about death (Anderson et al., 2008; Baykan et al., 2021; Braun et al., 2010) and increased well-being on the job (Guidetti et al., 2022). While time in one's career does not necessarily equate to higher exposure rates, it is speculated that those who have spent a significant amount of time in a high-exposure profession will have had an elevated amount of exposure when compared to someone new in their profession (Baykan et al., 2021). A highly exploratory approach was used in this study to examine these research questions, and a new method was utilized in order to determine the soundness of an original measure of exposure to death and dying.

Due to inadequacies of previous measures, this study developed a new measure to examine exposures to both death and dying in the professional sphere, in personal relationships, and with one's own life in order to produce a standard that focuses on the varied ways individuals experience exposure to death and dying. The new measure called the Exposure to Death and Dying Scale (ED&DS),

used a 5-point Likert scale (scale of 1 Never to 5 Very Often) in response to 24 total prompts asking “how often in your lifetime have you...” followed by various types of exposure to death and dying, such as “been exposed to immediate family members after death,” “participated in body preparation or memorialization in a professional capacity,” and “had a diagnosis of a life-threatening illness.” In order to cover the various types of exposure to death and dying, the ED&DS contained six subscales with four items each: exposure to death in personal relationships, exposure to dying in personal relationships, exposure to death in the professional sphere, exposure to dying in the professional sphere, exposure to one’s own death, and exposure to one’s own dying. Items for this scale were derived from exploring the existing measures that assess exposure to death and dying in these various areas, as well as reading the literature on ways in which people experience exposure to death and dying. The ED&DS produced a total score for the level of exposure in subjects, and also a sub-score for each of the six subscales, which were used to explore specific types of exposure.

Though the ED&DS can be used to examine different types of exposure to death and dying, this study honed in on two subscales in order to answer the exploratory questions of the study: professional exposure to death and professional exposure to dying. By focusing on exposure to death and dying in the professional sphere as it relates to death anxiety, it allowed the new ED&DS to be reviewed in an intentional way, as there are other studies that examine the relationship between professional exposure and death anxiety which were used as a baseline for comparison. Even though these other studies have a variety of methods in determining exposure to death and dying, trends and correlations were considered in relation to the current research.

Those with high levels of exposure to death and dying were of particular interest in this research, such as nurses, end-of-life carers, forensic professionals, mortuary professionals, and funeral professionals, amongst other occupations. Those who are exposed to death and dying over and over again on the job, with less personal or emotional attachment to those who are dead or dying than when in one’s personal life, were posited to have their own unique views on death, dying, and the afterlife as compared to those who aren’t professionally exposed or exposed in alternative ways. The differences unveiled between those with high, and those with low levels of professional exposure to death and dying help reveal how death-related beliefs are constructed, sustained, and change over time.

## METHOD

## Participants

This study collected data from 468 participants. There were 115 male participants (24.57%), 327 female participants (69.87%), 25 non-binary or 3rd gender participants (5.34%), and 1 participant who preferred not to indicate their gender (0.21%). The ages of participants ranged from 18-81, with a mean age of 43.84 and an SD of 14.73. Country of residence varied, with 123 residing in the UK (26.28%), 321 residing in the US (68.59%), and 24 residing in Canada (5.12%),

To ensure some participants would have high levels of exposure to death and dying in the professional sphere and others would not, recruitment took place on social media, as well as by targeting workplaces and organizations that contain individuals who have a high level of exposure to death and dying, such as nursing groups, care homes, funeral homes, hospice organizations, paramedic communities, etc. In those instances, permission was obtained from the company/organization prior to recruitment, and the approach to recruitment adhered to those locations’ policies, typically via email or being included in a newsletter. Participants were also obtained in person, mainly on a university campus in Manchester, England. Demographic information was obtained from participants, including their age, gender, country of residence, profession, and how much time has been spent in their profession. Participation consisted of self-report measures.

Initially, as an exploratory approach, participants were separated into two groups: low-exposure professions and high-exposure professions. Participants placed in these initial categories were done so by the reasonable assumption of the amount of exposure to either death or dying they have had during said profession. These high versus low categories were then confirmed by looking at both the grand total score of the ED&DS along with the professional exposure to death and professional exposure to dying subscale items. It was determined that participants were, in fact, in the high exposure group when they had an exposure score above the total participant mean for any of the eight professional exposure to death or professional exposure to dying items, as various professions will have different exposures based on their job criteria. Once confirmed to be in the high or low professional exposure groups, the high-exposure professions were categorized into like-categories based on similar self-reported job titles, which resulted in 6 different categories of exposure professions. These categories varied in types of exposure, with some having exposure to death, some having exposure to the process of dying, and some having exposure to both. These six groups included: men-

tal health professionals, the general medical field, nursing, mortuary professionals, end-of-life care, and forensic professionals. Non-exposure professions remained in their own grouping.

Mental health professionals included therapists, counselors, and social workers. This group was speculated to have more of a vicarious exposure to death and dying, as in patients discussing the topic more so than these professionals experiencing exposure to death and dying directly. The general medical field category contained participants in a variety of medical-related positions, such as doctors, surgeons, paramedics, physical therapists, general carers, medical assistants, and those who work in medical offices, amongst others. This group was speculated to have more exposure to the process of dying than death. The nursing category was composed of those who specifically stated “nurse” or “nursing” as their profession. This group was speculated to have exposure to both death and dying. End-of-life care professionals included hospice carers and death doulas and were speculated to have higher exposure to both death and dying, as they not only care for those who are dying, but they also are often with others after death. Mortuary professionals were funeral directors, corners, morticians, embalmers, cremators, cemetery workers, and those in body transportation. This group was speculated to have a higher exposure to death than to dying. The forensic professional category was composed of crime scene investigators and cleaners. This group was speculated to have more exposure to death than to dying.

Participants could withdraw by emailing the principal investigator (email provided on the participant information form), and participants were automatically removed from the study if they indicated they were under 18 years of age or if they failed to complete the questionnaires. Participants outside of the UK, US, and Canada were also excluded, as mental health resources were provided for those three countries because of the potentially distressing nature of inquiring about exposure to death and dying, as well as death anxiety. Per ethical guidelines, 7 participants were excluded for indicating “other” as their country of residence (1.49%).

## Measures

As this study explored professional exposure as it relates to death anxiety, the two subscales of the ED&DS that were utilized were professional exposure to death and professional exposure to dying. While participants completed the 24-item ED&DS, for the purposes of this paper, only the eight items in the professional subscales were analyzed, which included prompts to determine the

frequency of professional exposure, such as: dead bodies, body identification, body preparation or memorialization, caring for dying individuals, and threat of an individual’s death, among others. These subscales provide a total possible score of professional exposure to death and dying that ranges from 8 to 40, and, when looking at professional exposure to death and professional exposure to dying subscales separately, there is an alternative subscore ranging from 4 to 20 for each. Reliability for this scale is presented in the Analysis section.

**The Death Anxiety Scale - Extended (DAS-E)** was used to determine participants’ level of death anxiety, providing a total score for each participant. While Templer’s (2006) original development of the DAS-E utilized an orthogonal factor analysis with varimax rotation that identified ten different factors in the scale, this study used the DAS-E as a unidimensional scale with a single, total death anxiety score ranging from a possible 51 to 255 (Lester, 2007) in order to alleviate the varying factors found between studies (Durlak, 1982). The unidimensional approach is aimed to reduce the criticisms the DAS and DAS-E have faced, mainly the factor validity of these scales. The true/false forced choice scales used in the original DAS-E were also switched to a 5-point scale (scale of 1 Strongly Disagree to 5 Strongly Agree), as other research has shown a Likert scale provides the DAS with more internal consistency (Abdel-Khalek, 1997; Durlak, 1982; McMordie, 1979). Five items in the DAS-E are scored inversely (Items 2, 3, 5, 6, 7, and 15), and all other items are scored in a true direction. Reliability for this total scale was good,  $\alpha = .90$ .

## ETHICS

This research has been approved by the ethical committee of Manchester Metropolitan University, EthOS Reference Number: 40352.

## ANALYSIS

Initially, the ED&DS was examined using exploratory factor analysis (EFA). Factor extraction used the unweighted least squares method along with direct oblimin oblique rotation. This approach is recommended when interdependence is assumed to exist among potential underlying factors (Escolá-Gascón, 2020). Initial eigenvalues for each factor were considered in addition to the total quantity of explained variance. Parallel analysis was also conducted to advise the number of factors to extract (Horn, 1965). Items loading  $\geq .4$  on a factor were judged to effectively represent said factor, and items loading  $\geq .4$  on more than one factor reflected an intolerable degree of cross-loading (Thompson, 2004). Subsequently, data

were looked at in terms of the breakdown of high-exposure versus non-exposure career categories, rates of exposure to death and dying in those career categories, rates of death anxiety amongst the various careers, and how the amount of time in a career relates to death anxiety. Univariate, one-tailed ANOVAs were used with a confidence level of .05.

## RESULTS

### Exploratory Factor Analysis

The Kaiser-Meyer-Olkin test was initially utilized to indicate if items were satisfactorily correlated, which reported a suitable value of .86. A five-factor extraction accounted for 63.85% of the variance. Parallel analy-

sis suggested the extraction of four factors. However, a four-factor solution was not deemed to be as interpretable as a five-factor solution (i.e., one factor contained cross-loadings on all loading items). Therefore, a five-factor solution was selected as the most interpretable. Factor loadings are presented in Table 1. For the purposes of the current study, specific items loaded on distinct factors representing Professional Exposure to Death and Professional Exposure to Dying. Reliability was good for each subscale (Professional Exposure to Death  $\alpha = .89$ ,  $\omega = .90$ ; Professional Exposure to Dying  $\alpha = .92$ ,  $\omega = .92$ ). Remaining factors represented Death and Dying in Personal Relationships ( $\alpha = .88$ ,  $\omega = .88$ ), Own Death with an emphasis on threat and serious illness ( $\alpha = .76$ ,  $\omega = .75$ ), and Own Dying with an emphasis on near-death ex-

**Table 1.** Summary of EFA Results for the ED&DS Items. *Note:* Items ranked according to loading.

Item*	Factor Loadings (E = Eigenvalue, VE = Variance Explained)				
	Factor 1 (E = 6.71, VE = 27.95%)	Factor 1 (E = 3.89, VE = 16.21%)	Factor 1 (E = 2.41, VE = 10.05%)	Factor 1 (E = 1.27, VE = 5.30%)	Factor 1 (E = 1.27, VE = 4.39%)
9	.97				
10	.85				
11	.71				
12	.58				
8		.77			
7		.77			
3		.74			
4		.71			
5		.68			
6		.66			
1		.62			
2		.57			
17			.77		
21			.73		
18			.63		
24			.51		
15				.78	
14				.68	
13				.68	
16				.57	
22					.52
20					.49
19					.46
23					.17



perience ( $\alpha = .52$ ,  $\omega = .54$ ). This last factor displayed low reliability and possessed an item with weak loading (.17). It is beyond the scope of this paper, but future iterations of the scale are required with particular attention to the items representing this final factor.

### Breakdown of Professions

Participants had a range of careers, with a total of 283 (60.47%) reported professions not associated with exposure to death or dying. One-hundred eighty-five participants (39.53%) reported professions associated with higher exposure to death or dying. Of the professions associated with higher exposure to death and dying, they were divided into six subgroups: the mental health field, which consisted of 29 participants (15.67%) and a mean amount of time in this career of 12.17 years; the general medical field, which consisted of 47 participants (25.40%) and a mean amount of time in this career of 14.15 years; nursing, which consisted of 42 participants (22.70%) and a mean amount of time in this career of 22.67 years; the mortuary professionals, which consisted of 30 participants (16.22%) and a mean amount of time in this career of 10.63 years; end-of-life care, which consisted of 18 participants (9.73%) and a mean amount of time in this career of 8.0 years; and forensic professionals, which consisted of 19 participants (10.27%) and a mean amount of time in this career of 10.47 years. The mean amount of time participants who were in a non-exposure career was 10.93

years. Table 2 shows the breakdown of profession categories and time in said professions.

### Rates of Exposure to Death and Dying

Rates of professional exposure to death and dying via the ED&DS were compared. Table 3 shows non-exposure professions compared to all high-exposure professions, while Table 4 shows the breakdown of the high-exposure profession categories. The mean and standard deviation were calculated based on the four professional exposure to dying items and the four professional exposure to death items in the ED&DS and were compared to each professional category, including non-exposure professionals. Overall, non-exposure professionals reported lower levels of exposure to both death and dying in all areas, except with participating in body identification, in which end-of-life carers reported lower levels of exposure ( $M = 1.06$ ,  $SD = 0.24$ ) than non-exposure professionals ( $M = 1.12$ ,  $SD = 0.58$ ).

Mental health professionals experienced more exposure to death than dying, with the highest exposure coming from exposure to the threat of an individual's death ( $M = 3.24$ ,  $SD = 1.41$ ). The general medical field were exposed to the process of dying more often than death, with the highest exposures coming from caring for dying individuals ( $M = 3.28$ ,  $SD = 1.78$ ) and the threat of an individual's death ( $M = 3.13$ ,  $SD = 1.58$ ). Nurses had high levels of both exposure to dying and exposure to death, with the highest dying exposure being caring for dying individuals ( $M = 4.50$ ,  $SD = 0.92$ ) being tied with the highest exposure to death stemming from being exposed to dead bodies ( $M = 4.50$ ,  $SD = 0.97$ ). Overall, nurses reported the highest numbers of both professional dying and death exposures with notable means over the total across the board. Mortuary professionals had higher levels of exposure to death than exposure to dying, with the most significant exposure coming from being exposed to dead bodies ( $M = 4.83$ ,  $SD = 0.53$ ). However, participating in body preparation or memorialization was a close second ( $M = 4.60$ ,  $SD = 0.81$ ). The category for end-of-life care had higher levels of exposure than the total in both dying and death. Caring for dying individuals was the highest report of exposure to dying for this group ( $M = 3.67$ ,  $SD = 1.24$ ), and being exposed to dead bodies was the highest report of exposure to death ( $M = 3.00$ ,  $SD = 1.46$ ). Forensic professionals reported a higher level of exposure to death than exposure to dying, with exposure to dead bodies and being exposed to dead individuals at the scene of death being tied for the highest type of exposure reported ( $M = 4.95$ ,  $SD = 0.23$ ).

When looking at the different types of exposure to death and dying, nurses reported the highest levels of

**Table 2.** Profession Categories and Time in Professions

Profession Category	N	% of participants	Mean Time in Profession (years)	SD	Median
Non-exposure Professions	283	60	10.93	11.04	7.00
High-Exposure Professions	185	40	14.17	12.17	10.00
Mental Health	29	16	12.17	10.74	10.00
General Medical Field	47	25	14.15	10.95	11.00
Nursing	42	23	22.67	14.86	21.50
Mortuary Professionals	30	16	10.63	8.97	8.00
End-of-Life Care	18	10	8.00	8.96	5.50
Forensic Professionals	19	10	10.47	8.37	9.00

**Table 3.** Levels of Professional Exposure to Dying and Death Amongst High and Non-Exposure professions

Profession Category		Exposure to Dying				Exposure to Death			
		Cared for dying	Dying at moment of death	Process of death	Threat of death	Dead bodies	Dead at the scene of death	Body identification	Body preparation or memorialization
Non-exposure Profession	Mean	1.41	1.27	1.29	1.48	1.49	1.32	1.12	1.26
	SD	1.02	0.83	0.88	1.06	1.10	0.93	0.58	0.86
High-exposure Profession	Mean	3.14	2.78	2.95	3.36	3.78	3.29	2.16	2.76
	SD	1.71	1.62	1.74	3.78	1.60	1.76	1.64	1.70
Total	Mean	2.09	1.87	1.94	2.23	2.40	2.10	1.53	1.85
	SD	1.58	1.41	1.52	1.57	1.73	1.64	1.23	1.46

professional exposure to dying across the board with caring for dying individuals ( $M = 4.50, SD = 0.92$ ), being exposed to dying individuals at the moment of death ( $M = 4.10, SD = 1.21$ ), participating in the process of an individual's death ( $M = 4.07, SD = 1.52$ ), and being exposed to the threat of an individual's death ( $M = 4.38, SD = 1.06$ ). Amongst professional exposure to death, forensic professionals reported the highest levels of exposure to dead

bodies ( $M = 4.95, SD = 0.23$ ), exposure to dead individuals at the scene of death ( $M = 4.95, SD = 0.23$ ), and participating in body identification ( $M = 3.79, SD = 1.48$ ). Participation in body preparation or memorialization was the only professional death exposure category, whereas another group, mortuary professionals, reported the highest exposure ( $M = 4.60, SD = 0.81$ ).

### Rates of Death Anxiety

**Table 4.** Levels of Professional Exposure to Dying and Death Amongst High-Exposure Profession Categories

Profession Category		Exposure to Dying				Exposure to Death			
		Cared for dying	Dying at moment of death	Process of death	Threat of death	Dead bodies	Dead at the scene of death	Body identification	Body preparation or memorialization
Mental Health	Mean	2.48	2.00	2.21	3.24	2.24	2.03	1.17	1.66
	SD	1.62	1.63	1.50	1.41	1.73	1.61	0.60	1.08
General Medical Field	Mean	3.28	2.81	2.77	3.13	3.32	2.89	1.72	2.19
	SD	1.78	1.58	1.68	1.58	1.71	1.75	1.36	1.48
Nursing	Mean	4.50	4.10	4.07	4.38	4.50	3.83	2.00	3.69
	SD	0.92	1.21	1.52	1.06	0.97	1.51	1.45	1.68
Mortuary Profession	Mean	2.30	2.27	2.57	3.30	4.83	3.90	3.63	4.60
	SD	1.58	1.48	1.74	1.64	0.53	1.63	1.83	0.81
End-of-life Care	Mean	3.67	2.83	3.17	2.61	3.00	2.50	1.06	2.06
	SD	1.24	1.43	1.47	1.79	1.46	1.51	0.24	1.26
Forensics	Mean	1.79	2.00	2.63	2.68	4.95	4.95	3.79	1.68
	SD	1.38	1.20	1.98	1.06	0.23	0.23	1.48	0.89



**Table 5.** Descriptive Differences Between Profession Categories and Death Anxiety

Profession Category	Mean	
	DAS-E	SD
Non-exposure Professions	116.04	25.88
High-Exposure Professions	105.49	22.52
Mental Health	111.52	26.48
General Medical Field	106.66	22.26
Nursing	104.79	20.09
Mortuary Professionals	104.60	24.94
End-of-Life Care	93.89	14.99
Forensic Professionals	107.36	22.16

When incorporating the DAS-E, varying levels of death anxiety emerged among the different profession categories when a one-way ANOVA was calculated ( $F(10, 467) = 3.10, p < .001$ ). Tables 5 and Figure 1 show these results. The exposure professionals had a lower level of death anxiety overall ( $M = 105.49, SD = 22.52$ ) when compared to the non-exposure professionals ( $M = 116.04, SD = 25.88$ ). When looking at the breakdown of the different categories of exposure professionals, the mental health group had the highest mean death anxiety ( $M = 111.52, SD = 26.48$ ), and end-of-life carers had the lowest mean death anxiety ( $M = 93.89, SD = 14.99$ ). The remaining categories (mental health, general medical field, nursing, mortuary professions, and forensic professionals) all had

a similar mean death anxiety level reported.

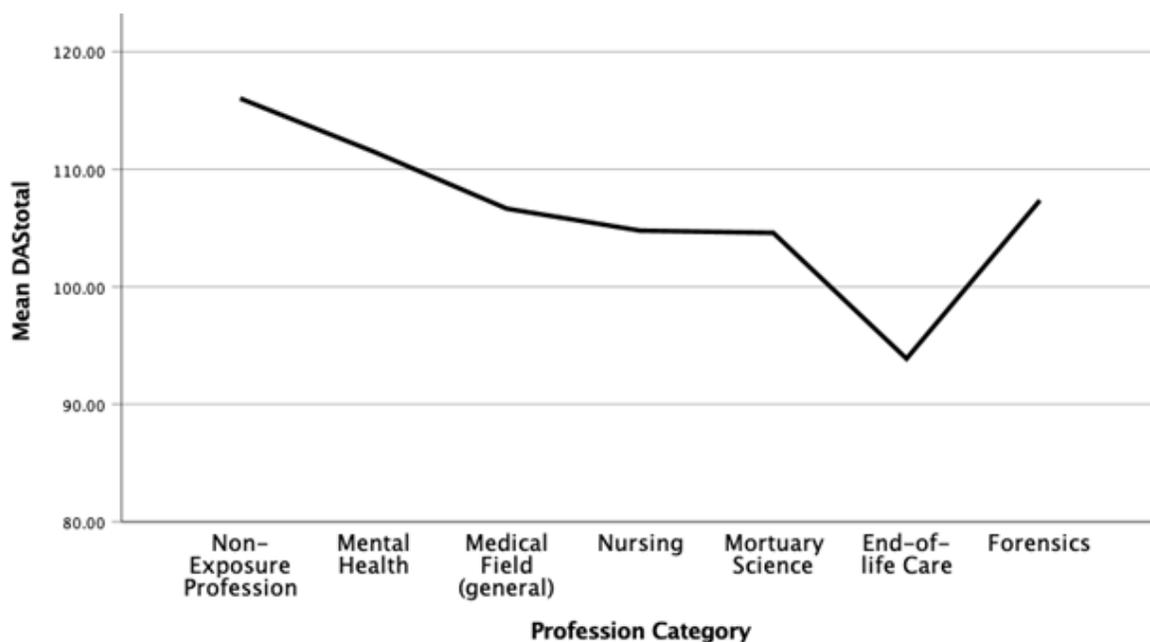
**Exposure to Death and Dying with Death Anxiety**

A bi-variate correlation was calculated with both the high-exposure and the non-exposure groups in order to compare professional exposure to death and professional exposure to dying with death anxiety, as well as differentiate the two groups. The non-exposure professions group showed a significant correlation in regards to death anxiety and professional exposure to dying ( $r = -1.36, n = 283, p = .011$ ) and a non-significant result when correlating death anxiety and professional exposure to death ( $r = -.041, n = 283, p = .247$ ).

With the exposure profession categories isolated, a bi-variate correlation was calculated between the professional exposure subscales of the ED&DS (professional exposure to dying and professional exposure to death) along with the DAS-E, which showed a negative correlation with exposure to death ( $r = -.088, n = 185, p = .117$ ) and exposure to dying ( $r = -.068, n = 185, p = .181$ ) and death anxiety. This exhibited that those in professions with high exposure correlate with lower levels of death anxiety. However, both of these negative correlations were not statistically significant.

Although the high-exposure profession group did not have any statistically significant correlations with professional exposures and death anxiety, it is worth noting that when compared to the significant correlation of non-exposure professionals (professional exposure to dying and death anxiety), it indicated that, while the non-exposure group had less professional exposure to

**Figure 1.** Means Plots for Death Anxiety and Profession Category



dying, there was a bigger impact to death anxiety in the non-exposure group than the high-exposure group on the occasions that it did happen.

### Death Anxiety and Time in Profession

The final research question asked how death anxiety may change over time spent on the job in a high-exposure profession. To explore this, the high-exposure professions ( $N = 185$ ) were separated into five groups of 37 participants each, ranging from least to most time in their professions regardless of their profession category. These five groups were compared with rates of death anxiety. Table 6 shows the mean death anxiety and standard deviation for each of the five groups of time in profession. Group 1, or the group with the least time in their high-exposure profession, had the highest death anxiety reported ( $M = 111.78, SD = 25.88$ ), and then the subsequent groups reduced in death anxiety as time on the job increased [Group 2 ( $M = 106.27, SD = 23.44$ ); Group 3 ( $M = 104.14, SD = 20.67$ ); Group 4 ( $M = 102.14, SD = 23.15$ )] up until the final group 5, which had a slight increase in death anxiety as compared to group 4 ( $M = 103.14, SD = 22.25$ ).

While there was a trend of decreased death anxiety as the groups increased their time in their high-exposure professions, the slight increase of death anxiety in the group with the highest amount of time in their profession (group 5) indicated that this is not a clear relationship. It is unclear how time in a high-exposure profession correlates with death anxiety overall, as there may be other factors at play creating this somewhat linear, negative relationship.

### DISCUSSION

The results of this study showed that the higher professional exposure to death and dying an individual has, the lower that individual's reported death anxiety was, regardless of the type of exposure experienced. This negative relationship between exposure and anxiety is often

**Table 6.** Descriptive Differences Between Time in Profession and Death Anxiety

Time in Profession (Low to High)	Mean DAS-E	SD
Group 1	111.78	25.88
Group 2	106.27	23.44
Group 3	104.14	20.67
Group 4	102.14	23.15
Group 5	103.14	22.25

seen with various psychological factors: more exposure equates to desensitization, diminished fear, and reduced mental health issues, particularly when treating anxiety and phobias (Abuso et al., 2023; Bilek, Meyer, Tomlinson, & Chen, 2023; Frank et al., 2023; Knowles & Tomlin, 2022; Menzes & Veale, 2022; Morgan-Mullane, 2023). A study by Peal, Handal, and Gilner (1981) specifically researched the effectiveness of group systematic desensitization to reduce death anxiety. While the results of that study were mixed, the concept of using exposure therapy to reduce fears is widely used, and there is room to explore the reasons why professional exposure to death and dying negatively correlated with death anxiety in this study.

The inverse can also be found. Research has shown that not working in a profession that requires exposure to death and dying positively correlates to several types of fear of death, particularly when the exposure has been limited and only with individuals emotionally close to the subject (Hoelter & Hoelter, 1981). This could be why mental health professionals showed the highest level of death anxiety amongst the high-exposure professionals, as their exposure tended to be more vicarious in nature as opposed to being first-hand. This further supports the idea that professional exposure, even at high levels, promotes an environment where individuals develop coping strategies for death anxiety and fears surrounding death, although the contributing influences are currently unclear. In a professional setting, the lack of personal emotion connected to the individual dying could be a factor impacting the relationship between exposure and reduced anxieties surrounding death, as well as the repeated exposure having a desensitizing effect. Additional research exploring the psychological differences between professional exposure and exposure to death and dying in one's personal relationships or in one's self could be an effective way to further shed light on the nuances with how different types of exposure affects individuals in various ways.

### Conclusions

Of all the exposure professions in this study, end-of-life carers had the lowest reported mean of death anxiety, even lower than nurses, who reported the highest levels of exposure to both death and dying. One explanation for this could be that end-of-life carers spend time on an individual basis with others in the process of dying and after death, witnessing the entire journey and bonding with their patients, whereas nurses, for example, are likely to be caring for multiple people at a time, for shorter durations (Nacak & Erden, 2022). End-of-life care often focuses on a holistic approach, treating the patient as a human



independent of their illness or disease, which allows time for the carer to uphold the dignity of the individual and witness the ebb and flow of the other's experience of dying, along with the potential relief after death (Pereira de Araújo, 2023), which could be contributing to less anxiety surrounding death and dying. Nurses often function by preserving life rather than preparing patients for death, and while death advocacy does appear in the nursing profession, it is not the sole function of their role as it is with end-of-life carers (Oelke, Besner, & Carter, 2013). End-of-life carers are required to fully immerse themselves in the process of death and dying, diminishing pain, and offering treatment when necessary, but ultimately accepting that death is inevitable for the patient (Holdsworth, 2015). This variance between end-of-life carers and nurses could also contribute to the carers' lower death anxiety because they are mentally and emotionally engaged with death and dying with an undertone of acceptance.

In a study by Anderson, Williams, Bost, and Barnard (2008), it was found that nursing students who were intentionally trained in end-of-life care and exposed frequently to dying patients had more positive outlooks regarding death than their student counterparts who did not have this specific type of training and exposure. The nursing students who had end-of-life training reported a more positive attitude towards end-of-life care and more knowledge on how to properly care for the dying, which can manifest as more confidence and a better quality experience for their dying patients. In general, higher exposure to death and training in caring for dying patients correlates to an improved outlook on death, which could be a contributing factor in why end-of-life carers, while not reporting the highest levels of exposure to death and dying, do report the lowest levels of death anxiety, as their profession requires such training and exposure. Similarly, Braun, Gordon, and Uziely (2010) found that nurses who experienced exposure to death and dying had positive attitudes toward end-of-life care, and reported lower levels of death avoidance and fear of death. This is also mirrored in a study by Mallett, Jurs, Price, and Slenker (1991), where hospice nurses reported lower levels of death anxiety than critical care nurses, further demonstrating end-of-life training specifically being related to lower levels of anxiety surrounding death. This provides a lens as to why this study showed those professions who would require training on end-of-life care were associated with lower death anxiety levels.

The positive effects of increased occupational exposure to death in professions where exposure to death and dying is part of the job can also be seen in other studies. When looking at funeral and mortuary operators, those who had direct exposure to dead individuals through

body manipulation or even merely viewing dead bodies reported higher occupational well-being than their counterparts who were not exposed in this manner or had minimal direct exposure (Guidetti, Grandi, Converso, & Colombo, 2022). Similar results occur with professionals who are exposed to the process of dying. A 2020 study by Baykan, Arslanturk, and Durukan gathered information from healthcare employees, particularly those in emergency medicine and intensive care units, and discovered that more experience on the job correlated with lessened fear of death. While experience did not necessarily correspond to exposure to death and dying, it is likely that the more time spent working in emergency medicine and intensive care would bring about increased exposure to death and dying.

When taking Terror Management Theory (TMT) and Meaning Management Theory (MMT) into consideration alongside these conclusions, one does not stand out over the other as a motivating factor for those in high-exposure professions. While someone who enters one of these professions may be compelled to find meaning through their work, helping others, and having a positive impact in their communities, it is unclear as to whether this meaning is fueled by the desire to minimize the terror associated with impending death as an act of avoidance (TMT) or maximize the meaning of their life through acceptance (MMT). Neither the DAS nor the ED&DS address participants' views on whether or not their life has meaning, nor perspectives on avoidance or acceptance of death, so distinguishing if TMT or MMT is more applicable to this population is still unclear. Ways to further explore these theories are mentioned below in the future studies section.

The relationship between exposure to death and dying with psychological factors such as death anxiety, perceptions and beliefs about death, and overall well-being is a complex one. Samson and Shvartzman (2017) found that individuals in professions with high exposure to death and dying reported increased compassion satisfaction, low levels of burnout, and minimal secondary traumatic stress. However, conducting a univariate MANOVA showed that the interaction effect with exposure to death and dying and death anxiety resulted in an increased reporting of secondary traumatic stress. This study highlights how the interaction of various factors can influence the ways in which exposure to death and dying impact those who have high exposure rates in their profession, as quality of life seems to improve overall as exposure increases unless death anxiety is present, in which secondary trauma is then reported.

This complexity is highlighted when considering the cultural, historical, and religious contexts in which death

attitudes tend to occur. Views on death and dying do not exist merely on an individual basis. Research into how exposure to death and dying affects individuals could benefit from a social science perspective. For example, a study conducted in India found that female nurses who were exposed to death and dying reported higher levels of fear of death compared to their nursing counterparts who were not exposed on a frequent basis (Dutta & Kaur, 2014), the inverse of the present study. While the Dutta and Kaur study had a narrow population due to a niche nursing group, and it assumes a level of exposure to death and dying based on the type of nurse, it does open the door to question how cultural foundations impact the relationship between death anxiety and exposure, as well as how this relationship can vary globally and historically.

### Future Research

One question that remains from this current study is whether it is professional exposure to death and dying that is impacting death anxiety or if individuals who naturally have a lower level of death anxiety are the ones seeking out professions with higher exposure rates. A longitudinal study on death anxiety over time, including death anxiety scores prior to entering an exposure profession, could help shed light on this lingering question. When looking at time in their profession in the present study, there was no clear linear relationship between time spent on the job and reduced death anxiety rates, indicating that more information is needed. A longitudinal study including professional exposure rates over time could help shed light on whether the connection between exposure and death anxiety is influenced by other variables, such as experience on the job, types of training, an innate acceptance of death, or if the relationship is purely more linear in nature, as in it simply being a negative correlation of professional exposure to death and dying with death anxiety.

It could be helpful to repeat this study to include the Death Anxiety Beliefs and Behaviors Scale (DABBS), which takes clinical relevance into consideration, whereas the DAS-E does not (Menzes et al., 2020). Because there is the potential for exposure to death and dying, along with death anxiety, to correlate with Post Traumatic Stress Disorder, secondary trauma, Prolonged Grief Disorder, depression, anxiety-related disorders, and addictions (Bolaséll et al. 2022; Martz, 2004; Menzies et al., 2019; Shvartzman, 2017), it could be helpful to examine how a more nuanced, clinically minded measure of death anxiety interacts with those who have repeated professional exposure, as they are not immune to these types of impacts on their mental health. There is a need for

mental healthcare for those who experience high levels of professional exposure to death and dying, regardless of whether this population tends to show an increased ability to deal with this type of repeated exposure. A more thorough understanding of how professional exposure to death and dying impacts the people working in those professions can expose the ways in which they require support both on and off the job, particularly due to death anxiety being shown to correspond with a variety of mental health conditions (Menzes & Veale, 2022). From a clinical perspective, the most effective way to treat death anxieties is through Cognitive Behavior Therapies (CBT) that include an element of exposure therapy, as these approaches normalize death in a way that reduces anxiety and increases healthy acceptance (Menzes & Veale, 2022). This line of research can open the door to what level of assistance can best support high-exposure professionals, including whether CBT and/or exposure therapy can be used as a preventative clinical treatment in order to reduce any negative impacts that do present themselves throughout their careers.

From a spiritual perspective, the concept of a *Dark Night of the Soul*, in which life's hardships and distressing situations create an environment for growth, gratitude, meaning, and awakening, appears in various practices and denominations (May, 2005). Those who are professionally exposed to high levels of death and dying could identify with having a *Dark Night*, as these exposures are shown to correlate with Post Traumatic Stress Disorder, secondary trauma, Prolonged Grief Disorder, depression, anxiety-related disorders, and addictions, as listed above (Bolaséll et al., 2022; Martz, 2004; Menzies et al., 2019; Shvartzman, 2017), which involve levels of emotional distress associated with the *Dark Night* (Durà-Vilà et al., 2010). Mary Elizabeth O'Brien (2021) describes nurses as wounded healers, as the gift of healing others has derived specifically from the healer's own pain and hardships. As opposed to hindering the care of others, the wounded healer utilizes their own distress in order to remain strong, empathetic, and understanding in the face of others' suffering. Additionally, Kim & Yong (2013) compared spirituality and death anxiety among nurses working in a cancer hospital and found that increased reporting of spirituality correlated with lower levels of death anxiety, as well as spiritual education also being negatively correlated with death anxiety. Future studies that explore how high-exposure professionals relate to spirituality and religiosity, not only for themselves but also when meeting the spiritual needs of those who are dying and loved ones of the deceased, can scrutinize whether or not these professionals are experiencing a *Dark Night* and if so, whether that experience fuels their ability to do their

job. In addition, paranormal belief has been correlated with reduced well-being (Dagnall, et al., 2022). The potential for high-exposure professions to experience paranormal experiences are noteworthy (Barbato et al., 1999; Fenwick, Lovelace, & Brayne, 2007; O'Connor, 2003; Osis & Haraldsson, 1997), and anomalous experiences being attributed to the paranormal in a systematic way (Lange, et al., 2019), this population's beliefs surrounding the paranormal and spirituality could also correlate with their overall well-being, indicating a capacity for a *Dark Night*.

Another measure that can be used alongside the ED&DS would be the Death Attitudes Profile - Revisited (DAP-R), which looks at five attitudes toward death: approach acceptance, fear of death, death avoidance, escape acceptance, and neutral acceptance (Wong, Reker, & Gesser, 1994). Approach acceptance is the belief that death leads to a happy afterlife. Fear of death is indicated by a specific, conscious fear towards death and dying. Death avoidance is displayed by a conscious bypassing of thoughts and conversations about death and dying. Escape acceptance is the belief that death is an escape from the pain of life, and neutral acceptance is the belief that death is a natural part of life and is neither positive nor negative. Being able to see differences between positive, negative, and neutral attitudes towards death, as opposed to just death anxiety, and how they correlate to exposure to death and dying could uncover more nuance about the relationship between views on and exposure to death and dying. A lack of death anxiety does not necessarily indicate the presence of acceptance of death (approach acceptance, escape acceptance, or neutral acceptance, for example), so exploring the presence and absence of these death attitudes could produce some refinement on how exposure to death and dying associates with individuals' outlooks on death, as well as speak to the validity of Terror Management Theory (an instinct to alleviate death anxiety through avoidance) versus Meaning Management Theory (an instinct to alleviate death anxiety through acceptance). In addition, utilizing the General Hopelessness Scale (GHS; Drinkwater et. al., 2023) alongside the DAP-R could illustrate additional intricacies between perceived meaning and hopelessness of those exposed to death and dying, and indicate whether TMT or MMT better exemplifies this population.

### Limitations

When assessing the effectiveness of the ED&DS, there are potential adjustments that can be made in subsequent studies with the phrasing of the prompts. Emergent items could be developed further, for example, in the professional exposure to dying category, "How often in

your lifetime have you been exposed to caring for dying individuals in a professional capacity?" is very similar to being exposed to "participating in the process of an individual's death in a professional capacity?" The former could be changed to being exposed to "advocating for a dying individual in a professional capacity" in order to further differentiate the two items. Also, in the exposure to one's own dying subscale, "How often in your lifetime have you been in a serious accident" could be shifted to the phrasing "life-threatening accident" in order to accentuate the idea of the item highlighting a threat to life as opposed to the ambiguousness that could be interpreted from the descriptor "serious." These tweaks will further emphasize that the ED&DS is specifically measuring exposure to death and dying and create differentiation between each item. In addition, the Own Dying factor, which possessed an item with weak loading (.17), needs to be addressed in future versions of the ED&DS.

### IMPLICATIONS AND APPLICATIONS

Future research can explore the relationship between exposure to death and dying, death anxiety, and other perspectives surrounding death. As noted above, the complexity of these relationships and their social influence can benefit from thorough and thoughtful analysis. Even if one is not in a profession that exposes them to death and dying, it is unavoidable that some type of exposure will happen in their lifetime. In recent years, the Covid-19 pandemic has highlighted the inevitability of being exposed to the finality of life in various and sometimes unpredictable ways, and research indicates that a better understanding of how different types of exposure to death and dying impacts people on cultural, relational, and personal levels can result in a better quality of life for the individual due to a better understanding of the varied needs of differing people (Anderson, et. al., 2008; Depaola, et. al., 2003; Dutta & Kaur, 2014; Neimeyer, 1998; Samson & Shvartzman, 2017).

### ACKNOWLEDGMENTS

#### Author Contributions

Kelly A. Curtis: study conception and design, data collection, analysis, writing; Neil Dagnall: study conception and design, analysis, editing; Kenneth Drinkwater: editing; Andrew Denovan: analysis and editing.

### REFERENCES

Abdel-Khalek, A. M. (1997). Death, anxiety, and depression. *OMEGA: Journal of Death and Dying*, 35(2), 219-

229. <https://doi.org/10.2190/H120-9U9D-C2MH-NYQ5>
- Abuso, A. B. V., Hashmi, M., Hashmi, H., Khoo, A., & Parssik, A. (2023). Overcoming fear of flying: A combined approach of psychopharmacology and gradual exposure therapy. *Cureus*, *15*(5), 1-4, <https://doi.org/10.7759/cureus.39773>
- Anderson, W. G., Williams, M. S., Boat, J. E., & Barnard, D. (2008). Exposure to death is associated with positive attitudes and higher knowledge about end-of-life care in graduating medical students. *Journal of Palliative Medicine*, *11*(9), 1227-1233, <https://doi.org/10.1089/jpm.2008.0058>
- Ardnt, J., Routledge, C., Cox, C. R., & Goldenberg, J. L. (2005). The worm at the core: A terror management perspective on the roots of psychological dysfunction. *Applied and Preventive Psychology*, *11*(3), 191-213. <https://doi.org/10.1016/j.appsy.2005.07.002>
- Baykan, N., Arslantürk, G., & Durukan, P. (2021). Desensitizing effect of frequently witnessing death in an occupation: A study with turkish health-care professionals. *OMEGA: Journal of Death and Dying*, *84*(2), 567-581. <https://doi.org/10.1177/0030222820904880>
- Barbato, M., Blunden, C., Reid, K., Irwin, H., & Rodriguez, P. (1999). Parapsychological phenomena near the time of death. *Journal of Palliative Care*, *15*(2), 30-37. <https://doi.org/10.1177/082585979901500206>
- Bilek, E., Meyer, A. E., Tomlinson, R., & Chen, C. (2023). Pilot study of self-distancing augmentation to exposure therapy for youth anxiety. *Child Psychiatry & Human Development*, 1-13, <https://doi.org/10.1007/s10578-023-01540-x>
- Bolaséll, L. T., Oliveira, V. C. C., & Kristensen, C. H. (2022). The effects of exposure to factors related to death in mental health, *Journal of Loss and Trauma*, *27*(4), 318-334, <https://doi.org/10.1080/15325024.2021.1959854>
- Braun, M., Gordon, D., & Uziely, B. (2010). Associations between oncology nurses' attitudes toward death and caring for dying patients. *Oncology Nursing Forum*, *37*(1), 43-49, <https://doi.org/10.1188/10.ONF.E43-E49>
- Clare, E., Elander, J., & Baraniak, A. (2022). How health-care providers' own death anxiety influences their communication with patients in end-of-life care: A thematic analysis. *Death Studies*, *46*(7), 1773-1780. <https://doi.org/10.1080/07481187.2020.1837297>
- Dagnall, N., Denovan, A., & Drinkwater, N. (2022). Paranormal belief, cognitive-perceptual factors, and well-being: A network analysis. *Frontiers in Psychology*, *13*, Article 967823. <https://doi.org/10.3389/fpsyg.2022.967823>
- Davoudi, N. (2022). Remember death: An examination of death, mourning, and death anxiety within Islam. *Open Theology*, *8*(1), 221-236. <https://doi.org/10.1515/oph-2022-0205>
- Depaola, S.J., Griffin, M., Young, J.R., et al. (2003). Death anxiety and attitudes toward the elderly among older adults: The role of gender and ethnicity. *Death Studies*, *27*(4), 335-354. <https://doi.org/10.1080/07481180302904>
- Drinkwater, K., Denovan, A., Dagnall, N., & Williams, C. (2023). The General Hopelessness Scale: Development of a measure of hopelessness for non-clinical samples. *PLoS ONE*, *18*(6), Article e0287016. <https://doi.org/10.1371/journal.pone.0287016>
- Durà-Vilà, G., Dein, S., Littlewood, R., & Leavey, G. (2010). The dark night of the soul: Causes and resolution of emotional distress among contemplative nuns. *Transcultural Psychiatry*, *47*(4), 548-70. <https://doi.org/10.1177/1363461510374899>
- Durlak, J. A. (1982). Using the Templer scale to assess "death anxiety:" A cautionary note. *Psychological Reports*, *50*(3), 1257-1258. <https://doi.org/10.2466/pr0.1982.50.3c.1257>
- Dutta, M., & Kaur, H. (2014). Death anxiety in females with and without exposure to death and dying: Differential dimensions. *Sri Lanka Journal of Social Sciences*, *37*(1&2), 33-39. <http://doi.org/10.4038/sljs.v37i1-2.7378>
- Escolà-Gascón, Á. (2020). Researching unexplained phenomena: empirical-statistical validity and reliability of the Multivariable Multiaxial Suggestibility Inventory-2 (MMSI-2). *Heliyon*, *6*(7), Article e04291. <https://doi.org/10.1016/j.heliyon.2020.e04291>
- Fenwick, P., Lovelace, H., & Brayne, S. (2007). End-of-life experiences and implications for palliative care. *International Journal of Environmental Studies*, *64*, 315-323. <https://doi.org/10.1080/00207230701394458>
- Frank, H. E., Rifkin, L. S., Sheehan, K., Becker-Haimes, E. M., Crane, M. E., Phillips, K. E., Buinewicz, S. A. P., Kemp, J., Benito, K., & Kendall, P. C. (2023). Therapist perceptions of experiential training for exposure therapy. *Behavioral and Cognitive Psychotherapy*, *51*(3), 214-229, <https://doi.org/10.1017/S1352465822000728>
- Gire, J. T. (2013). Death anxiety. In K. D. Keith (Ed.), *The encyclopedia of cross-cultural psychology* (pp. 371-374). John Wiley & Sons Inc. <https://doi.org/10.1002/9781118339893.wbeccp151>
- Greenburg, J. (2012). Terror management theory: From genesis to revelations. In P. R. Shaver & M. Mikulincer (Eds.), *Meaning, mortality, and choice: The social psychology of existential concerns* (pp. 17-35). American Psychological Association. <https://doi.org/10.1037/12800-001>

- org/10.1037/13748-001
- Guidetti, G., Grandi, A., Converso, D., & Colombo, L. (2022). Exposure to death and bereavement: An analysis of the occupational and psychological well-being of funeral and mortuary operators. *OMEGA: Journal of Death and Dying*. Advanced online publication. <https://doi.org/10.1177/00302228221130611>
- Hashemi, A., Oroojan, A. A., Rassouli, M., & Ashrafzadeh, H. (2023). Explanation of near death experiences: A systematic analysis of case reports and qualitative research. *Frontiers in Psychology, 14*, Article 1048929. <https://doi.org/10.3389/fpsyg.2023.1048929>
- Hoelter, J. W., & Hoelter, J. A. (1981). On the interrelationships among exposure to death and dying, fear of death and anxiety. *OMEGA: Journal of Death and Dying, 11*(3), 241-254. <https://doi.org/10.2190/TY4E-KV6Q-WE9D-7DAT>
- Holdsworth, L. M. (2015). Bereaved carers' accounts of the end of life and the role of care providers in a 'good death': A qualitative study. *Palliative Medicine, 29*(9), 834-841, <https://doi.org/10.1177/0269216315584865>
- Horn, J. L. (1965). A rationale and test for the number of factors in factor analysis. *Psychometrika, 30*, 179-185. <https://doi.org/10.1007/BF02289447>
- Hotchkiss, J. (2018). Mindful self-care and secondary traumatic stress mediate a relationship between compassion satisfaction and burnout risk among hospice care professionals. *American Journal of Hospice and Palliative Medicine, 35*(1), 1-10. <https://doi.org/10.1177/1049909118756657>
- Iverach, L., Menzies, R. G., & Menzies, R. E. (2014). Death anxiety and its role in psychopathology: Reviewing the status of a transdiagnostic construct. *Clinical Psychology Review, 24*(7), 580-593. <https://doi.org/10.1016/j.cpr.2014.09.002>
- Jamadar, C., & Kumari, A. (2019). Forgiveness and death anxiety in tribes. *Motivation and Emotion, 12*(1), 152-166. <https://doi.org/10.25215/0704.022>
- Jong, J. (2020). Death anxiety and religious belief: A critical review. In K. E. Vail & C. Routledge, (Eds.), *The science of religion, spirituality, and existentialism* (pp. 21-35). Academic Press. <https://doi.org/10.1016/B978-0-12-817204-9.00003-2>
- Kastenbaum, R., & Moreman, C. (2018). *Death, society, and human experience* (12th ed.). Routledge. <https://doi.org/10.4324/9781315232058>
- Kane A. C., & Hogan J. D. (1986). Death anxiety in physicians: Defensive style, medical specialty, and exposure to death. *OMEGA: Journal of Death and Dying, 16*(1), 11-22. <https://doi.org/10.2190/TFG3-YQJQ-EOM6-4JYJ>
- Kernberg, O. (2009). The concept of the death drive: A clinical perspective. *International Journal of Psychoanalysis, 90*(5), 1009-1023. <https://doi.org/10.1111/j.1745-8315.2009.00187.x>
- Keyes, K.M., Pratt, C., Galea, S., McLaughlin, K.A., Koenen, K.C., & Shear, M.K. (2014). The burden of loss: Unexpected death of a loved one and psychiatric disorders across the life course in a national study. *American Journal of Psychiatry, 171*(8), 864-871. <https://doi.org/10.1176/appi.ajp.2014.13081132>
- Kim, K., & Yong, J. (2013). Spirituality, death anxiety and burnout levels among nurses working in a cancer hospital. *Journal of Hospice and Palliative Care, 16*(4), 264-273. <https://doi.org/10.14475/kjhpc.2013.16.4.264>
- Knowles, K. A., & Tomlin, D. F. (2022). Mechanisms of action in exposure therapy. *Current Psychiatry Reports, 24*(3), 861-869. <https://doi.org/10.1007/s11920-022-01391-8>
- Lange, R., Ross, R. M., Dagnall, N., Irwin, H., Houran, J., & Drinkwater, K. (2019). Anomalous experiences and paranormal attributions: Psychometric challenges in studying their measurement and relationship. *Psychology of Consciousness: Theory, Research, and Practice, 6*(4), 346-358. <https://doi.org/10.1037/cns0000187>
- Langs, R. (2018). *Death anxiety and clinical practice*. Routledge.
- Lester, D. (2007). What do death anxiety scales measure? *Psychological Reports, 101*(3), 754. <https://doi.org/10.2466/pr0.101.3.754-754>
- Lester, D. & Templer, D. I. (1993). Death anxiety scale: A dialogue. *OMEGA: Journal of Death and Dying, 26*(4), 239-253. <https://doi.org/10.2190/F6GX-KXGX-PFR8-2HFD>
- Linley, P., & Joseph, S. (2005). Positive and negative changes following occupational death exposure. *Journal of Traumatic Stress, 18*(6), 751-758. <https://doi.org/10.1002/jts.20083>
- Mallett, K., Jurs, S. G., Price, J. H., & Slenker, S. (1991). Relationships among burnout, death anxiety, and social support in hospice and critical care nurses. *Psychological Reports, 68*(3), 1347-1359. <https://doi.org/10.2466/pr0.1991.68.3c.1347>
- Martz, E. (2004). Death anxiety as a predictor of post-traumatic stress levels among individuals with spinal cord injuries. *Death Studies, 28*(1), 1-17, <https://doi.org/10.1080/07481180490249201>
- Maxfield, M., John, S., & Pyszczynski, T. (2014). A terror management perspective on the role of death-related anxiety in psychological dysfunction. *The Humanistic Psychologist, 42*(1), 35-53. <https://doi.org/10.1080/08873267.2012.732155>
- May, G. G. (2005). *The dark night of the soul: A psychiatrist*

- explores the connection between darkness and spiritual growth. HarperSanFrancisco/HarperCollins Publishers.
- McGregor, H. A., Lieberman, J. D., Greenberg, J., Solomon, S., Arndt, J., Simon, L., & Pyszczynski, T. (1998). Terror management and aggression: Evidence that mortality salience motivates aggression against worldview-threatening others. *Journal of Personality and Social Psychology*, 74(3), 590–605. <https://doi.org/10.1037/0022-3514.74.3.590>
- McMordie, W. R. (1979). Improving measurement of death anxiety. *Psychological Reports*, 44(3), 975-980. <https://doi.org/10.2466/pr0.1979.44.3.975>
- Menzies, R. E., Sharpe, L., & Dar-Nimrod, I. (2019). The relationship between death anxiety and severity of mental illnesses. *British Journal of Clinical Psychology*, 58(4), 452–467. <https://doi.org/10.1111/bjc.12229>
- Menzies, R. E., Sharpe, L., & Dar-Nimrod, I. (2020). Subtypes of obsessive-compulsive disorder and their relationship to death anxiety. *Journal of Obsessive Compulsive and Related Disorders*, 27, 1-27. <https://doi.org/10.1016/j.jocrd.2020.100572>
- Menzies, R. E., & Veale, D. (2022). Creative approaches to treating the dread of death. In R. G. Menzies, R. E. Menzies, & G. A. Dingle (Eds.), *Existential concerns and cognitive-behavioral procedures: An integrative approach to mental health* (pp. 75-92). Springer, Cham. [https://doi.org/10.1007/978-3-031-06932-1\\_5](https://doi.org/10.1007/978-3-031-06932-1_5)
- Morgan-Mullane, A. (2023). *An integrative approach to clinical social work practice with children of incarcerated parents: A clinicians guide. Essential clinical social work series*. Springer, Cham. [https://doi.org/10.1007/978-3-031-28823-4\\_6](https://doi.org/10.1007/978-3-031-28823-4_6)
- Nacak, A., & Erden, Y. (2022). End-of-life care and nurse's role. *Eurasian Journal of Medicine*, 54(1), <https://doi.org/10.5152/eurasianjmed.2022.22324>
- Neimeyer, R. A. (1998). Special article: Death anxiety research: The state of the art. *OMEGA: Journal of Death and Dying*, 36(2), 97-120. <https://doi.org/10.2190/TY32-EE9J-YVQ8-RP31>
- O'Brien, M. E. (2021). *Spirituality in nursing: Standing on holy ground*. Jones & Bartlett Learning.
- O'Connor, D. (2003, November 21-23). Palliative care nurses' experiences of paranormal phenomena and their influence on nursing practice. Presented at 2nd Global Making Sense of Dying and Death Inter-Disciplinary Conference, Paris, France.
- Oelke, N. D., Besner, J., & Carter, R. (2013). The evolving role of nurses in primary care settings. *International Journal of Nursing Practice*, 20(6), 629-635. <https://doi.org/10.1111/ijn.12219>
- Osis, K., & Haraldsson, E. (1997). *At the hour of death*. United Publishers Group.
- Peal, R. L., Handal, P. J., & Gilner, F. H. (1981). A group desensitization procedure for the reduction of death anxiety. *OMEGA: Journal of Death and Dying*, 12(1), 61-70. <https://doi.org/10.2190/8EEE-T21E-JNAB-GFK5>
- Pereira de Araújo, C. (2023). *Palliative treatment for advanced cancer patients: Can hope be a right?*. Springer, Cham. [https://doi.org/10.1007/978-3-031-30776-8\\_6](https://doi.org/10.1007/978-3-031-30776-8_6)
- Peters, L., Cant, R., Payne, S., O'Connor, M., Mcdermott, F., Hood, K., Morphet, J., & Shimoinaba, K. (2013). Emergency and palliative care nurses' levels of anxiety about death and coping with death: A questionnaire survey. *Australasian Emergency Nursing Journal*, 16(4), 152-159. <https://doi.org/10.1016/j.aenj.2013.08.001>
- Pirelli, G., & Jeglic, E. (2009). The influence of death exposure on suicidal thoughts and behaviors. *Journal of the International Academy for Suicide Research*, 13(2), 136-146. <https://doi.org/10.1080/13811110902835064>
- Pollak, J. M. (1980) Correlates of death anxiety: A review of empirical studies. *Omega: Journal of Death and Dying*, 10(2), 97-121. <https://doi.org/10.2190/4KG5-HBH0-NNME-DM58>
- Samson, T., & Shvartzman, P. (2017). Association between level of exposure to death and dying and professional quality of life among palliative care workers. *Palliative Support Care*, 16(4), 442-451. <https://doi.org/10.1017/S1478951517000487>
- Sharif-Nia, H., Lehto, R., Sharif, S. P., Mashrouteh, M., Goudarzian, A. H., Rahmatpour, P., Torkmandi, H., & Yaghoobzadeh, A. (2019). A cross-cultural evaluation of the construct validity of Templer's death anxiety scale: A systematic review. *OMEGA: Journal of Death and Dying*, 83(2), 1-17. <https://doi.org/10.1177/0030222819865407>
- Slaughter, V., & Griffiths, M. (2007) Death understanding and fear of death in young children. *Clinical Child Psychology and Psychiatry*, 12(4), 525-535. <https://doi.org/10.1177/1359104507080980>
- Smith-Greenway, E., Weitzman, A., Lin, Y., & Huss, K. (2023). Under-five mortality exposure in low- and middle - income countries: A multi-cultural and cohort perspective of sibling and offspring loss. *Preprint*. <https://doi.org/10.31235/osf.io/xvbkj>
- Strachan, E., Schimel, J., Arndt, J., Williams, T., Solomon, S., Pyszczynski, T., & Greenberg, J. (2007). Terror mismanagement: Evidence that mortality salience exacerbates phobic and compulsive behaviors. *Personality and Social Psychology Bulletin*, 33(8), 1137-1151. <https://doi.org/10.1177/0146167207303018>
- Taywade, A. P. (2018). Death anxiety in elderly. *International Journal of Basic and Applied Research*, 8(2), 158-164.

- Templer, D. I. (1970) The construction and validation of a death anxiety scale, *Journal of General Psychology*, 82, 165-177. <http://dx.doi.org/10.1080/00221309.1970.9920634>
- Templer, D. I., Awadalla, A., Al-Fayez, G., Frazee, J., Bassman, L., Connelley, H. J., Arikawa, H., & Abdel-Khalek, A. M. (2006). Construction and of a death anxiety scale - Extended. *OMEGA: Journal of Death and Dying*, 53(3), 175-262. <https://doi-org.mmu.idm.oclc.org/10.2190/BQFP-9ULN-NULY-4JDR>
- Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. American Psychological Association. <https://doi.org/10.1037/10694-000>
- Wong, P. T. R. (2008). Meaning management theory and death acceptance. In A. Tomer, E. Grafton, & P. T. P. Wong (Eds.), *Existential and spiritual issues in death attitudes* (pp. 65–87). Lawrence Erlbaum Associates Publishers.
- Wong, P. T. R., Reker, G. T., & Gesser, G. (1994). Death attitudes profile - revised: A multidimensional measure of attitudes towards death. In R. A. Neimeyer (Ed.), *Death anxiety handbook: Research, instrumentation, and application* (pp. 121-148). Taylor & Francis. <https://doi.org/10.1037/t17237-000>
- Wong, P. T. R., & Tomer, A. (2011). Beyond terror and denial: The positive psychology of death acceptance. *Death Studies*, 35(2), 99–106. <https://doi.org/10.1080/07481187.2011.535377>

- org/10.1016/j.yebeh.2021.108219
- Bourguignon, E. (1973). *Religion, altered states of consciousness and social change*. Ohio State University Press.
- Bowman, E. S. (1993). Clinical and spiritual effects of exorcism in fifteen patients with multiple personality disorder. *Dissociation*, 6(4), 222-238.
- Bull, D. L., Ellason, J. W., & Ross, C. A. (1998). Exorcism revisited: Positive outcomes with dissociative identity disorder. *Journal of Psychology and Theology*, 26(2), 188-196. <https://doi.org/10.1177/009164719802600205>
- Bull, D. L. (2001). A phenomenological model of therapeutic exorcism for dissociative identity disorder. *Journal of Psychology and Theology*, 29(2), 131-139. <https://doi.org/10.1177/009164710102900204>
- Carrazana, E., DeToledo, J., Tatum, W., Rivas-Vasquez, R., Rey, G., & Wheeler, S. (1999). Epilepsy and religious experiences: Voodoo possession. *Epilepsia*, 40(2), 239-241. <https://doi.org/10.1111/j.1528-1157.1999.tb02081.x>
- Casale, U. (2011). *Faith and science: A necessary dialogue*. Sal Terrae.
- Castillo, R. J. (1994). Spirit possession in South Asia, dissociation or hysteria? part 2: Case histories. *Culture, Medicine and Psychiatry*, 18(2), 141-162. <https://doi.org/10.1007/bf01379447>
- Castro-Blanco, D. R. (2005). Cultural sensitivity in conventional psychotherapy: A comment on Martínez-Taboas (2005). *Psychotherapy: Theory, Research, Practice, Training*, 42(1), 14-16. <https://doi.org/10.1037/0033-3204.42.1.14>
- Cavanna, A. E., Cavanna, S., & Cavanna, A. (2010). Epileptic seizures and spirit possession in Haitian culture: Report of four cases and review of the literature. *Epilepsy & Behavior*, 19(1), 89-91. <https://doi.org/10.1016/j.yebeh.2010.07.002>
- Chartonas, D., & Bose, R. (2015). Fighting with spirits: migration trauma, acculturative stress, and new sibling transition-A clinical case study of an 8-year-old girl with absence epilepsy. *Culture, Medicine, and Psychiatry*, 39(4), 698-724. <https://doi.org/10.1007/s11013-015-9438-7>
- Coelho, I. (2012). In some sense transcendent or supernatural. *Loneragan Workshop*, 26, 107-126. <https://doi.org/10.5840/lw20122628>
- Cramer, M. (1980). Psychopathology and shamanism in rural Mexico: A case study of spirit possession. *The British Journal of Medical Psychology*, 53(1), 67-73. <https://doi.org/10.1111/j.2044-8341.1980.tb02870.x>
- Crookes, W. (1870/2012). *Researches in the phenomena of spiritualism*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139176316>
- Cuneo, M. (2001). *American exorcism: Expelling demons in the land of plenty*. Doubleday.
- Dein, S. (2021). Spirit possession in a psychiatric clinic. *Journal for the Study of Religious Experience*, 7(1), 57-68.
- Delmonte, R., Lucchetti, G., Moreira-Almeida, A., & Farias, M. (2015). Can the DSM-5 differentiate between non-pathological possession and dissociative identity disorder? A case study from an Afro-Brazilian religion. *Journal of Trauma & Dissociation*, 17(3), 322-337. <https://doi.org/10.1080/15299732.2015.1103351>
- de Oliveira-Maraldi, E., Costa, A., Cunha, A., Flores, D., Hamazaki, E., de Queiroz, G. P., Martinez, M., Siqueira, S., & Reichow, J. (2021). Cultural presentations of dissociation: The case of possession trance experiences. *Journal of Trauma & Dissociation*, 22(1), 11-16. <https://doi.org/10.1080/15299732.2020.1821145>
- de Oliveira Maraldi, E., Ribeiro, R. N., & Krippner, S. (2019). Cultural and group differences in mediumship and dissociation: Exploring the varieties of mediumistic experiences. *International Journal of Latin American Religions*, 3(1), 170-192. <https://doi.org/10.1007/s41603-019-00076-0>
- Diller, T. (1890). A Case of paranoia, illustrating the feature of imperative conceptions. *Alienist and Neurologist (1880-1920)*, 11(2), 354-358.
- Driscoll, M. (2015). *Demons, deliverance, and discernment*. Catholic Answers.
- Drouin, E., Péréon, T., & Péréon, Y. (2017). Demonic possession by Jean Lhermitte. *L'Encephale*, 43(4), 394-398. <https://doi.org/10.1016/j.encep.2017.03.001>
- Ember, C. R., & Carolus, C. (2017). Altered states of consciousness. In C. R. Ember (Ed.), *Explaining human culture: A database produced by human relations area files*. (pp. e1-e14). Human Relations Area Files, Yale University.
- Escolà-Gascón, Á. (2020a). Researching unexplained phenomena: Empirical-statistical validity and reliability of the Multivariable Multiaxial Suggestibility Inventory-2 (MMSI-2). *Heliyon*, 6(7), Article e04291 <https://doi.org/10.1016/j.heliyon.2020.e04291>
- Escolà-Gascón, Á. (2020b). Researching unexplained phenomena II: New evidences for anomalous experiences supported by the Multivariable Multiaxial Suggestibility Inventory-2 (MMSI-2). *Current Research in Behavioral Sciences*, 1, Article 100005. <https://doi.org/10.1016/j.crbeha.2020.100005>
- Escolà-Gascón, Á., Dagnall, N., & Drinkwater, K. (2023). Bias analysis in forensic and non-forensic psychiatric assessments. *International Journal of Law and Psychiatry*, 88, Article 101891. <https://doi.org/10.1016/j.ijlp.2023.101891>

- Espí, C., & Espí, F. (2014). Demonic possessions and mental illness: Discussion of selected cases in late medieval hagiographical literature. *Early Science and Medicine*, 19(3), 258-279. <https://doi.org/10.1163/15733823-00193p03>
- Exline, J. J. (2021). Psychopathology, normal psychological processes, or supernatural encounters? Three ways to frame reports of after-death communication (ADC). *Spirituality in Clinical Practice*, 8(3), 164-176. <https://doi.org/10.1037/scp0000245>
- Exline, J. J., Pargament, K. I., Wilt, J. A., & Harriott, V. A. (2021a). Mental illness, normal psychological processes, or attacks by the devil? Three lenses to frame demonic struggles in therapy. *Spirituality in Clinical Practice*, 8(3), 215-228. <https://doi.org/10.1037/scp0000268>
- Exline, J. J., Wilt, J. A., Stauner, N., Schutt, W. A., Pargament, K. I., Fincham, F. D., & May, R. W. (2021b). Supernatural operating rules: How people envision and experience God, the devil, ghosts/spirits, fate/destiny, karma, and luck. *Psychology of Religion and Spirituality*. Advance online publication. <https://doi.org/10.1037/rel0000444>
- Exline, J. J., & Wilt, J. A. (2023). Supernatural attributions: Seeing God, the devil, demons, spirits, Fate, and karma as causes of events. *Annual Review of Clinical Psychology*, 19(1), 461-487. <https://doi.org/10.1146/annurev-clinpsy-080921-081114>
- Farah, J., & McColl, M. A. (2008). Exploring prayer as a spiritual modality. *Canadian Journal of Occupational Therapy*, 75(1), 5-13. <https://doi.org/10.1177/000841740807500103>
- Ferracuti, S., Sacco, R., & Lazzari, R. (1996). Dissociative trance disorder: Clinical and Rorschach findings in ten persons reporting demon possession and treated by exorcism. *Journal of Personality Assessment*, 66(3), 525-539. [https://doi.org/10.1207/s15327752-jpa6603\\_4](https://doi.org/10.1207/s15327752-jpa6603_4)
- Font, J. (2012). Entrevista al Dr. Jordi Font i Rodon: Impulsor de proyectos, impulsor de Personas. *Temas de Psicoanálisis*, 3, 1-45.
- Font, J. (2016). *Religion, psychopathology, and mental health: An introduction to the psychology of religious experiences and beliefs*. Paidós and Cardinal Vidal i Barraquer Foundation.
- Fraser, G. A. (1993). Exorcism rituals: Effects on multiple personality disorder patients. *Dissociation*, 6(4), 239-244.
- French, C. C. (2023). Demonic possession and disorders. In S. Hupp, & R. Wiseman (Eds.), *Investigating pop psychology: Pseudoscience, fringe science, and controversies* (pp. 130-138). Routledge, Taylor and Francis Group. <https://doi.org/10.4324/9781003107798-15>
- Germiniani, F. M. B., Miranda, A. P., Ferenczy, P., Munhoz, R. P., & Teive, H. A. G. (2012). Tourette's Syndrome: From demonic possession and psychoanalysis to the discovery of gene. *Arquivos de Neuro-Psiquiatria*, 70(7), 547-549. <https://doi.org/10.1590/s0004-282x2012000700014>
- Giordan, G., & Possamai, A. (2018). *Sociology of exorcism in late modernity*. Springer Nature. <https://doi.org/10.1007/978-3-319-71773-9>
- Guedi, A. A., Al Hussaini, A., Obeid, Y. A., Hussain, S., Al-Azri, F., & Al-Adawi, S. (2009). Investigation of the cerebral blood flow of an Omani man with supposed 'spirit possession' associated with an altered mental state: A case report. *Journal of Medical Case Reports*, 3, Article 9325. <https://doi.org/10.1186/1752-1947-3-9325>
- Hankinson, R. J. (2012). Natural, unnatural, And preternatural motions: Contrariety and the argument for the elements in De Caelo 1.2-4. In A. Bowen, & C. Wildberg (Eds.), *New perspectives on Aristotle's De caelo* (pp. 83-118). Brill Publishing Group. <https://doi.org/10.1163/ej.9789004173767.i-326.23>
- Hansen, F. J., Stanilla, J. K., Ross, J. I., & Sinvani, C. (1993). Integrating child psychiatry and family systems approaches. *Journal of Family Psychotherapy*, 3(3), 13-26. [https://doi.org/10.1300/j085v03n03\\_02](https://doi.org/10.1300/j085v03n03_02)
- Hart, C. A. (2023). *Thomistic metaphysics: An inquiry into the act of existing*. Editiones Scholasticae, Rutgers University.
- Hawkins, J. M., McPhee, D. P., & Brown, C. C. (2019). Incorporating biopsychosocial-spiritual resources in emotionally focused couple therapy. *Contemporary Family Therapy*, 42(3), 217-227. <https://doi.org/10.1007/s10591-019-09523-8>
- Hecker, T., Braitmayer, L., & van Duijl, M. (2015). Global mental health and trauma exposure: The current evidence for the relationship between traumatic experiences and spirit possession. *European Journal of Psychotraumatology*, 6, Article 29126. <https://doi.org/10.3402/ejpt.v6.29126>
- Hitchcock, J. T., & John, R. L. (1976). *Spirit possession in the Nepal Himalayas*. Aris & Phillips.
- Hobson, N. M., Schroeder, J., Risen, J. L., Xygalatas, D., & Inzlicht, M. (2017). The psychology of rituals: An integrative review and process-based framework. *Personality and Social Psychology Review*, 22(3), 260-284. <https://doi.org/10.1177/1088868317734944>
- Holmes, E., Brown, R., Mansell, W., Fearon, R., Hunter, E., Frasilho, F., & Oakley, D. (2005). Are there two qualitatively distinct forms of dissociation? A review and some clinical implications. *Clinical Psy-*

- chology Review*, 25(1), 1-23. <https://doi.org/10.1016/j.cpr.2004.08.006>
- Irwin, H. J. (2009). *The psychology of paranormal belief: A researcher's handbook*. University of Hertfordshire.
- Jin, Q., Leaman, R., & Lu, Z. (2023). *PubMed and beyond: biomedical literature search in the age of artificial intelligence*. arXiv preprint. <https://doi.org/10.48550/arXiv.2307.09683>
- Keitt, A. (2013). The devil in the Old World: Anti-superstition literature, medical humanism and preternatural philosophy in early modern Spain. In F. Cervantes, & A. Redden (Eds.), *Angels, demons and the new world* (pp. 15-39). Cambridge University Press. <https://doi.org/10.1017/CBO9781139023870.003>
- Kemp, S., & Williams, K. (1987). Demonic possession and mental disorder in medieval and early modern Europe. *Psychological Medicine*, 17(1), 21-29. <https://doi.org/10.1017/S0033291700012940>
- Kiev, A. (1961). Spirit possession in Haiti. *American Journal of Psychiatry*, 118(2), 133-138. <https://doi.org/10.1176/ajp.118.2.133>
- Kiraly, S. J. (1975). Folie a deux: A case of "Demonic Possession" involving mother and daughter. *Canadian Psychiatric Association Journal*, 20(3), 223-227. <https://doi.org/10.1177/070674377502000309>
- Kleinman, A. (1980). *Patients and healers in the context of culture*. University of California Press.
- Koenig, H. G. (2008). Religion and mental health: What should psychiatrists do? *Psychiatric Bulletin*, 32(6), 201-203. <https://doi.org/10.1192/pb.bp.108.019430>
- Kohn, E. (2015). Anthropology of ontologies. *Annual Review of Anthropology*, 44(1), 311-327. <https://doi.org/10.1146/annurev-anthro-102214-014127>
- Leavitt, J. (1993). Are trance and possession disorders? *Transcultural Psychiatric Research Review*, 30(1), 51-57. <https://doi.org/10.1177/136346159303000102>
- Lewis, I. M. (1971). *Ecstatic religion*. Penguin.
- Lewis, I. M. (1989). *Ecstatic religion: A study of shamanism and spirit possession*. Routledge, Taylor & Francis Group.
- Mabbett, I. W. (1982). Defining the paranormal. *Journal of Parapsychology*, 46(4), 337-354.
- MacNutt, F. (1995). *Deliverance from evil spirits: A practical manual*. Chosen.
- Marmer, S. S. (1991). Multiple Personality Disorder: A psychoanalytic perspective. *Psychiatric Clinics of North America*, 14(3), 677-693. [https://doi.org/10.1016/s0193-953x\(18\)30295-8](https://doi.org/10.1016/s0193-953x(18)30295-8)
- Martínez-Taboas, A. (1999). A case of spirit possession and glossolalia. *Culture, Medicine and Psychiatry*, 23(3), 333-348. <https://doi.org/10.1023/a:1005504222101>
- Martínez-Taboas, A. (2005). Psychogenic seizures in an Es-  
piritismo context: The role of culturally sensitive psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 42(1), 6-13. <https://doi.org/10.1037/0033-3204.42.1.6>
- Matthews, L. J., Hertzog, W. B., Kyritsis, T., & Kerber, R. (2023). Magic, religion, and science: Secularization trends and continued coexistence. *Journal for the Scientific Study of Religion*, 62(1), 5-27. <https://doi.org/10.1111/jssr.12813>
- Matthews, L. J., & Robertson, P. (2024). *Theorizing the anthropology of belief: Magic, conspiracies, and misinformation*. Routledge, Taylor & Francis Group.
- Mayer, E. E. (1911). A case illustrating so-called demon possessions. *Journal of Abnormal Psychology*, 6(4), 265-278. <https://doi.org/10.1037/h0070220>
- Melia, W. M., & Mumford, J. D. (1987). Spirit possession and bewitchment presenting as physical illness: Report of four cases in Nepalese males. *Journal of the Royal Army Medical Corps*, 133(3), 152-154. <https://doi.org/10.1136/jramc-133-03-07>
- Mercer, J. (2013). Deliverance, demonic possession, and mental illness: Some considerations for mental health professionals. *Mental Health, Religion & Culture*, 16(6), 595-611. <https://doi.org/10.1080/13674676.2012.706272>
- Merz, J., & Merz, S. (2017). Occupying the ontological penumbra: Towards a postsecular and theologically minded anthropology. *Religions*, 8(5), 80-97. <https://doi.org/10.3390/rel8050080>
- Muhammad, I. A. (2019). Demonic possession or something else... anti-NMDAR encephalitis: A case report. *Journal of Clinical Cases & Reports*, 2(2), 35-40. <https://doi.org/10.46619/joccr.2019.2-1035>
- Murphy, J. K., & Brantley, P. J. (1982). A case study reportedly involving possession. *Journal of Behavior Therapy and Experimental Psychiatry*, 13(4), 357-359. [https://doi.org/10.1016/0005-7916\(82\)90085-4](https://doi.org/10.1016/0005-7916(82)90085-4)
- MSF Psychologist (2020). Sociocultural expression of psychiatric symptoms: A case report from South Asia. *Oxford Medical Case Reports*, 9. <https://doi.org/10.1093/omcr/omaa071>
- Nahm, M. (2022). Toward a "parapsychological synthesis": Proposals for integrating theories of psi. *Journal of Parapsychology*, 86(2), 299-321. <https://doi.org/10.30891/jopar.2022.02.04>
- Obeyesekere, G. (1970). The idiom of demonic possession: A case study. *Social Science & Medicine*, 4(1), 97-111. [https://doi.org/10.1016/0037-7856\(70\)90061-2](https://doi.org/10.1016/0037-7856(70)90061-2)
- Ocampo-Ponce, M. (2020). Los primeros principios ontológicos en el pensamiento de Santo Tomás de Aquino. *Revista Chilena de Estudios Medievales*, 17, 9-18. [journalofscientificexploration.org](https://doi.org/10.4067/s0719-</a></p>
</div>
<div data-bbox=)

- 689x2020000100009
- Oesterreich, T. K., (1966). *Possession demoniacal and other, among primitive races, in antiquity, the middle ages, and modern times*. New York University.
- Pietkiewicz, I. J., & Lecoq-Bamboche, M. (2017). Exorcism leads to reenactment of trauma in a Mauritian woman. *Journal of Child Sexual Abuse*, 26(8), 970-992. <https://doi.org/10.1080/10538712.2017.1372837>
- Pietkiewicz, I. J., Kłosińska, U., & Tomalski, R. (2021a). Delusions of possession and religious coping in schizophrenia: A qualitative study of four cases. *Frontiers in Psychology*, 12, Article 628925. <https://doi.org/10.3389/fpsyg.2021.628925>
- Pietkiewicz, I. J., Kłosińska, U., Tomalski, R., & van der Hart, O. (2021b). Beyond dissociative disorders: A qualitative study of Polish catholic women reporting demonic possession. *European Journal of Trauma & Dissociation*, 5(4), Article 100204. <https://doi.org/10.1016/j.ejtd.2021.100204>
- Pietkiewicz, I. J., Kłosińska, U., & Tomalski, R. (2022). Trapped between theological and medical notions of possession: A case of possession trance disorder with a 3-year follow-up. *Frontiers in Psychiatry*, 13, Article 891859. <https://doi.org/10.3389/fpsyg.2022.891859>
- Rashed, M. A. (2018). More things in heaven and Earth: Spirit possession, mental disorder, and Intentionality. *Journal of Medical Humanities*, 41(3), 363-378. <https://doi.org/10.1007/s10912-018-9519-z>
- Renard, S. B., Huntjens, R. J., Lysaker, P. H., Moskowitz, A., Aleman, A., & Pijnenborg, G. H. (2016). Unique and overlapping symptoms in schizophrenia spectrum and dissociative disorders in relation to models of psychopathology: A systematic review. *Schizophrenia Bulletin*, 43(1), 108-121. <https://doi.org/10.1093/schbul/sbw063>
- Rosenhan, D. L. (1973). On being sane in insane places. *Science*, 179(4070), 250-258. <https://doi.org/10.1126/science.179.4070.250>
- Rosenthal, R., & Fode, K. L. (1963). The effect of experimenter bias on the performance of the albino rat. *Behavioral Science*, 8(3), 183-189. <https://doi.org/10.1002/bs.3830080302>
- Rosik, C. H. (2004). Possession phenomena in North America: A case study with ethnographic, psychodynamic, religious and clinical implications. *Journal of Trauma & Dissociation*, 5(1), 49-76. [https://doi.org/10.1300/J229v05n01\\_04](https://doi.org/10.1300/J229v05n01_04)
- Sapkota, R.P., Gurung, D., Neupane, D. et al. (2014). A village possessed by "Witches": A mixed-methods case-control study of possession and common mental disorders in rural Nepal. *Culture, Medicine, and Psychiatry*, 38, 642-668. <https://doi.org/10.1007/s11013-014-9393-8>
- Seltzer A. (1983). Psychodynamics of spirit possession among the Inuit. *Canadian Journal of Psychiatry* 28(1), 52-56. <https://doi.org/10.1177/070674378302800112>
- Shafranske, E. P., & Cummings, J. P. (2013). Religious and spiritual beliefs, affiliations, and practices of psychologists. In K. I. Pargament, A. Mahoney, & E. P. Shafranske (Eds.), *APA handbook of psychology, religion, and spirituality (Vol. 2): An applied psychology of religion and spirituality* (pp. 23-41). American Psychological Association. <https://doi.org/10.1037/14046-002>
- Somer, E. (2004). Trance possession disorder in Judaism: Sixteenth-century Dybbuks in the Near East. *Journal of Trauma & Dissociation*, 5(2), 131-146. [https://doi.org/10.1300/j229v05n02\\_07](https://doi.org/10.1300/j229v05n02_07)
- Sosis, R. (2019). The building blocks of religious systems: Approaching religion as a complex adaptive system. In G. G. Georgiev, J. M. Smart, C. L. Flores-Martínez, & M. E. Price (Eds.), *Evolution, development and complexity* (pp. 421-449). Springer Nature. [https://doi.org/10.1007/978-3-030-00075-2\\_19](https://doi.org/10.1007/978-3-030-00075-2_19)
- Suryani, L. K., & Jensen, G. D. (1994). *Trance and possession in Bali: A window on western multiple personality, possession disorder, and suicide*. Oxford University Press.
- Steadly, M. (1988). Severing the bonds of love: A case study in soul loss. *Social Science & Medicine*, 27(8), 841-856. [https://doi.org/10.1016/0277-9536\(88\)90236-5](https://doi.org/10.1016/0277-9536(88)90236-5)
- Tajima-Pozo, K., Zambrano-Enriquez, D., de Anta, L., Moron, M. D., Carrasco, J. L., Lopez-Ibor, J. J., & Diaz-Marsa, M. (2011). Practicing exorcism in schizophrenia. *Case Reports*, 2011(1). Article bcr1020092350. <https://doi.org/10.1136/bcr.10.2009.2350>
- Teoh, C. L., & Dass, D. (1973). Spirit possession in an Indian family- A case report. *Singapore Medical Journal*, 14(1), 62-64.
- Teja, J. S., Khanna, B. S., & Subrahmanyam, T. (1970). "Possession states" in Indian patients. *Indian Journal of Psychiatry*, 12(1), 71-87.
- Truzzi, M. (1987). On pseudo-skepticism. *Zetetic Scholar*, 12-13, 3-4.
- Turró, S. (1985). *Descartes: Del hermetismo a la nueva ciencia*. Anthropos.
- Ugobi-Onyemere, M. C. (2015). *The knowledge of the first principles in saint Thomas Aquinas*. Peter Lang, International Academic Publishers. <https://doi.org/10.3726/978-3-0351-0749-4>
- United Nations. (2023, November, 2). *Universal declaration of human rights*. UN. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- Vagrecha, Y. S. (2016). Possession behaviour. *Abnormal and Behavioural Psychology*, 2(2), Article 1000119. <https://doi.org/10.4172/2472-0496.1000119>

- Van der Hart, O., Witztum, E., & Friedman, B. (1993). From hysterical psychosis to reactive dissociative psychosis. *Journal of Traumatic Stress*, 6(1), 43-64. <https://doi.org/10.1002/jts.2490060106>
- VanPool, C. S., & VanPool, T. L. (2023a). Anthropology and the science of the supernatural: Souls, ancestors, ghosts, and spirits. In C. S. VanPool, & T. L. VanPool (Eds.), *An anthropological study of spirits* (pp. 7-46). Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-25920-3\\_2](https://doi.org/10.1007/978-3-031-25920-3_2)
- VanPool, C. S., & VanPool, T. L. (2023b). Defense against the dark. In C. S. VanPool, & T. L. VanPool (Eds.), *An anthropological study of spirits* (pp. 7-46). Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-25920-3\\_6](https://doi.org/10.1007/978-3-031-25920-3_6)
- Ward, C. A. (Ed.). (1989). *Altered states of consciousness and mental health: A cross-cultural perspective*. Sage Publications, Inc.
- Westerink, H. (2014). Demonic possession and the historical construction of melancholy and hysteria. *History of Psychiatry*, 25(3), 335-349. <https://doi.org/10.1177/0957154x14530818>
- Wilt, J. A., Van Tongeren, D. R., & Exline, J. J. (2023). Are daily supernatural attributions to God and the devil/demons linked with meaning in life? *Journal of Positive Psychology*. Advance online publication. <https://doi.org/10.1080/17439760.2023.2169630>
- Wilby, E. (2023). Eve's opinion: Spirit-possession and the witches' sabbath in early modern Europe. *Magick, Ritual, and Witchcraft*, 18(1), 80-122. <https://doi.org/10.1353/mrw.2023.a906603>
- Witztum, E., Grisaru, N., & Budowski, D. (1996). The 'zar' possession syndrome among Ethiopian immigrants to Israel: Cultural and clinical aspects. *British Journal of Medical Psychology*, 69(3), 207-225. <https://doi.org/10.1111/j.2044-8341.1996.tb01865.x>
- World Health Organization. (2022). *ICD-11: International classification of diseases* (11th revision). <https://icd.who.int/>
- Wright, P. G. (2000). Postmodern ontology, anthropology, and religion. *Culture and Religion*, 1(1), 85-94. <https://doi.org/10.1080/01438300008567141>
- Yap, P. M. (1960). The possession syndrome: A comparison of Hong Kong and French findings. *Journal of Mental Science*, 106(442), 114-137. <https://doi.org/10.1192/bjp.106.442.114>



**RESEARCH  
ARTICLE**

# Interdisciplinary Review of Demonic Possession Between 1890 and 2023: A Compendium of Scientific Cases

**Álex Escolà-Gascón**

aescola@icade.comillas.edu

Comillas Pontifical University,  
erected and belonging to the Holy-  
See, Vatican City State.

**María Alejandra Ovalle**

Faculty of Psychology, Autonomous  
University of Madrid, Spain.

**Luke J. Matthews**

Senior Behavioral and Social Scien-  
tist, RAND Corporation.

SUBMITTED March 11, 2023

ACCEPTED November 27, 2023

PUBLISHED December 31, 2023

<https://doi.org/10.31275/20233235>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## HIGHLIGHTS

“Demonic possession” cases published in the academic literature over the last 130 years indicate that about 5% lack a scientific explanation and thus require further study.

## ABSTRACT

Episodes of demonic or spirit possession, where individuals perceive their bodies and minds as being controlled by supernatural entities, have been the subject of extensive research across various disciplines. Despite this, the extent to which existing scientific explanations can account for these phenomena is still uncertain, especially in terms of the aspects that remain unexplained. This official review aims to clarify the current scientific understanding of the origins, mechanisms, and causes of these seemingly extraordinary experiences. Our analysis includes 52 documented cases of possession, reviewed from literature published between 1890 and 2023 and incorporating insights from psychology, medicine, anthropology, and theology. We examine common symptom patterns, delve into the research conducted, and evaluate how many cases are still unexplained within the existing behavioral science framework. Quantitative models indicate a 0.01923 probability of a possession case being scientifically unexplained. The likelihood of discovering new, truly unexplained cases of demonic possession in the future is estimated at 0.0031, with a 0.0023 probability of encountering five such cases in a single year. Moreover, we assess the medical and psychological interventions employed in these cases and propose practical guidelines for the safe use of exorcisms and specific pharmacological treatments. This study advocates for the integration of therapeutic interventions, combined with the expertise of anthropologists for culturally sensitive actions and Catholic Church priests for spiritual guidance, including exorcisms where appropriate as determined by ecclesiastical authorities. Our conclusion suggests that integrative approaches provide the most comprehensive clinical support in such cases and underscore how possession episodes challenge our scientific understanding of consciousness and its boundaries.

## KEYWORDS

Dissociation; psychosis; demonic possession; spirit possession; Holy See; Catholic Church;



## INTRODUCTION

Experiences of *spirit possession* are predicated on the belief that supernatural, noncorporeal entities can exert influence over human behavior by seizing control of an individual's body, speech, or consciousness (Rosik, 2004; Pietkiewicz et al., 2021a). The behavioral changes noted during such experiences exhibit two defining traits that typify the profile of the possessed (Vagrecha, 2016): Firstly, there is an identified loss of agency over one's actions, encompassing thoughts, sensations, and emotions, often paired with altered states of consciousness and anomalous physical activities. Secondly, there is a discernible disruption of personal identity, evidenced by pronounced variations in vocal tone, either complete or partial amnesia regarding one's past experiences or memories, and a profound disconnection with self-recognition (Pietkiewicz et al., 2021a). Sociological research has established that altered states of consciousness associated with possession are observed in 89% of the 488 religious societies surveyed globally (Bourguignon, 1973). More recent studies confirm that the incidence and the phenomenological aspects of possession continue to persist internationally (Rashed, 2018).

Spirit possession is deeply entrenched across a myriad of cultures, particularly in Asia and Africa, where it assumes significant cultural importance (Hitchcock & John, 1976; Suryani & Jensen, 1994; Somer, 2004). Within each culture, interpretations of possession vary, with or without integration into the belief systems of the community (Castillo, 1994). In certain Eastern communities, possession is embraced as a core element of collective identity, necessitating purification rituals and communal engagement with the affected individual (Blidstein, 2018). These rituals fulfill psychosocial functions, facilitating healing, communication, societal validation, and unity (Kemp & Williams, 1987). While various theoretical models have been suggested to elucidate these perspectives on possession, the prevailing theory posits that the phenomenon arises as a coping mechanism for individual socio-moral maladaptation (Baker et al., 2020; Hobson et al., 2017). Confronted with such discordance, the community conducts particular rites of liberation aimed at the reintegration and affirmation of the so-called "possessed" person's identity within their group (Sosis, 2019).

In contrast, the cultural interpretation of spirit possession in Western contexts diverges substantially (Ang & Montiel, 2019). In societies influenced by Christian and Jewish traditions, these phenomena are often considered primarily as manifestations of physical and mental pathology, although the religious connotations of the supernatural hypothesis are neither neglected nor outright

rejected (Mercer, 2013). While certain Eastern cultures may view possession as a mechanism for individual adaptation, Western interpretations frequently dismiss this adaptive aspect, leaning more towards a pathologizing view of possession.

## Ontology *Thomistic* Classifications

To elucidate the concept of the supernatural hypothesis and its implications, we refer to the *Thomistic* framework concerning the ontological classification of phenomena within both empirical-formal and logical-abstract realities (Casale, 2011).

Firstly, *natural* phenomena are events within reality, whether directly or indirectly observable, that conform to or can be explained by the established laws of the natural and formal sciences (Hankinson, 2012). These phenomena adhere to an ontology grounded in realism or the principle of reality (Ugobi-Onyemere, 2015) and are characterized by the assertions that: (a) reality is singular, (b) reality is material, and (c) reality is changeable. As such, the initiating forces, transitions, and outcomes of natural phenomena are contained within the realm of reality. This acknowledgment does not negate the immaterial aspects of reality (Ocampo-Ponce, 2020).

Secondly, *preternatural* phenomena are those observable events within reality that, at first glance, seem inexplicable by the conventional laws recognized by basic and formal sciences (referencing the seminal work of Crookes, 1870/2012). These events align only partially with the principle of reality (Hankinson, 2012); that is, they are perceptible within reality, but present anomalies when compared to the expected patterns of scientific understanding, and their origins seem foreign to, or beyond, material reality (Escolà-Gascón, 2020a, 2020b). In parapsychology, such events are described as unexplained but not inherently inexplicable, maintaining that their origins are not unnatural (Mabbett, 1982). It's important to recognize that these deviations and the mystery surrounding their sources do not necessarily contravene natural law (Escolà-Gascón et al., 2020a, 2020b). Consequently, preternatural phenomena might currently be enigmatic but could eventually be integrated into the scope of natural law with advancements in understanding reality's mutable nature (Coelho, 2012).

Thirdly, we encounter phenomena that diverge most distinctly from *Thomistic* reasoning: *supernatural* phenomena. These are events with origins, developments, and conclusions entirely outside the domain of known reality. Within *Thomism*, occurrences such as demonic possession are categorized at this level while not precluding potential overlaps with other ontological domains (Keitt,

2013). The demarcation of reality's boundaries pertains to a metaphysical debate beyond the scope of this discussion (interested readers are directed to Hart, 2023). Supernatural phenomena possess either a divine or diabolical ontology, distinct from terrestrial events or the regular order of natural phenomena (Turró, 1985). For an event to be classified as supernatural, it must fulfill the principle of independence; the genesis, process, and conclusion of the event must not conform to (or may stand in stark contrast with) the foundational tenets of realism. This divergence may suggest, though not necessitate, a contradiction with the conventional scientific principles governing natural phenomena (Brann, 2001).

In the context of a monotheistic religious framework, the supernatural hypothesis of possession postulates that the behavioral manifestations of spirit possession originate from: (a) a malevolent source, (b) operate autonomously from the established course of natural events, and (c) belong to an ontology outside the natural order. These characteristics provide a potential epistemic basis predominantly influenced by Catholic and Judeo-Christian traditions.

It is critical to acknowledge, however, that interest in spirit possession extends beyond religious studies. Historically, disciplines such as psychiatry, anthropology, sociology, and psychology have each explored the concept from their respective viewpoints. These fields have developed unique interpretations of possession, identified the potential causes, and proposed diverse therapeutic strategies to support individuals affected by this phenomenon. In the sections that follow, we will briefly examine how these disciplines, along with theology, conceptualize possession, its etiology, and the interventions they advocate, including ritualized and therapeutic methods.

## Multidisciplinary Approach

**Theological approach.** Theological perspectives, particularly within monotheistic traditions, conceptualize spirit possession as a malign supernatural occurrence that usurps the divinely bestowed freedom of the individual (Amorth, 2016). For many, belief in supernatural forces is an indispensable element of their worldview, providing a framework to navigate daily adversities, often perceived as components of a larger benevolent divine scheme (MacNutt, 1995). This outlook enables individuals to interpret challenges as part of a meaningful plan and seek solace and guidance in God, whom they regard as a source of refuge and comfort during stressful periods (Exline et al., 2021a).

Adherents to a belief system that accommodates supernatural phenomena typically resort to supernatural

explanations for life's trials, finding such interpretations particularly resonant when supported by personal experiences or credible narratives from within their community (Exline et al., 2021b). Consequently, those who sincerely credit the existence of spirit possession often embrace spiritual remedies to shield against or combat malevolent forces (Exline & Wilt, 2023). These protective measures can range from devout prayer and consultation of holy texts to the pursuit of virtuous conduct. Despite seeming at odds, psychological and spiritual methodologies can coalesce within therapeutic contexts that honor religious convictions, where practitioners may integrate spiritual practices such as prayer, scriptural reflection, or religious ceremonies into their healing modalities (Shafranske & Cummings, 2013; Farah & McColl, 2008; Hawkins et al., 2019).

It is crucial, however, to distinguish between practices that are generally advised against by professionals, such as deliverance in the place of exorcism (Exline et al., 2021a). Deliverance focuses on relieving individuals from the affliction of evil spirits, when there is no implication of full possession, whereas exorcism addresses cases where malevolent entities are believed to have seized complete control over the individual (Amorth, 2016). This differentiation is key: Deliverance may involve attempts to engage with tormenting spirits, a practice at odds with Catholic doctrine, while exorcism, an official sacrament sanctioned by the Catholic Church, avoids such interactions. The Church appoints exorcists through a formal procedure, emphasizing the necessity of a multidisciplinary approach that includes medical, legal, and psychological expertise (Driscoll, 2015; Giordan & Possamai, 2018).

Positive outcomes from exorcisms are more likely when: (a) the ritual adheres to the individual's belief system; (b) the exorcist is knowledgeable about dissociative disorders; and (c) the individual's autonomy is respected (Fraser, 1993<sup>Note 1</sup>). Conversely, negative repercussions are more probable in the absence of these safeguards (Bowman, 1993<sup>Note 1</sup>; Bull, 1998). Notably, rigorous assessments are crucial, with data indicating that a mere 5% of assessed cases over a decade were deemed appropriate for exorcism (Giordan & Possamai, 2018). This highlights exorcism as an intervention of last resort rather than a primary solution. However, the scarcity of systematic records makes it challenging to substantiate the prevalence of exorcisms (Bauer, 2022).

**Psychiatric approach.** The historical interpretation of spirit possession has predominantly been viewed through a religious lens. However, as the 19th century turned to the 20th, alternative perspectives began to surface from the study of psychopathology (Westerink, 2014). These modern theories diverge from the idea of supernatural

causality, suggesting instead that what has been labeled as possession might be more accurately attributed to neurological or psychiatric disorders, including, but not limited to, epilepsy and various neuropathies (Bone & Dein, 2021). There is a noted parallel between the traditional accounts of possession and symptoms of conditions such as schizophrenia, dissociative disorders, hysteria, mania, and Tourette's syndrome (Betty, 2005; Germiniani et al., 2012; Koenig, 2008; Pietkiewicz et al., 2021b).

In a groundbreaking study, Yap (1960) coined the term "psychiatric possession syndrome" (PPS), analyzing cultural variations in possession phenomena between subjects in France and Hong Kong. Building on Yap's concept, Oesterreich (1966) expanded the use of PPS to delineate a medical category capturing clinical symptoms typically associated with so-called supernatural possessions. These ranged from motor dysfunctions to delusional states and glossolalia.

Possession has been variously classified in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) across its versions, with the most recent edition, the DSM-5-TR, characterizing it as a disturbance in identity and personality that leads individuals to believe they are possessed (American Psychiatric Association, 2022). In contrast, the *International Classification of Diseases 11th Revision* (ICD-11) by the WHO (2022) continues to recognize possession syndrome as a form of dissociative disorder (Pietkiewicz et al., 2022). This discrepancy underscores the complexity inherent in the subject, entwined with medical, cultural, and religious nuances.

Delmonte et al. (2015) conducted research on Afro-Brazilian religious practices and discovered that the criteria outlined in the DSM-5 were inadequate in clearly distinguishing between non-pathological religious possession and dissociative identity disorder. This revelation prompts two significant concerns: Firstly, psychiatric classifications appear insufficient or non-exclusively characterized when it comes to possession syndrome, leading to potential diagnostic errors and their subsequent ramifications. Secondly, the issue pertains to dissociative and psychotic phenomena, which are not always indicative of pathology. Instead, they can be integral to cultural expressions within religious belief systems. These variations in conceptualization, however, are not adequately represented in the current psychiatric metrics for this phenomenon. Therefore, while the psychiatric approach provides valid descriptions and explanations, the evidence and outcomes they yield in the context of possession are still incomplete, considering the vast scope of cultural diversity.

**Anthropological approach.** In anthropological discourse, there is a critique of the clinical reductionism that

is often present in psychiatric approaches to understanding phenomena such as possession. Such approaches risk stripping away the rich cultural and social contexts that underpin symptoms, thereby overlooking their broader significance within the lived experiences of individuals (Leavitt, 1993; VanPool & VanPool, 2023, 2023b). Kleinman (1980) argued that possession can provide a means for people to express behaviors or emotions that might otherwise be suppressed or denied. It can also reflect societal shifts, acting as a conduit for expressing dissent and advocating for change, particularly in settings where marginalized populations are prevalent (Kiev, 1961). This has been underscored by observations that possession may serve as a mechanism for adaptation and survival within certain social environments (Lewis, 1989; Wilt et al., 2023), and in some cases, can play a constructive role in ameliorating dissociative phenomena (Marmer, 1991).

More broadly, anthropologists would categorize possessive states within the wider class of altered states of consciousness that are reported across most, if not all, cultures (Ember & Carolus, 2017). Specifically within possessive experiences, anthropology has noted that these can be affectively positive, negative, or ambiguous experiences for the possessed (Matthews et al., 2023). Using a global sample of 32 contemporary religious groups from all major branches of religious belief, Matthews et al. (2023) found that 24 (75%) of them espoused an exorcism practice, implying belief in negative possession, and 13 (40%) espoused affectively positive possession experiences. Interestingly, no religion had positive possession without also exhibiting negative possession.

Lewis (1971) advanced a more specific framing of positive possession as 'central' and negative possession as 'peripheral'. Central possession is a temporary, voluntary, and reversible altered state of consciousness, typically associated with mystical ceremonies and the influence of benevolent spirits aimed at 'healing' or improving one's life (Ward, 1989; Wilby, 2023). While central possession holds an anthropological significance that is functional, adaptive, and culturally purposed, peripheral possession tends to be entwined with an individual's personality, marked by recurring episodes of possession interspersed with lucidity (see French, 2023). Anthropologically, peripheral possession corresponds with psychiatric or psychopathological perspectives and lacks the cultural functionality of central possession, which serves as a linchpin for community culture and has potential therapeutic value (Ward, 1989).

Lewis (1989) analyzed the social structures that underlie peripheral possessions, observing that they are more common among women who use dissociative states as a mechanism of survival. In some cultural contexts,

such as in India, this phenomenon is also interpreted through the lens of the vulnerability of young women within the family structure, predisposing them to experiences of possession due to potential mistreatment and neglect (Teja et al., 1970). Obeyesekere (1970) further noted that peripheral possession may also involve the enactment of cultural roles learned during early childhood, which could exacerbate an individual's need to manage their sexual and aggressive drives. This anthropological insight parallels the dynamic psychology viewpoint, which interprets certain possession states as histrionic outbursts (see Font, 2016).

Conversely, central possessions are deeply embedded within cultural anthropology, focusing on the collective rather than on the individual experience (VanPool & VanPool, 2023a). In this context, possession episodes can provide secondary benefits to the community, such as strengthening social bonds and unity (French, 2023). The anthropological role of possession in these scenarios justifies communal actions taken to support and fulfill the needs of the possessed person, often within the framework of dealing with a supernatural presence. The community, therefore, engages in ceremonial behaviors, such as providing the possessed with new garments, to placate the spirit that is believed to have taken one of their own as a vessel for communication with the mortal world (see Witztum et al., 1996). These episodes are also categorized as mediumistic incorporation states, where the spirit's host enters a trance and is perceived to act under the control of the spiritual entity inhabiting them (see de Oliveira-Maraldi et al., 2019; 2021).

It is also worth noting that spirit possession in many non-Western cultures is viewed in a way that is more integrated across the supernatural and natural; this has important implications for how possession concepts function for people (potentially including recently converted Catholics) from non-Western cultures. For example, spirit possession is sometimes attributed to wholly physical illness symptoms. Rituals to remove illness-causing spirits involve acute stressors (e.g. shouting the spirits out) that modern medical research suggests may boost the early stages of immune response to pathogens (Bains & Sharkey, 2022). Relatedly, many cultures do not recognize the same nature-culture and material-spiritual divides as are present in the Western tradition (Kohn, 2015). This means some cultures will view spirits as more akin to creatures, i.e., part of the created natural world, and thus not supernatural in the Thomistic schema. It is worth noting that pre-scholastic Christian Neoplatonism was more similar in some ways to non-Western perspectives on the participation of spirits in the created world. This is because, as discussed above, scholasticism positions the supernat-

ural epistemologically as that which is outside humanity's current knowledge of reality, whereas pre-scholastic Christianity and many non-Western perspectives, position the supernatural ontologically such that all of created reality (i.e., not God) is 'nature' and only God is beyond nature—'supernature' (Matthews & Robertson, 2024). In line with this ontology, anthropologists have noted that their research subjects insist there can be no study of possession that does not involve interaction with the spirits, just as there is no study of an animal or plant that does not involve interacting with it in some way (Wright, 2000; Merz & Merz, 2017).

**Psychological approach.** In the field of psychology, it is paramount to understand all experiences and beliefs within their cultural contexts, as cultural factors significantly influence both clinical symptoms and the explanatory models adopted by individuals (Font, 2016). A therapist encountering a belief in demonic possession must approach the issue with neutrality, avoiding any prejudiced viewpoints. The emphasis should be on understanding the origins and emotional impact of these beliefs and on assessing their positive and negative consequences on the patient's life. The psychological approach is not to validate or refute the existence of demonic possessions or to diagnose an underlying pathology in episodes of possession but rather to understand the personal mechanisms that give rise to such beliefs and to assist in managing symptoms and enhancing well-being.

Dissociative disorders and identity disturbances, which are positively correlated with traumatic experiences like sexual abuse, physical violence, and extreme psychological stress, are often considered when interpreting possession states from a psychological angle (Jin et al., 2023). Standard psychotherapeutic treatments have shown effectiveness in treating dissociative disorders. However, there is a segment of Christian and Catholic psychotherapists who have proposed exorcisms as a potential intervention, integrating a spiritual understanding of the individual's condition with the psychological aspects involved in order to enhance the intervention's effectiveness (Baas et al., 2020).

The debate on the use of exorcisms in cases of possession is varied, with no unified stance beyond advocating for evidence-based psychological interventions. Some preliminary research has suggested a lack of benefit from exorcism when used as an adjunct to pharmacological and psychotherapeutic treatments. However, these findings were broad and did not account for the diverse psychological profiles of individuals reporting possessions (Font, 2012).

Msgr. Jordi Font, a Jesuit priest and psychiatrist, was designated by the Catholic Church in Barcelona to conduct

medical assessments for suspected cases of possession, referred by the archbishop (Font, 2016). Working with Br. Dr. Àlex Escolà-Gascón at the *St. Peter Calver Psychiatric Hospital* and the *Vidal and Barraquer Foundation* assessed cases for the archdiocese over three years. Msgr. Font stated, “I have no personal experience with the devil, nor through the many cases I have seen of alleged ‘possessions’” (Font, 2012, p. 28), implying that he encountered no evidence of the supernatural in these instances.

Font’s theoretical model suggests that possession episodes manifest in two internal structures: the schizoid-paranoid and the histrionic-narcissistic positions (Font, 2016). He found that individuals with schizoid-paranoid traits displayed extreme sensitivity to their environment, leading to unstable behavior and messianic personifications during possession episodes. Conversely, the histrionic-narcissistic position involved either dramatic motor disturbances without a loss of contact with reality, or a chameleon-like personality variation focused on gaining attention and affection.

According to Font (2016), exorcism may be beneficial for those with histrionic-narcissistic structures but not for those with psychotic features. These findings were communicated to the Spanish Episcopal Conference and the Holy See, influencing protocols in dioceses such as Frankfurt (Font, 2012). Despite the implementation of his theories, the scientific community has largely overlooked Font’s contributions, emphasizing the need for further research to substantiate this framework for understanding possession cases.

### Current Review

The primary aim of this review article is to meticulously examine cases of possession that have been evaluated by professionals and documented in scientific literature. Our goal is to elucidate the diagnostic processes and treatment methods applied thus far to individuals who have undergone episodes of possession. This review is intended to enhance our understanding of the possession phenomenon and to inform the development of future investigative and therapeutic approaches. Our specific objectives are threefold:

1. To collate and describe case studies from the literature pertaining to demonic or spirit possession, with the aim of identifying and analyzing recurring patterns and elements within these cases.
2. To assess and discuss the principal challenges encountered in the diagnosis and treatment of possession episodes. This includes the evaluation process, the selection of effective therapeutic strategies, and the ethical dilemmas involved in managing such cases.
3. To offer recommendations and perspectives for the future, detailing how possession episodes can be managed effectively and ethically from a holistic therapeutic standpoint that incorporates diverse methodologies and the cumulative scientific knowledge within this domain.

## METHOD

### Search Strategy

We conducted a meticulous search within two renowned databases, *PubMed* and *Scopus*, due to their comprehensive coverage across multiple disciplines and their advanced search capabilities for generating detailed and specialized results, as outlined by Baas et al. (2020) and Jin et al. (2023). The search spanned from June to September 2023, employing Boolean operators to methodically combine terms as detailed in Table 1.

Our objective was to refine the search to isolate case studies exclusively. We imported the search outcomes into a database, carefully eliminating any duplicates. We then scrutinized the titles and abstracts listed in the database to confirm their relevance as case studies. Additionally, we conducted a thorough examination of the reference lists within the selected articles to uncover any pertinent studies that may have been initially overlooked.

Following the assembly of the chosen articles, we embarked on a detailed data analysis phase, during which we meticulously extracted and compiled critical information for further review.

### Data Extraction

Data extraction from each case study adhered to the following predetermined criteria:

**Table 1.** Database and Search String for Data Collection.

Database	Search string
PubMed	“Demonic possession*” OR “spirit possession*” OR “Possession phenomena” OR “Exorcism possession”.
Scopus	“Demonic possession*” OR “spirit possession*” OR “Possession phenomena” OR “Exorcism possession”.

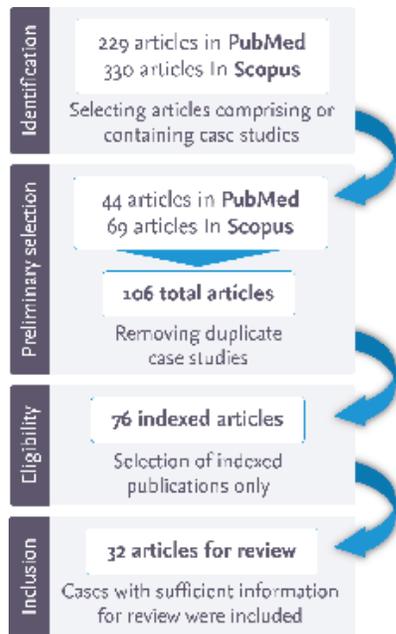
**Table 2.** Cases Excluded From the Analysis.

Author (s)	Year	Title	Journal	Reason
<b>Murphy &amp; Brantley</b>	1982	A case study reportedly involving possession	Journal of Behavior Therapy and Experimental Psychiatry	It has addressed the relationship between multiple personality and possession, although they present some cases, they do not constitute its main focus, so the information available on the matter is very brief.
<b>Kenny</b>	1981	Multiple Personality and spirit possession	Psychiatry: Interpersonal and Biological Processes	They analyze other symptoms that are unrelated to the feeling of possession or the sense that someone is taking over the person. They describe the case of a 12-year-old girl who perceives that the house they live in is haunted.
<b>Melia &amp; Mumford</b>	1987	Spirit possession and bewitchment presenting as physical illness: Report of four cases in Nepalese Males	Journal of the Royal Army Medical Corps	Cases 1 and 3 have been excluded, since the narrative and symptoms are not directly related to spirit possession.
<b>Ferracuti et al.</b>	1996	Dissociative Trance Disorder: Clinical and Rorschach Findings in Ten Persons Reporting Demon Possession and Treated by Exorcism	Journal of Personality Assessment	The objective of this study was focused on descriptive statistics at the sample level, indicating the coincidence of symptoms, behaviors, and shared characteristics among the case studies.
<b>Castro-Blanco</b>	2005	Cultural sensitivity in conventional psychotherapy: A comment on Martínez-Taboas	Psychotherapy	It is not the original source of the case. The original source of the case was included (Martínez-Taboas, 2005).
<b>Betty</b>	2005	The growing evidence for “demonic possession”: What should psychiatry’s response be?	Journal of Religion and Health	The cases described in this research focused on exposing how spiritual possession was perceived in each of the studied countries (China, India, and the United States).
<b>Cavanna et al.</b>	2010	Epileptic seizures and spirit possession in Haitian culture: Report of four cases and review of the literature	Epilepsy & Behavior	The information mentioned about the four cases is very brief and does not delve into the details we need for the investigation.
<b>Zouari et al.</b>	2010	Cultural aspects in depression masked by psychotic symptoms in Maghreb countries: three case report	L’Encéphale	The cases were quite brief, in addition, the research focus of this article consisted of illustrating how the cultural factor influenced depression.
<b>Espí &amp; Espí</b>	2014	Demonic possessions and mental illness: Discussion of selected cases in late medieval hagiographical literature.	Early Science and Medicine	The description of the cases is very brief and does not delve into the details that we need for the research.
<b>Drouin et al.</b>	2017	Demonic possession by Jean Lhermitte	L’Encéphale	The data provided in both cases focused on demographic aspects, and there was a lack of detailed information regarding the symptomatology or the history of possessions.
<b>Sharabi</b>	2020	The politics of madness and spirit possession in Northern India	Medical Anthropology	The possession of the three cases exposed in the article were related to Gods. The three brothers presented themselves as gods in the town.

- (a) *Source Information:* We documented the article reference for each case.
- (b) *Case Number:* A unique number was assigned to each case for identification purposes.
- (c) *Gender:* This was determined based on the self-identified gender of the patient, either male or female.

- (d) *Background:* We compiled pertinent life history details of the patient as provided by the authors of each report.
- (e) *Evaluation:* The specific symptoms exhibited by individuals in each case were itemized.
- (f) *Diagnosis:* We noted the diagnostic approach—whether theological,





**Figure 1.** Step-by-step article selection and recovery mechanism.

psychiatric, anthropological, or psychological—and included any associated classifications.

- (g) *Treatment*: The type of intervention was recorded, detailing the discipline or specialty that addressed the symptoms or characteristics of each possession case, along with the techniques employed.
- (h) *Outcome*: We described the observed effects or results following the intervention and the subsequent progression of each case.

**Eligibility Criteria**

The studies included in our systematic review were required to fulfill the following inclusion criteria:

1. Focus on case studies involving individuals who experienced episodes of spirit possession, which also encompasses instances of demonic possession. The evaluation of spirit possession was based on self-reports from the subjects claiming to be possessed;
2. Be published within the timeframe leading up to the commencement of our search period (June-September 2023), with no restrictions regarding the date of publication relative to the participants’ ages;
3. Appear in journals indexed in PubMed or Scopus. Studies from journals not indexed in these databases were excluded;
4. Provide comprehensive and detailed information on the episodes of possession, the historical context of the possession phenomenon, and the methodologies employed in addressing each case. Any study that

did not offer this essential level of detail was omitted from our analysis.

**Search Strategy and Selection Process**

The initial search across both databases returned 559 articles. Focusing exclusively on case studies, this was refined to 113 articles. After eliminating duplicates and filtering for papers published in indexed journals, 76 articles remained. These were added to a database for further analysis. The abstracts of these articles were reviewed to identify those that detailed case studies of possession. Ultimately, 32 articles encompassing 52 cases of possession were deemed suitable. The remaining articles either did not focus on possession case studies or examined different constructs. A comprehensive review of the selected articles followed, evaluating both the quantity and the integrity of the information within each case study. We also examined the bibliographic references within these articles to identify additional relevant studies that fulfilled the inclusion criteria set out in subsection “2.3. Eligibility Criteria.” This led to the inclusion of 8 more pertinent articles.

From the original 43 articles, eleven were discarded for reasons outlined in Table 2. Consequently, we finalized our selection of 32 articles as the basis for data extraction. The process followed for article selection is depicted in Figure 1 with a flow diagram.

**RESULTS**

**General Data**

Table 3 (see appendix) provides a detailed presentation of the 52 case studies that were identified and selected in this review. These cases were documented in research spanning the period from 1890 to 2022. We found no published possession cases in 2023 up to the commencement of our search in June. Among the individuals studied, we recorded that 35 were women, in contrast to only 17 men, and ages ranged from 8 to 56 years (Mean=30.57; Standard Deviation=12.37), highlighting the predominance of cases in the adult female group.

**Recurring Life History Patterns in Possession Cases**

An examination of the life histories of individuals reported as possessed reveals three recurrent patterns. The first pattern shows that the majority were immersed from an early age in deeply religious environments where their belief systems solidified within a context replete with religious dogma. For instance, cases 25, 31, 34, 38,

39, 42, and 44 display this pattern. Even in instances where the individuals themselves were not particularly religious, such as cases 14, 41, 46, 47, and 52, the significant influence of their family's religious beliefs could have impacted their worldview. In these contexts, actions deemed contrary to religious teachings were often linked to demonic possession, perceived as punishment for sinful behavior—this theme is evident in case 29's mention of watching horror movies, case 38's reference to tarot reading, case 48's note of extramarital affairs, and case 49's identification with a non-heteronormative sexual orientation. It is important to clarify that these are relational attributions reported in our sources, and our aim is not to validate these claims but to report observed patterns among the 30 cases reviewed.

The second pattern highlights a history of trauma in childhood or adolescence, with common threads including social isolation, substance misuse or abuse, economic hardship, and familial or relational conflict, as seen in cases 14, 28, 38, 40, and 41. The intersection of past traumas with reports of paranormal beliefs and dissociative states aligns with existing literature (refer to Irwin, 2009, for a comprehensive review), suggesting an association between paranormal belief and trauma-induced dissociation.

The third pattern concerns the striking similarities between the characteristics of the alleged possessing entities and the personalities or intense emotional connections with significant individuals in the lives of the possessed. Case 2, for example, reveals hallucinations centered on the individual's ex-wife attempting to harm him post-separation. Case 5 links the burden of financial responsibility to the spirit's obsession with wealth. In case 28, the patient's guilt over his grandmother's death manifests as possession by her spirit. Lastly, case 19 associates a missing daughter with a spirit imparting a clue about her whereabouts.

### Common Symptoms and Characteristics in Documented Possession Cases

The primary symptom reported by the patients was the conviction of being tormented by a supernatural presence. This core belief was often accompanied by irritability, aggression, amnesic episodes, and claimed communication with otherworldly entities, predominantly the deceased. These symptoms align with known psychiatric classifications, including auditory hallucinations, voice distortions, vision disturbances, and seizure-like episodes.

It should be noted that while many attributed these experiences to spirit possession, rooted in their personal

convictions of the supernatural, other cases exhibited a lucid understanding of their condition without resorting to supernatural explanations, as seen in cases 1, 10, 15, 16, 24, 26, 27, 28, 33, and 41. This observation supports Font's (2016) theory concerning the histrionic-narcissistic posture of the possessed, who maintain awareness and do not entirely detach from reality even while feeling under the influence of unknown forces. Other documented symptoms correspond with the diverse theoretical perspectives we have discussed previously.

### Assessment of Each Case and Predominant Interventions

For individuals attributing their symptoms to demonic possession, a priest, often serving as a pivotal figure for confirmation and relief through exorcism, is viewed as a means to liberation from their suffering. Of the 52 cases reviewed, 24 were evaluated through a religious lens, and of these, half (12 cases) pursued purely religious or spiritual interventions, such as prayers, deliverance rituals, and exorcisms. This translates to 44.2% of the cases seeking help from religious communities, with 21.2% undergoing exclusively spiritual remedies.

In situations where a supernatural attribution was in doubt, rituals, and prayers were often employed as adjunctive treatments rather than as primary solutions. This approach reflects a balanced integration of spiritual practices with psychiatric or psychological interventions. This perspective challenges the conventional belief that irrational thoughts should be exclusively confronted with cognitive restructuring to dispel magical thinking. For instance, in cases 14, 43, and 44, which represent approximately 6% of our sample, encouraging patients to question these supernatural attributions—without outright refuting them—proved to be therapeutically beneficial.

The key takeaway here is the transition from a stark dismissal of an individual's beliefs to nurturing a constructive form of skepticism. Given that supernatural phenomena elude scientific explanation, is it necessary to insist on altering these beliefs under the assumption that they are false? Wouldn't encouraging a healthy skepticism be more effective (e.g., Truzzi, 1987)? After all, it should be left to the patient to decide whether to maintain or reconsider their beliefs. This approach respects patient autonomy while still offering a pathway to potentially healthier thinking patterns.

Promoting therapeutic doubt does not mean disputing someone's faith or spirituality. Instead, it invites reconsideration of the application of beliefs, supporting the right to question our interpretations without undermining the belief system as a whole. Therapeutic doubt, akin

to skeptical inquiry, should be considered by professionals before they dismiss the value of a patient's beliefs, acknowledging that medical practitioners don't hold all the answers to human suffering.

Regarding treatment outcomes, although we lack comprehensive follow-up data, some patients reported a "sense of liberation" following rituals (as in case 3), while others, despite repeated attempts, found no relief and turned to exorcism (cases 31, 49, and 50). The outcomes of exorcism varied, with some patients experiencing tranquility and others gaining better control over their symptoms and thought processes (cases 26 and 27). Notably, the support provided by priests or exorcists was invaluable, offering understanding and companionship (notably case 42).

In cases treated psychologically, we observed varied outcomes, including two from successful hypnotherapy-based psychoanalytic interventions (cases 2 and 15), as well as instances where traditional therapy showed limited progress (cases 14 and 25). To date, neither religious nor psychological treatments have shown consistent efficacy across the cases studied. However, interventions rooted in patient beliefs, like cognitive restructuring incorporating religious content (case 27t) or self-directed prayer facilitated by a therapist (case 26), proved to be particularly effective.

We advocate that future research should comprehensively consider the interplay between belief systems and therapeutic success. Noteworthy are cases that underscore the environment's impact on symptoms (case 52) and the effects of medical interventions on behaviors associated with possession (cases 5 and 35).

In conclusion, addressing cases of purported possession requires a multidisciplinary approach that respects the patient's beliefs, cultural context, and the integration of various therapeutic modalities. Ethical considerations must guide the treatment process, and research should aim to develop interventions that honor and incorporate the patient's worldview for a truly effective and empathetic therapeutic journey.

## DISCUSSION

The sustained historical interest in possession episodes, with case studies dating back to 1890, underscores a long-standing scientific endeavor to unravel the complexities of this phenomenon. Despite the longevity of this fascination, significant gaps and unknowns remain, hindering our scientific capacity to pinpoint the root causes and develop holistic, effective treatments for affected individuals.

The challenge in fully comprehending spirit posses-

sion stems from the disparate lenses through which various disciplines view the subject, leading to a fragmented consensus on its definition, diagnosis, and treatment. As illustrated in the introduction, disciplines have historically been insular, often endorsing their specific theories to the exclusion of others, and resulting in a narrow or, at worst, reductionist understanding. While efforts to find common ground have been noted, the day-to-day reality, particularly in professional practice, exhibits a glaring disconnect among religious, medical, psychological, and anthropological viewpoints.

This discordance echoes the broader diversity of scientific theories addressing anomalies in consciousness. Nahm (2022) underscores the imperative for synthetic and evolutionary theories that integrate the multiplicity of perspectives within consciousness studies. Similarly, we advocate for a unified theory in possession research, embracing various disciplinary approaches to better elucidate the nature, occurrence, and origins of possessions. Such synthetic theories should be inclusive, yet the parapsychological community has often failed to promote this inclusivity.

## The Impact of Diagnostic Labeling on the Experience of Possession

The assignment of a diagnostic label can provide some individuals with a sense of relief, as it offers a semblance of understanding and reduces uncertainty about their symptoms by suggesting an apparent cause. While the label of spirit possession can have different implications for those involved, it is important to note that these impacts are not uniformly negative. However, in some instances, this designation might intensify feelings of uncertainty, fear, and helplessness, potentially worsening the individual's condition.

It is critical to acknowledge that a diagnostic label, in itself, neither clarifies nor addresses the root cause of an individual's distress. Employing a label as a definitive explanation for a phenomenon, especially one with clinical relevance, is to engage in a *nominal fallacy* (Escolà-Gascón, 2022). This results in circular or tautological reasoning that fails to illuminate any unknowns. Consider the following: Does a person experience auditory hallucinations because they have psychosis, or are they diagnosed with psychosis because they hear voices? These questions represent a logical loop and cannot be definitively answered; the suffering associated with psychosis may exist independently of the symptom of hearing voices and vice versa. Such circular reasoning reveals that labels, while facilitating technical communication among professionals, do not inherently explain the origins of a phenome-

non like possession. Some readers may view this observation as self-evident or simplistic. However, it is important to recognize that the nominal fallacy is a real concern in mental health. Highlighting this risk is necessary to ensure that the forthcoming discussion is not subject to misinterpretation.

However, we should also highlight that the label of “possession” has provided temporary solace in some instances. This comfort arises primarily for two reasons: Firstly, when the term “possession” aligns with the belief system of the affected individuals, it validates their personal beliefs, superficially enhancing their sense of control. Yet, this perceived control does not necessarily equate to actual mastery over the experience. Secondly, the attribution of possession signifies an external locus of control. From a psychodynamic perspective, attributing the cause of inner turmoil to an outside source can be soothing, as it shifts the burden away from the individual’s inner reality to an external one, thereby diminishing the personal moral responsibility and consequently alleviating distress. This mechanism of externalization may be a key psychological factor that underpins the temporary benefits associated with the label of spirit possession.

### Symptomatic Discrimination Problems

The examination of the cases presented in Table 3 (see appendix) reveals a prevailing confusion or difficulty in assigning the observed symptoms to episodes of spirit possession, particularly when such attribution isn’t explicitly declared by the subject under study. While this might appear to be a trivial concern, it represents one of the most significant challenges faced by cases of possession in the realms of medicine and behavioral science. This raises a critical question: If neither the subject nor their environment explicitly attributes the observed distress to a state of demonic or spirit possession, would the concept of possession exist as it is presently understood in the medical-psychiatric narrative?

It has been well-established that mental health diagnoses exhibit inconsistencies when different cultural frameworks and decision criteria are prevalent (see Escolà-Gascón et al., 2023). Rosenhan (1973) conducted an exploratory experiment involving fictitious patients who, upon being admitted to mental health facilities, received false diagnoses. Subsequently, it was revealed that these diagnoses varied depending on the diagnostic perspectives adopted by different physicians. While it’s worth noting that this experiment would be considered ethically problematic and unfeasible today, Rosenhan’s (1973) findings, although specific and anecdotal, underscore the

fallibility of the mental health diagnostic process. They highlight its susceptibility to biases introduced by individual practitioners.

This raises the question of the reliability of the diagnoses presented in Table 3 (see appendix) and the potential influence of the Pygmalion effect (originally termed to describe the phenomenon that our beliefs guide us to confirm preconceived notions rather than objectively assessing reality, Rosenthal & Fode, 1963). Our analysis of 52 cases revealed a primary source of confusion between diagnostic classifications for dissociative identity disorder and psychosis (primarily schizophrenia). These findings align with previous research by other scholars (see Pietkiewicz et al., 2021a, 2022), suggesting that the current psychiatric model is scientifically insufficient for understanding diagnostic classifications in terms of facilitating functional connections between symptoms and the efficacy of treatments employed in cases of spirit possession.

Despite the distinction between psychosis and dissociative disorders as separate nosological entities, both diagnoses exhibited a common symptomatic thread: dissociation. It’s crucial to emphasize that the dissociative manifestations associated with psychosis differ from non-psychotic dissociations (Holmes et al., 2005). Clinical evidence indicates that horizontal or non-structural dissociation doesn’t imply an altered state of consciousness, while vertical dissociation necessitates a deliberate disconnect from external objective reality (Brown, 2006). Although Font (2016) provides a clear distinction, our analysis of cases doesn’t appear to identify this as a differential criterion enabling clinicians to distinguish between psychotic and non-psychotic dissociations. This discrepancy becomes more evident when examining the symptoms of dissociation in a non-psychotic dissociative disorder case in Table 3 (see appendix) and comparing them with symptoms of psychotic dissociation. Despite distinct manifestations, the differences don’t align with the diagnoses. This leads us to conclude that psychosis may have been diagnosed in cases that lacked a psychotic personality structure, while dissociative disorders may have been diagnosed in cases where a psychotic structure was present. It’s important to emphasize that this doesn’t validate the existence of demonic possessions nor endorse the hypothesis attributing a supernatural origin to such cases. However, it does underscore the limitations of the psychiatric model and supports the possibility of employing multidisciplinary intervention models, incorporating insights from anthropology and integration.

Speculatively, one might ponder what would have transpired if patients with these diagnoses had not declared their belief in being possessed by supernatural

forces (a belief seemingly deemed delusional within the psychiatric model). It's conceivable that there would be fewer diagnoses of psychosis, with the focus shifting towards dissociative diagnoses. However, the recognized psychiatric comorbidity within this overlap presents a significant challenge in resolving this matter. In this official document, we propose considering Font's (2016) criteria, which distinguish between schizoid-paranoid positions (representing the psychotic structure) and histrionic-narcissistic positions (representing neurotic or non-psychotic dissociations).

It's imperative to clarify that these positions do not constitute diagnostic labels but rather form part of a dynamic theoretical framework that enhances our understanding of how to approach these individuals and informs decision-making regarding their treatment.

Consequently, the challenge posed by episodes of demonic possession for psychiatric and psychological approaches is twofold. Firstly, there is a need to develop a comprehensive diagnostic system that extends beyond the clinical realm, providing functional decision criteria for tailored interventions. While the criteria employed by the Catholic Church prioritize medical assessments and interventions, psychiatry has yet to effectively address this issue, persisting since Rosenhan's time (1973). Secondly, there is the challenge of detecting and recognizing cases of spirit possession that go beyond self-declarations made by patients or their cultural contexts. This challenge remains unresolved, and at its most extreme, it compels us to question the concepts of "truth" and "reality" in cases of demonic possession.

### Presence of Possession Anomalies: A Statistical Approach

This scientific review paper did not originally aim to endorse any natural, preternatural, or supernatural hypotheses. In the introduction, we explicitly stated our intent to abstain from making ontological judgments regarding the origin and underlying forces at play in these cases. However, rather than venturing into such metaphysical inquiries, we can assess the extent to which the analyzed cases contain unexplained elements.

Nine percent of the cases (a total of only five) lacked specific diagnoses, and the original reports did not arrive at any definitive conclusions regarding the potential earthly causation of the patient's conditions. Several factors might account for this, including the various approaches taken by the authors. For instance, of the five cases (constituting 9%), three were published within a theological framework, one of which primarily pertained to the medical field, and another was presented from a

psychological perspective. While it is anticipated that a religious-theological framework may not yield conclusive diagnoses or definitive attributions of causality (although speculative hypotheses may be considered), it is less plausible that psychiatric and psychological approaches would refrain from providing insights on this matter.

The case employing a psychiatric approach was the inaugural case published in scientific literature, dating back to 1890. Given the technological limitations of that era, it appears reasonable to understand why the author-physician opted not to make any conclusive diagnosis attempting to elucidate the medical aspect of possession. In the case of the psychological approach, the rationale behind the omission of a diagnosis is less clear and more open to interpretation, suggesting the authors chose to exercise prudence.

With these considerations in mind, utilizing the logical foundations of frequentist probability, it becomes possible to assert that the likelihood of encountering a case of demonic or spirit possession that lacks a scientific explanation is less than 2% ( $p < 0.05$ ;  $p = 0.01923$ ). It is important to note that this probability is an approximation and, in strict terms, does not constitute scientific evidence of the supernatural origin of demonic possessions. However, the fact that the probability is less than 2% for cases likely to remain scientifically unexplained underscores that the current state of evolutionary scientific knowledge, as presented in this document, is insufficient to provide a unilateral explanation for demonic possessions as supernatural or extraordinary phenomena. Nonetheless, it does support the idea that we can remain, following Thomistic logic, within the realm of the preternatural.

It is important for the reader to keep in mind that 3% of the cases appear to lack a scientific explanation when we base our assessment on scientific publications, rather than just counting the number of cases within a single publication. We provide this clarification because, using this weighting as a reference, it would not be incorrect to limit the adjustment of the previous probability estimate to a maximum of 3%. However, a very different question arises when considering how to interpret these values: Does this figure, which is less than 2%, provide enough grounds to justify the exploration of new research avenues that delve into the ontological origins of possession phenomena?

### Estimating Probabilities of Unexplained Demonic Possession Cases

For guidance purposes only and in an attempt to utilize objective mathematical and statistical criteria, we

could apply the following forecast model provided the subsequent assumptions are accepted: (1) the number of cases of demonic possessions and spirits is a random variable ( $X$ ); (2) the number of cases of demonic possessions and spirits constitutes a count; (3) the mathematical expectation is set at a parameter of  $\lambda = 1$  (equivalent to the number of unexplained cases identified in this study, which was strictly 1); and (4) the predicted count can be set at an upper value of  $x = 5$ . Accepting the aforementioned premises, we can define the following equation as the quantile function:

$$\hat{P}(\Psi) \cong P(X = x) = e^{-\lambda} \times \frac{\lambda^x}{x!} \quad \forall x = 0, 1, 2, \dots \quad [1]$$

where  $\hat{P}(\Psi)$  represents the estimated likelihood of identifying and documenting new instances of inexplicable possession in the PubMed and Scopus scientific databases over the forthcoming 133 years. Given these premises and the fact that the mathematical expectancy of the model is set at 1, it follows that:

$$\hat{P}(\Psi = 5) \cong P(X = 5) = e^{-1} \times \frac{1^5}{5!} = \frac{1}{120e} \approx 0.0031 \quad [2]$$

If we want to make a forecast for 10 cases:

$$\hat{P}(\Psi = 10) \cong P(X = 10) = e^{-1} \times \frac{1^{10}}{10!} \approx 0.0000001 \quad [3]$$

These forecasted probabilities are modest. They suggest that the likelihood of identifying and scientifically publishing five cases of seemingly inexplicable demonic possession in PubMed and Scopus is about 0.31%. The probability of encountering ten such cases drops to a mere 0.00001%. These figures are projected over the span of the next 133 years. To contextualize this further, the annual average probability for discovering five cases stands at 0.002331%, and for ten cases, a strikingly low 0.0000000751%.

It is important to note that these estimates are based on the current scientific understanding and methodologies outlined in this review. They do not represent the only approach and don't preclude the possibility of alternative scenarios that could influence these probabilities. We include these calculations in our discussion as speculative estimates, not definitive conclusions. This study is pioneering in its application of such probabilities to gauge the frequency of unexplained possession cases under the defined conditions. It is evident that altering these conditions-the criteria framing this review-would result in different probabilities. This point is crucial as our presentation here offers a partial view, and future

research may yield different figures. Moreover, while our model is based on counts, it is not necessarily the optimal approach; the  $\lambda$  parameter is but an expected mean and alternative methods could also be viable. We have opted for a unitary value for its conservative, skeptical, and rigorous implications, yet we acknowledge that other means might be more suitable under a different, perhaps more adventurous interpretation of the data.

### On the Effectiveness of Exorcisms

It is possible to examine exorcism as "another type of treatment" and, consequently, it is also possible to measure its effects on the mental health of patients based on the reduction or inhibition of symptoms. Exorcisms may be effective simply via the well-known placebo effect, which, in fact, can generate profound physical and mental healing (Patterson & Schroder, 2022). However, exorcism also has the potential to exacerbate dissociation by validating psychotic symptoms in the mind of the patient (Bowman, 1993; Fraser, 1993<sup>1</sup>).

For cases in which exorcism achieves positive outcomes, liberation rituals, prayers, and exorcisms could fulfill the mechanism of externalization or projection that we have previously mentioned. This mechanism could rationally justify why there were certain benefits in the perception of relief and well-being in certain individuals who believed they were possessed. Following the theological and psychiatric contributions of Msgr. Jordi Font (2016), in the cases of histrionic-narcissistic profiles, exorcism is a practice that externalizes the cause of the patient's suffering and, by placing it outside the patient, the suffering is less because it moves from the internal reality of the patient to an external reality outside of the patient, which frees the patient from moral burdens and responsibilities. The problem with this mechanism is that it has a momentary or provisional operation. According to Msgr. Jordi Font (2016), exorcisms can be a specific and complementary remedy with respect to conventional treatments, but they are not in themselves sufficient to generate structural (not even environmental) changes in the position and profile of the patient. Following this line, if there are no changes in the degrees of histrionic-narcissistic position, it will be complicated to find a remedy that is stable over time.

For those who suffer possessions from a schizoid-paranoid position, exorcism would not be effective because it would no longer fulfill this mechanism of externalization of the problem. This would be explained by the type of psychic functioning that prevails in schizoid positions, which does not allow the mechanism of externalization to intervene because the psychic membranes that de-



fine the boundaries between internal and external reality are diffuse in this type of profile. Due to the permeability of the boundaries of this type of profile, externalization, even when triggered in the form of projection, lacks beneficial effects because internal and external contents are superimposed in the perception of these individuals, which prevents deliberate discrimination. In these cases, there would be no justification to use exorcism.

At this stage, readers might perceive our discussion as purely speculative, and indeed it is. However, it remains relevant to the cases analyzed in Table 3 (see appendix). The theoretical concepts of histrionic-narcissistic and schizoid-paranoid positions, introduced by the Catholic priest Msgr. Font in 2016 and originally proposed in the 1960s, did not achieve widespread recognition in the Anglophone scientific community and are primarily available in Spanish and German. This explains why the cases in Table 3 (see appendix) do not employ Font's specific terminology. Nonetheless, there are notable similarities between his theoretical concepts and the symptoms or characteristics observed in the cases reported in our study. For example, many cases diagnosed within the psychosis spectrum showed characteristics such as suspicion, distrust, and isolation, which are indicative of the schizoid-paranoid position. Similarly, in non-psychotic cases, behaviors like denial, perceived vulnerability, and resistance to the cessation of exorcism rituals by priests were observed. These reactions could be seen as the ego's defense mechanism to remain in the spotlight, potentially seeking admiration or secondary gain. Such behaviors and interpretations are consistent with the traits of a histrionic-narcissistic structure, lending credence to the speculative aspects of our discussion.

Thus, the clinical phenomenology described by Font (2016) seems to have applicable correlations with the cases compiled in Table 3 (see appendix). We acknowledge that the theoretical model proposed by Font (2016) was underappreciated by the academic community, received minimal attention in scientific literature, and lacks substantial scientific evidence. However, we believe that his conceptual contributions, even if only at a hypothetical level, are applicable to the published cases, thereby lending support to the research trajectory established by Font (2016). We are aware of several ongoing studies that have found empirical and statistical evidence supporting Font's (2016) bipolar model. We look forward to these studies being published soon and believe they will provide useful supplemental material to this current study.

### Enhancing the Effectiveness of Interventions in Possession Cases

The majority of research in the realm of possession has been centered on identifying the mechanisms that contribute to the manifestation of the phenomenon, rather than evaluating the effectiveness and suitability of interventions in use (Baglio, 2009; Cuneo, 2001). This oversight has led to a lack of understanding regarding why certain interventions fail to yield a significant improvement in individuals reported to be possessed.

Our review indicates that numerous individuals have undergone repeated liberation rituals and exorcisms over considerable periods, with little to no marked improvement in their condition. It has been noted that some practitioners carry out these exorcisms without a uniform protocol, leading to spontaneous, situation-specific decisions and at times, conducting procedures without the necessary informed consent or respect for confidentiality (Giordan & Possamai, 2018). The lack of progress was not exclusive to religious approaches—many psychological treatments similarly fell short of producing significant clinical improvement. In such cases, the ineffectiveness may stem from traditional psychotherapeutic methods that focus strictly on scientific symptom diagnosis, dismissing the reported possession as a genuine experience. For instance, Case 1 presents a relative success through psychoanalysis, likely because the therapist did not strictly pathologize the phenomenon, allowing for the patient's introspection and self-suggestion.

Sustainable positive outcomes were more frequently noted in cases where psychotherapy was tailored to incorporate the patient's belief system. This form of therapy did not dispute the validity of the possession experience; instead, it aimed to assist patients in drawing connections between their symptoms and personal history. Cognitive restructuring approaches that integrated religious considerations in a manner respectful of the patient's faith also showed promise. Additionally, interventions incorporating cultural sensitivity, facilitated by anthropological expertise, provided valuable insights into the role of the possession symptoms within the patient's immediate and broader social context. Although the improvements were sometimes modest, they suggest that conventional treatments, including pharmacological options, might be more effective when they accommodate the patient's belief system and refrain from casting judgment on the authenticity of the possession experience.

### Ensuring the Safety of Exorcism Practices

To ensure that exorcism practices are conducted safely and appropriately for individuals experiencing spirit possession, a move toward standardization is essential. This process should extend beyond the mere regulation

of exorcism rituals and should actively incorporate a multidisciplinary approach that adheres to fundamental ethical standards.

Interventions aligning with ethical principles must:

1. Uphold the patient's autonomy by providing them with the information necessary to make enlightened choices regarding their treatment (*principle of autonomy*).
2. Guarantee that the practices administered are designed to be safe and aimed at the patient's benefit, avoiding harm (*principle of non-maleficence*).
3. Integrate religious interventions within a scientifically supported framework, undertaken in collaboration with healthcare professionals, and with the patient's welfare as the central focus (*principle of beneficence*).
4. Maintain neutrality and respect for the patient's religious beliefs, abstaining from judgments on their validity (*principle of justice*).

The standardization of exorcism must be rooted in these ethical tenets. It should also complement and coordinate with medical treatments that are critical for the individual's wellbeing, enhancing their quality of life, or, at the very least, preventing its decline. Within this paradigm, pharmacological and clinical treatments should not stand separate but rather integrate synergistically with exorcism practices, thereby ensuring a comprehensive and therapeutically cohesive approach that prioritizes the safety, welfare, and improvement of individuals reporting possession.

### Insights From Over a Century of Research Into Spirit and Demonic Possession

Upon examining 52 documented instances of spirit or demonic possession (or both), we have distilled five pivotal insights that contribute to a comprehensive, multidisciplinary comprehension of the possession phenomena and the therapeutic interventions employed:

1. **Encouraging reflective and therapeutic skepticism:** Individuals manifesting possession who questioned their own perceptions regarding the origins and causation of their episodes often exhibited improved prognoses. Rather than enforcing cognitive reframing to overwrite existing beliefs (regardless of their supernatural nature), promoting a reflective skepticism that challenges the maladaptive reliance on these beliefs appears more beneficial. This approach is not to dismiss or devalue the individual's belief system; rather, it is to seek alternate interpretations through skepticism that offer a sense of security and empowerment, enabling a connection between their suffering and

personal history and fostering an adaptive reinterpretation of their belief-related meanings.

2. **Developing inclusive therapeutic modalities:** While the efficacy of pharmacological and evidence-based clinical treatments should not be undermined, there is a strong case for integrating culturally attuned responses to a patient's belief systems. This includes a synergistic collaboration between healthcare professionals and religious figures such as Catholic priests, pastors, or spiritual advisors, supported by interdisciplinary contributions from anthropologists and other relevant experts. Such collaborations are essential for an enriched understanding of possession that moves beyond the confines of strict realism.
3. **Understanding the psychic externalization of distress:** The surveyed cases resonate with Msgr. Jordi Font's theoretical framework from 2016, positing that individuals with histrionic-narcissistic tendencies utilize possession and exorcism to project internal conflicts onto an external reality. This external attribution of causality may elucidate the reported feelings of liberation in some instances. Conversely, this mechanism is notably absent in individuals with schizoid-paranoid tendencies, for whom exorcism fails to yield sustainable therapeutic benefits. Recognizing these psychological profiles is vital for predicting the efficacy of religious and cultural interventions.
4. **Standardizing rituals and exorcistic practices:** Efficacious exorcisms observed within the case studies adhered to a protocol involving: (a) cooperation with medical professionals, (b) ecclesiastical sanction and informed consent by the afflicted, (c) alignment with personal belief systems and cultural contexts, (d) regulated practices ensuring adherence to ethical principles and patient safety, and (e) specialized training for religious leaders confronting such cases. The Catholic Church, recognizing the necessity for structured guidance, provides training in this realm, with bishops requiring comprehensive medical assessments before sanctioning exorcism rituals.
5. **Positioning possession within the scientific paradigm:** The enigmatic nature of spirit possession challenges the explanatory capacity of contemporary science. Notwithstanding scientific elucidations concerning possessions' supernatural aspects, the existing body of knowledge about human consciousness and perception falls short of comprehensively decoding the origins and true nature of these phenomena. Some documented episodes elude scientific rationalization, bolstering the hypothesis that possession may involve preternatural human behaviors. This gap in understanding underscores the imperative for ongoing in-

vestigation into psychic phenomena, acknowledging our present limitations in grasping the full spectrum of consciousness.

In summary, spirit possession transcends the individual disciplines of psychology, medicine, religion, anthropology, and culture, presenting an enduring scientific conundrum tied to one of history's great unanswered questions: the extent of human consciousness. A holistic and culturally respectful approach markedly propels our understanding and the strategies for addressing possession. The journey towards enlightenment in this domain necessitates standardized religious protocols, interdisciplinary collaboration, and a deep respect for cultural variances, offering a fundamental strategy for providing appropriate support to those experiencing possession. This multifaceted challenge underscores the importance of advancing a multidisciplinary dialogue that honors each person's unique essence and promotes treatment modalities respectful of their subjective and cultural narratives.

## ENDNOTE

- <sup>1</sup> Bowman's (1993) and Fraser's (1993) research have inherent design limitations. Specifically, these studies (involving 15 cases in one and seven in another) exclusively examined patients who had undergone exorcism before seeking medical attention. This selection inherently biases the sample towards those for whom exorcism was unsuccessful, as successful cases presumably would not have sought medical intervention thereafter. Consequently, this design inherently skews the results towards negative outcomes associated with exorcism. This approach contrasts sharply with the method typically employed by the Catholic Church, which prioritizes medical solutions before considering exorcism.

## REFERENCES

- American Psychiatric Association. (2002). *Diagnostic and statistical manual of mental disorders-Text revision (DSM-IV-TR)*. (4<sup>th</sup> ed. reviewed). American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5)*. (5<sup>th</sup> ed.). American Psychiatric Association.
- American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders-Text revision (DSM-5-TR)* (5<sup>th</sup> ed. reviewed). American Psychiatric Association.
- Amorth, G. (2016). *An exorcist explains the demonic*. Sophia Institute Press.
- Ang, A. V., & Montiel, C. J. (2019). Understanding spirit possession in the Philippines: A social representations approach. *Mental Health, Religion & Culture*, 22(7), 738-753. <https://doi.org/10.1080/13674676.2019.1646232>
- Aymerich, C., Madrazo, A., Bustamante, S., Blanco, J., Gómez-Guimaraes, D., Sesma, E., & González-Torres, M. Á. (2020). Possession phenomena: A case report. *Actas Espanolas de Psiquiatria*, 48(2), 91-93.
- Baas, J., Schotten, M., Plume, A., Côté, G., & Karimi, R. (2020). Scopus as a curated, high-quality bibliometric data source for academic research in quantitative science studies. *Quantitative Science Studies*, 1(1), 377-386. [https://doi.org/10.1162/qss\\_a\\_00019](https://doi.org/10.1162/qss_a_00019)
- Baglio, M. (2009). *The rite. The making of a modern exorcist*. Simon & Schuster.
- Bains, J. S., & Sharkey, K. A. (2022). Stress and immunity — The circuit makes the difference. *Nature Immunology*, 23(8), 1137-1139. <https://doi.org/10.1038/s41590-022-01276-1>
- Baker, J. O., Molle, A., & Bader, C. D. (2020). The flesh and the devil: Belief in religious evil and views of sexual morality. *Review of Religious Research*, 62(1), 133-151. <https://doi.org/10.1007/s13644-020-00403-4>
- Ballon, B., & Leszcz, M. (2007). Horror films: Tales to master terror or shapers of trauma? *American Journal of Psychotherapy*, 61(2), 211-230. <https://doi.org/10.1176/appi.psychotherapy.2007.61.2.211>
- Bauer, N. M. (2022). The devil and the doctor: The (de) medicalization of exorcism in the Roman Catholic Church. *Religions*, 13(2), Article 87. <https://doi.org/10.3390/rel13020087>
- Betty, S. (2005). The growing evidence for demonic possession: What should psychiatry's response be? *Journal of Religion and Health*, 44, 13-30. <https://doi.org/10.1007/s10943-004-1142-9>
- Blidstein, M. (2018). The ambivalence of purification and the challenge of transformation in *the rites of passage* and in early Christian texts. *Journal of Classical Sociology*, 18(4), 338-347. <https://doi.org/10.1177/1468795x18789015>
- Brown, R. J. (2006). Different types of "dissociation" have different psychological mechanisms. *Journal of Trauma & Dissociation*, 7(4), 7-28. [https://doi.org/10.1300/j229v07n04\\_02](https://doi.org/10.1300/j229v07n04_02)
- Brann, N. L. (2001). *The debate over the origin of genius during the Italian Renaissance: The theories of supernatural frenzy and natural melancholy in accord and in conflict on the threshold of the scientific revolution*. Brill Publishing Group.
- Bone, I., & Dein, S. (2021). Religion, spirituality, and epilepsy. *Epilepsy & Behavior*, 122, 108219. <https://doi.org/10.1016/j.yebeh.2021.108219>

- org/10.1016/j.yebeh.2021.108219
- Bourguignon, E. (1973). *Religion, altered states of consciousness and social change*. Ohio State University Press.
- Bowman, E. S. (1993). Clinical and spiritual effects of exorcism in fifteen patients with multiple personality disorder. *Dissociation*, 6(4), 222-238.
- Bull, D. L., Ellason, J. W., & Ross, C. A. (1998). Exorcism revisited: Positive outcomes with dissociative identity disorder. *Journal of Psychology and Theology*, 26(2), 188-196. <https://doi.org/10.1177/009164719802600205>
- Bull, D. L. (2001). A phenomenological model of therapeutic exorcism for dissociative identity disorder. *Journal of Psychology and Theology*, 29(2), 131-139. <https://doi.org/10.1177/009164710102900204>
- Carrazana, E., DeToledo, J., Tatum, W., Rivas-Vasquez, R., Rey, G., & Wheeler, S. (1999). Epilepsy and religious experiences: Voodoo possession. *Epilepsia*, 40(2), 239-241. <https://doi.org/10.1111/j.1528-1157.1999.tb02081.x>
- Casale, U. (2011). *Faith and science: A necessary dialogue*. Sal Terrae.
- Castillo, R. J. (1994). Spirit possession in South Asia, dissociation or hysteria? part 2: Case histories. *Culture, Medicine and Psychiatry*, 18(2), 141-162. <https://doi.org/10.1007/bf01379447>
- Castro-Blanco, D. R. (2005). Cultural sensitivity in conventional psychotherapy: A comment on Martínez-Taboas (2005). *Psychotherapy: Theory, Research, Practice, Training*, 42(1), 14-16. <https://doi.org/10.1037/0033-3204.42.1.14>
- Cavanna, A. E., Cavanna, S., & Cavanna, A. (2010). Epileptic seizures and spirit possession in Haitian culture: Report of four cases and review of the literature. *Epilepsy & Behavior*, 19(1), 89-91. <https://doi.org/10.1016/j.yebeh.2010.07.002>
- Chartonas, D., & Bose, R. (2015). Fighting with spirits: migration trauma, acculturative stress, and new sibling transition-A clinical case study of an 8-year-old girl with absence epilepsy. *Culture, Medicine, and Psychiatry*, 39(4), 698-724. <https://doi.org/10.1007/s11013-015-9438-7>
- Coelho, I. (2012). In some sense transcendent or supernatural. *Loneragan Workshop*, 26, 107-126. <https://doi.org/10.5840/lw20122628>
- Cramer, M. (1980). Psychopathology and shamanism in rural Mexico: A case study of spirit possession. *The British Journal of Medical Psychology*, 53(1), 67-73. <https://doi.org/10.1111/j.2044-8341.1980.tb02870.x>
- Crookes, W. (1870/2012). *Researches in the phenomena of spiritualism*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139176316>
- Cuneo, M. (2001). *American exorcism: Expelling demons in the land of plenty*. Doubleday.
- Dein, S. (2021). Spirit possession in a psychiatric clinic. *Journal for the Study of Religious Experience*, 7(1), 57-68.
- Delmonte, R., Lucchetti, G., Moreira-Almeida, A., & Farias, M. (2015). Can the DSM-5 differentiate between non-pathological possession and dissociative identity disorder? A case study from an Afro-Brazilian religion. *Journal of Trauma & Dissociation*, 17(3), 322-337. <https://doi.org/10.1080/15299732.2015.1103351>
- de Oliveira-Maraldi, E., Costa, A., Cunha, A., Flores, D., Hamazaki, E., de Queiroz, G. P., Martinez, M., Siqueira, S., & Reichow, J. (2021). Cultural presentations of dissociation: The case of possession trance experiences. *Journal of Trauma & Dissociation*, 22(1), 11-16. <https://doi.org/10.1080/15299732.2020.1821145>
- de Oliveira Maraldi, E., Ribeiro, R. N., & Krippner, S. (2019). Cultural and group differences in mediumship and dissociation: Exploring the varieties of mediumistic experiences. *International Journal of Latin American Religions*, 3(1), 170-192. <https://doi.org/10.1007/s41603-019-00076-0>
- Diller, T. (1890). A Case of paranoia, illustrating the feature of imperative conceptions. *Alienist and Neurologist (1880-1920)*, 11(2), 354-358.
- Driscoll, M. (2015). *Demons, deliverance, and discernment*. Catholic Answers.
- Drouin, E., Péréon, T., & Péréon, Y. (2017). Demonic possession by Jean Lhermitte. *L'Encephale*, 43(4), 394-398. <https://doi.org/10.1016/j.encep.2017.03.001>
- Ember, C. R., & Carolus, C. (2017). Altered states of consciousness. In C. R. Ember (Ed.), *Explaining human culture: A database produced by human relations area files*. (pp. e1-e14). Human Relations Area Files, Yale University.
- Escolà-Gascón, Á. (2020a). Researching unexplained phenomena: Empirical-statistical validity and reliability of the Multivariable Multiaxial Suggestibility Inventory-2 (MMSI-2). *Heliyon*, 6(7), Article e04291 <https://doi.org/10.1016/j.heliyon.2020.e04291>
- Escolà-Gascón, Á. (2020b). Researching unexplained phenomena II: New evidences for anomalous experiences supported by the Multivariable Multiaxial Suggestibility Inventory-2 (MMSI-2). *Current Research in Behavioral Sciences*, 1, Article 100005. <https://doi.org/10.1016/j.crbeha.2020.100005>
- Escolà-Gascón, Á., Dagnall, N., & Drinkwater, K. (2023). Bias analysis in forensic and non-forensic psychiatric assessments. *International Journal of Law and Psychiatry*, 88, Article 101891. <https://doi.org/10.1016/j.ijlp.2023.101891>

- Espí, C., & Espí, F. (2014). Demonic possessions and mental illness: Discussion of selected cases in late medieval hagiographical literature. *Early Science and Medicine*, 19(3), 258-279. <https://doi.org/10.1163/15733823-00193p03>
- Exline, J. J. (2021). Psychopathology, normal psychological processes, or supernatural encounters? Three ways to frame reports of after-death communication (ADC). *Spirituality in Clinical Practice*, 8(3), 164-176. <https://doi.org/10.1037/scp0000245>
- Exline, J. J., Pargament, K. I., Wilt, J. A., & Harriott, V. A. (2021a). Mental illness, normal psychological processes, or attacks by the devil? Three lenses to frame demonic struggles in therapy. *Spirituality in Clinical Practice*, 8(3), 215-228. <https://doi.org/10.1037/scp0000268>
- Exline, J. J., Wilt, J. A., Stauner, N., Schutt, W. A., Pargament, K. I., Fincham, F. D., & May, R. W. (2021b). Supernatural operating rules: How people envision and experience God, the devil, ghosts/spirits, fate/destiny, karma, and luck. *Psychology of Religion and Spirituality*. Advance online publication. <https://doi.org/10.1037/rel0000444>
- Exline, J. J., & Wilt, J. A. (2023). Supernatural attributions: Seeing God, the devil, demons, spirits, Fate, and karma as causes of events. *Annual Review of Clinical Psychology*, 19(1), 461-487. <https://doi.org/10.1146/annurev-clinpsy-080921-081114>
- Farah, J., & McColl, M. A. (2008). Exploring prayer as a spiritual modality. *Canadian Journal of Occupational Therapy*, 75(1), 5-13. <https://doi.org/10.1177/000841740807500103>
- Ferracuti, S., Sacco, R., & Lazzari, R. (1996). Dissociative trance disorder: Clinical and Rorschach findings in ten persons reporting demon possession and treated by exorcism. *Journal of Personality Assessment*, 66(3), 525-539. [https://doi.org/10.1207/s15327752-jpa6603\\_4](https://doi.org/10.1207/s15327752-jpa6603_4)
- Font, J. (2012). Entrevista al Dr. Jordi Font i Rodon: Impulsor de proyectos, impulsor de Personas. *Temas de Psicoanálisis*, 3, 1-45.
- Font, J. (2016). *Religion, psychopathology, and mental health: An introduction to the psychology of religious experiences and beliefs*. Paidós and Cardinal Vidal i Barraquer Foundation.
- Fraser, G. A. (1993). Exorcism rituals: Effects on multiple personality disorder patients. *Dissociation*, 6(4), 239-244.
- French, C. C. (2023). Demonic possession and disorders. In S. Hupp, & R. Wiseman (Eds.), *Investigating pop psychology: Pseudoscience, fringe science, and controversies* (pp. 130-138). Routledge, Taylor and Francis Group. <https://doi.org/10.4324/9781003107798-15>
- Germiniani, F. M. B., Miranda, A. P., Ferenczy, P., Munhoz, R. P., & Teive, H. A. G. (2012). Tourette's Syndrome: From demonic possession and psychoanalysis to the discovery of gene. *Arquivos de Neuro-Psiquiatria*, 70(7), 547-549. <https://doi.org/10.1590/s0004-282x2012000700014>
- Giordan, G., & Possamai, A. (2018). *Sociology of exorcism in late modernity*. Springer Nature. <https://doi.org/10.1007/978-3-319-71773-9>
- Guedi, A. A., Al Hussaini, A., Obeid, Y. A., Hussain, S., Al-Azri, F., & Al-Adawi, S. (2009). Investigation of the cerebral blood flow of an Omani man with supposed 'spirit possession' associated with an altered mental state: A case report. *Journal of Medical Case Reports*, 3, Article 9325. <https://doi.org/10.1186/1752-1947-3-9325>
- Hankinson, R. J. (2012). Natural, unnatural, And preternatural motions: Contrariety and the argument for the elements in De Caelo 1.2-4. In A. Bowen, & C. Wildberg (Eds.), *New perspectives on Aristotle's De caelo* (pp. 83-118). Brill Publishing Group. <https://doi.org/10.1163/ej.9789004173767.i-326.23>
- Hansen, F. J., Stanilla, J. K., Ross, J. I., & Sinvani, C. (1993). Integrating child psychiatry and family systems approaches. *Journal of Family Psychotherapy*, 3(3), 13-26. [https://doi.org/10.1300/j085v03n03\\_02](https://doi.org/10.1300/j085v03n03_02)
- Hart, C. A. (2023). *Thomistic metaphysics: An inquiry into the act of existing*. Editiones Scholasticae, Rutgers University.
- Hawkins, J. M., McPhee, D. P., & Brown, C. C. (2019). Incorporating biopsychosocial-spiritual resources in emotionally focused couple therapy. *Contemporary Family Therapy*, 42(3), 217-227. <https://doi.org/10.1007/s10591-019-09523-8>
- Hecker, T., Braitmayer, L., & van Duijl, M. (2015). Global mental health and trauma exposure: The current evidence for the relationship between traumatic experiences and spirit possession. *European Journal of Psychotraumatology*, 6, Article 29126. <https://doi.org/10.3402/ejpt.v6.29126>
- Hitchcock, J. T., & John, R. L. (1976). *Spirit possession in the Nepal Himalayas*. Aris & Phillips.
- Hobson, N. M., Schroeder, J., Risen, J. L., Xygalatas, D., & Inzlicht, M. (2017). The psychology of rituals: An integrative review and process-based framework. *Personality and Social Psychology Review*, 22(3), 260-284. <https://doi.org/10.1177/1088868317734944>
- Holmes, E., Brown, R., Mansell, W., Fearon, R., Hunter, E., Frasilho, F., & Oakley, D. (2005). Are there two qualitatively distinct forms of dissociation? A review and some clinical implications. *Clinical Psy-*

- chology Review*, 25(1), 1-23. <https://doi.org/10.1016/j.cpr.2004.08.006>
- Irwin, H. J. (2009). *The psychology of paranormal belief: A researcher's handbook*. University of Hertfordshire.
- Jin, Q., Leaman, R., & Lu, Z. (2023). *PubMed and beyond: biomedical literature search in the age of artificial intelligence*. arXiv preprint. <https://doi.org/10.48550/arXiv.2307.09683>
- Keitt, A. (2013). The devil in the Old World: Anti-superstition literature, medical humanism and preternatural philosophy in early modern Spain. In F. Cervantes, & A. Redden (Eds.), *Angels, demons and the new world* (pp. 15-39). Cambridge University Press. <https://doi.org/10.1017/CBO9781139023870.003>
- Kemp, S., & Williams, K. (1987). Demonic possession and mental disorder in medieval and early modern Europe. *Psychological Medicine*, 17(1), 21-29. <https://doi.org/10.1017/S0033291700012940>
- Kiev, A. (1961). Spirit possession in Haiti. *American Journal of Psychiatry*, 118(2), 133-138. <https://doi.org/10.1176/ajp.118.2.133>
- Kiraly, S. J. (1975). Folie a deux: A case of "Demonic Possession" involving mother and daughter. *Canadian Psychiatric Association Journal*, 20(3), 223-227. <https://doi.org/10.1177/070674377502000309>
- Kleinman, A. (1980). *Patients and healers in the context of culture*. University of California Press.
- Koenig, H. G. (2008). Religion and mental health: What should psychiatrists do? *Psychiatric Bulletin*, 32(6), 201-203. <https://doi.org/10.1192/pb.bp.108.019430>
- Kohn, E. (2015). Anthropology of ontologies. *Annual Review of Anthropology*, 44(1), 311-327. <https://doi.org/10.1146/annurev-anthro-102214-014127>
- Leavitt, J. (1993). Are trance and possession disorders? *Transcultural Psychiatric Research Review*, 30(1), 51-57. <https://doi.org/10.1177/136346159303000102>
- Lewis, I. M. (1971). *Ecstatic religion*. Penguin.
- Lewis, I. M. (1989). *Ecstatic religion: A study of shamanism and spirit possession*. Routledge, Taylor & Francis Group.
- Mabbett, I. W. (1982). Defining the paranormal. *Journal of Parapsychology*, 46(4), 337-354.
- MacNutt, F. (1995). *Deliverance from evil spirits: A practical manual*. Chosen.
- Marmer, S. S. (1991). Multiple Personality Disorder: A psychoanalytic perspective. *Psychiatric Clinics of North America*, 14(3), 677-693. [https://doi.org/10.1016/s0193-953x\(18\)30295-8](https://doi.org/10.1016/s0193-953x(18)30295-8)
- Martínez-Taboas, A. (1999). A case of spirit possession and glossolalia. *Culture, Medicine and Psychiatry*, 23(3), 333-348. <https://doi.org/10.1023/a:1005504222101>
- Martínez-Taboas, A. (2005). Psychogenic seizures in an Es-  
piritismo context: The role of culturally sensitive psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 42(1), 6-13. <https://doi.org/10.1037/0033-3204.42.1.6>
- Matthews, L. J., Hertzog, W. B., Kyritsis, T., & Kerber, R. (2023). Magic, religion, and science: Secularization trends and continued coexistence. *Journal for the Scientific Study of Religion*, 62(1), 5-27. <https://doi.org/10.1111/jssr.12813>
- Matthews, L. J., & Robertson, P. (2024). *Theorizing the anthropology of belief: Magic, conspiracies, and misinformation*. Routledge, Taylor & Francis Group.
- Mayer, E. E. (1911). A case illustrating so-called demon possessions. *Journal of Abnormal Psychology*, 6(4), 265-278. <https://doi.org/10.1037/h0070220>
- Melia, W. M., & Mumford, J. D. (1987). Spirit possession and bewitchment presenting as physical illness: Report of four cases in Nepalese males. *Journal of the Royal Army Medical Corps*, 133(3), 152-154. <https://doi.org/10.1136/jramc-133-03-07>
- Mercer, J. (2013). Deliverance, demonic possession, and mental illness: Some considerations for mental health professionals. *Mental Health, Religion & Culture*, 16(6), 595-611. <https://doi.org/10.1080/13674676.2012.706272>
- Merz, J., & Merz, S. (2017). Occupying the ontological penumbra: Towards a postsecular and theologically minded anthropology. *Religions*, 8(5), 80-97. <https://doi.org/10.3390/rel8050080>
- Muhammad, I. A. (2019). Demonic possession or something else... anti-NMDAR encephalitis: A case report. *Journal of Clinical Cases & Reports*, 2(2), 35-40. <https://doi.org/10.46619/joccr.2019.2-1035>
- Murphy, J. K., & Brantley, P. J. (1982). A case study reportedly involving possession. *Journal of Behavior Therapy and Experimental Psychiatry*, 13(4), 357-359. [https://doi.org/10.1016/0005-7916\(82\)90085-4](https://doi.org/10.1016/0005-7916(82)90085-4)
- MSF Psychologist (2020). Sociocultural expression of psychiatric symptoms: A case report from South Asia. *Oxford Medical Case Reports*, 9. <https://doi.org/10.1093/omcr/omaa071>
- Nahm, M. (2022). Toward a "parapsychological synthesis": Proposals for integrating theories of psi. *Journal of Parapsychology*, 86(2), 299-321. <https://doi.org/10.30891/jopar.2022.02.04>
- Obeyesekere, G. (1970). The idiom of demonic possession: A case study. *Social Science & Medicine*, 4(1), 97-111. [https://doi.org/10.1016/0037-7856\(70\)90061-2](https://doi.org/10.1016/0037-7856(70)90061-2)
- Ocampo-Ponce, M. (2020). Los primeros principios ontológicos en el pensamiento de Santo Tomás de Aquino. *Revista Chilena de Estudios Medievales*, 17, 9-18. [journalofscientificexploration.org](https://doi.org/10.4067/s0719-</a></p>
</div>
<div data-bbox=)

- 689x2020000100009
- Oesterreich, T. K., (1966). *Possession demoniacal and other, among primitive races, in antiquity, the middle ages, and modern times*. New York University.
- Pietkiewicz, I. J., & Lecoq-Bamboche, M. (2017). Exorcism leads to reenactment of trauma in a Mauritian woman. *Journal of Child Sexual Abuse*, 26(8), 970-992. <https://doi.org/10.1080/10538712.2017.1372837>
- Pietkiewicz, I. J., Kłosińska, U., & Tomalski, R. (2021a). Delusions of possession and religious coping in schizophrenia: A qualitative study of four cases. *Frontiers in Psychology*, 12, Article 628925. <https://doi.org/10.3389/fpsyg.2021.628925>
- Pietkiewicz, I. J., Kłosińska, U., Tomalski, R., & van der Hart, O. (2021b). Beyond dissociative disorders: A qualitative study of Polish catholic women reporting demonic possession. *European Journal of Trauma & Dissociation*, 5(4), Article 100204. <https://doi.org/10.1016/j.ejtd.2021.100204>
- Pietkiewicz, I. J., Kłosińska, U., & Tomalski, R. (2022). Trapped between theological and medical notions of possession: A case of possession trance disorder with a 3-year follow-up. *Frontiers in Psychiatry*, 13, Article 891859. <https://doi.org/10.3389/fpsyg.2022.891859>
- Rashed, M. A. (2018). More things in heaven and Earth: Spirit possession, mental disorder, and Intentionality. *Journal of Medical Humanities*, 41(3), 363-378. <https://doi.org/10.1007/s10912-018-9519-z>
- Renard, S. B., Huntjens, R. J., Lysaker, P. H., Moskowitz, A., Aleman, A., & Pijnenborg, G. H. (2016). Unique and overlapping symptoms in schizophrenia spectrum and dissociative disorders in relation to models of psychopathology: A systematic review. *Schizophrenia Bulletin*, 43(1), 108-121. <https://doi.org/10.1093/schbul/sbw063>
- Rosenhan, D. L. (1973). On being sane in insane places. *Science*, 179(4070), 250-258. <https://doi.org/10.1126/science.179.4070.250>
- Rosenthal, R., & Fode, K. L. (1963). The effect of experimenter bias on the performance of the albino rat. *Behavioral Science*, 8(3), 183-189. <https://doi.org/10.1002/bs.3830080302>
- Rosik, C. H. (2004). Possession phenomena in North America: A case study with ethnographic, psychodynamic, religious and clinical implications. *Journal of Trauma & Dissociation*, 5(1), 49-76. [https://doi.org/10.1300/J229v05n01\\_04](https://doi.org/10.1300/J229v05n01_04)
- Sapkota, R.P., Gurung, D., Neupane, D. et al. (2014). A village possessed by "Witches": A mixed-methods case-control study of possession and common mental disorders in rural Nepal. *Culture, Medicine, and Psychiatry*, 38, 642-668. <https://doi.org/10.1007/s11013-014-9393-8>
- Seltzer A. (1983). Psychodynamics of spirit possession among the Inuit. *Canadian Journal of Psychiatry* 28(1), 52-56. <https://doi.org/10.1177/070674378302800112>
- Shafranske, E. P., & Cummings, J. P. (2013). Religious and spiritual beliefs, affiliations, and practices of psychologists. In K. I. Pargament, A. Mahoney, & E. P. Shafranske (Eds.), *APA handbook of psychology, religion, and spirituality (Vol. 2): An applied psychology of religion and spirituality* (pp. 23-41). American Psychological Association. <https://doi.org/10.1037/14046-002>
- Somer, E. (2004). Trance possession disorder in Judaism: Sixteenth-century Dybbuks in the Near East. *Journal of Trauma & Dissociation*, 5(2), 131-146. [https://doi.org/10.1300/j229v05n02\\_07](https://doi.org/10.1300/j229v05n02_07)
- Sosis, R. (2019). The building blocks of religious systems: Approaching religion as a complex adaptive system. In G. G. Georgiev, J. M. Smart, C. L. Flores-Martínez, & M. E. Price (Eds.), *Evolution, development and complexity* (pp. 421-449). Springer Nature. [https://doi.org/10.1007/978-3-030-00075-2\\_19](https://doi.org/10.1007/978-3-030-00075-2_19)
- Suryani, L. K., & Jensen, G. D. (1994). *Trance and possession in Bali: A window on western multiple personality, possession disorder, and suicide*. Oxford University Press.
- Steadly, M. (1988). Severing the bonds of love: A case study in soul loss. *Social Science & Medicine*, 27(8), 841-856. [https://doi.org/10.1016/0277-9536\(88\)90236-5](https://doi.org/10.1016/0277-9536(88)90236-5)
- Tajima-Pozo, K., Zambrano-Enriquez, D., de Anta, L., Moron, M. D., Carrasco, J. L., Lopez-Ibor, J. J., & Diaz-Marsa, M. (2011). Practicing exorcism in schizophrenia. *Case Reports*, 2011(1). Article bcr1020092350. <https://doi.org/10.1136/bcr.10.2009.2350>
- Teoh, C. L., & Dass, D. (1973). Spirit possession in an Indian family- A case report. *Singapore Medical Journal*, 14(1), 62-64.
- Teja, J. S., Khanna, B. S., & Subrahmanyam, T. (1970). "Possession states" in Indian patients. *Indian Journal of Psychiatry*, 12(1), 71-87.
- Truzzi, M. (1987). On pseudo-skepticism. *Zetetic Scholar*, 12-13, 3-4.
- Turró, S. (1985). *Descartes: Del hermetismo a la nueva ciencia*. Anthropos.
- Ugobi-Onyemere, M. C. (2015). *The knowledge of the first principles in saint Thomas Aquinas*. Peter Lang, International Academic Publishers. <https://doi.org/10.3726/978-3-0351-0749-4>
- United Nations. (2023, November, 2). *Universal declaration of human rights*. UN. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- Vagrecha, Y. S. (2016). Possession behaviour. *Abnormal and Behavioural Psychology*, 2(2), Article 1000119. <https://doi.org/10.4172/2472-0496.1000119>

- Van der Hart, O., Witztum, E., & Friedman, B. (1993). From hysterical psychosis to reactive dissociative psychosis. *Journal of Traumatic Stress*, 6(1), 43-64. <https://doi.org/10.1002/jts.2490060106>
- VanPool, C. S., & VanPool, T. L. (2023a). Anthropology and the science of the supernatural: Souls, ancestors, ghosts, and spirits. In C. S. VanPool, & T. L. VanPool (Eds.), *An anthropological study of spirits* (pp. 7-46). Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-25920-3\\_2](https://doi.org/10.1007/978-3-031-25920-3_2)
- VanPool, C. S., & VanPool, T. L. (2023b). Defense against the dark. In C. S. VanPool, & T. L. VanPool (Eds.), *An anthropological study of spirits* (pp. 7-46). Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-25920-3\\_6](https://doi.org/10.1007/978-3-031-25920-3_6)
- Ward, C. A. (Ed.). (1989). *Altered states of consciousness and mental health: A cross-cultural perspective*. Sage Publications, Inc.
- Westerink, H. (2014). Demonic possession and the historical construction of melancholy and hysteria. *History of Psychiatry*, 25(3), 335-349. <https://doi.org/10.1177/0957154x14530818>
- Wilt, J. A., Van Tongeren, D. R., & Exline, J. J. (2023). Are daily supernatural attributions to God and the devil/demons linked with meaning in life? *Journal of Positive Psychology*. Advance online publication. <https://doi.org/10.1080/17439760.2023.2169630>
- Wilby, E. (2023). Eve's opinion: Spirit-possession and the witches' sabbath in early modern Europe. *Magical, Ritual, and Witchcraft*, 18(1), 80-122. <https://doi.org/10.1353/mrw.2023.a906603>
- Witztum, E., Grisaru, N., & Budowski, D. (1996). The 'zar' possession syndrome among Ethiopian immigrants to Israel: Cultural and clinical aspects. *British Journal of Medical Psychology*, 69(3), 207-225. <https://doi.org/10.1111/j.2044-8341.1996.tb01865.x>
- World Health Organization. (2022). *ICD-11: International classification of diseases* (11th revision). <https://icd.who.int/>
- Wright, P. G. (2000). Postmodern ontology, anthropology, and religion. *Culture and Religion*, 1(1), 85-94. <https://doi.org/10.1080/01438300008567141>
- Yap, P. M. (1960). The possession syndrome: A comparison of Hong Kong and French findings. *Journal of Mental Science*, 106(442), 114-137. <https://doi.org/10.1192/bjp.106.442.114>

APPENDIX: TABLE 3: CASE STUDY DESCRIPTIONS

Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Diller (1890)	1	F	37	She attended one of the country's premier schools and was distinguished as the valedictorian of her class. Often described as cultured and refined, she recently admitted to feeling a bit "unhinged", an emotion underscored by an impulsive act of breaking a window and injuring her hand. Despite health concerns stemming from her erratic eating habits, she was an avid writer. While her discourse remained coherent, it was often tinged with irrational and delusional beliefs.	She had a nervous temperament and exhibited delusions with strongly held beliefs, often showing periods of defiance against authority. She experienced auditory and visual hallucinations, felt persecuted, and believed she communicated spiritually with friends.	The report does not indicate any diagnosis.	The report does not indicate any treatment or intervention.	The report makes no mention of the case's progression.
Mayer (1911)	2	M	45	Had limited access to education and worked as a machinist. After separating from his wife, he moved in with a sister who introduced him to esoteric matters. He tried to alleviate his symptoms with alcohol.	Developed a second personality, altered persona, distinct delusions of a paranoid nature, auditory delusions, tingling in the face, suffered from paresthesias, and constantly suspected that his wife tried to poison and hypnotize him.	Psychological (defensive neuro-psychosis).	Psychological (psychoanalysis).	Careful psychoanalysis that focused on understanding his illness, introspection, and suggestibility. Success in the intervention was reported. There is no information on the subsequent course of the case.
Obeyesek (1970)	3	F	40	Possessed for the first time 9 years ago when she was pregnant with her second child. She was free from possession for 5 years. It began again when she conceived her fourth child. Her husband performed prayers with Catholic monks over sacred texts, but it was ineffective.	She experienced burning sensations in her stomach, pain in her jaw, and had hallucinations of footsteps following her. She claimed to see demons, dark beings with protruding teeth.	Religious (spirit possession).	Religious (first time: prayers; second time: liberation ritual).	Success was reported in the second intervention. There is no information on the subsequent course of the case.
Teoh & Dass (1973)	4	M	18	He came from a working-class and highly conservative family. His brother was the primary authority figure within their household. He experienced severe asthma attacks, and despite being 18 years old, he was not considered an adult by his family and could not leave the house without permission, especially because of his asthmatic condition. The young man stated that he was not allowed to choose his own friends either. There was a belief within him that family members had been possessed in the past and had been cured through other possession spells, referred to as witchcraft. He was admitted to the hospital after experiencing several episodes of bleeding from the mouth over the prior six months. This period coincided with the time he believed he was being possessed by supernatural entities.	He felt pain in his chest and perceived a dark shadow approaching him. When this shadow made contact with his body, the young man became agitated and entered a trance-like state. During this state, he often asked for food or became aggressive. He would throw or break furniture and physically assault his family members. It was observed that after the trance episode, the man experienced anterograde amnesia.	Religious (spirit possession).	Medical (specialized treatment for asthma).	In the scientific case report, neither the cause of the oral bleeding was confirmed nor discovered. After suffering two trance episodes in the hospital, the patient calmed down and the trances did not recur. His asthmatic condition was favorably managed with medication. Although the family was informed that the possible hypothetical cause was the dysfunctional dynamic he had with his older brother, his family rejected such a hypothesis. After three months, he had no more trance episodes and the young man reported greater personal freedom without beliefs of being possessed.
Kiraly (1975)	5	F	18	Case 5 (Daughter) and Case 6 (Mother). The daughter remained socially isolated due to her mother's concern, took on financial responsibilities from a very young age, and felt pressured because of it. A week earlier, the two carried out exercises extracted from a book on occult phenomena. The daughter felt as if she was being possessed by an archangel, which later turned into a demon.	Auditory hallucinations, involuntary movements in her hand, the spirit told her to take over all the money in the world, delusional perceptions, and unusual communication.	Psychological (paranoid psychosis).	Psychiatric (pharmacological treatment with phenothiazine).	She improved drastically. After ten days, she recalled her delusions as tricks of her mind. The dosage of the pharmacological treatment was reduced until reaching maintenance doses.
Kiraly (1975)	6	F	53	Case 5 (Daughter) and Case 6 (Mother). The daughter remained socially isolated due to her mother's concern, took on financial responsibilities from a very young age, and felt pressured because of it. A week earlier, the two carried out exercises extracted from a book on occult phenomena. The daughter felt as if she was being possessed by an archangel, which later turned into a demon.	She exhibited anxiety, exhaustion, fear, and worry. She predominantly experienced auditory hallucinations similar to those of her daughter and feared harming someone. She was dependent on her daughter, easily influenced, but verbally dominant.	Psychological (hysterical overlay).	Psychiatric (outpatient review and follow-up).	The hospital management of her daughter was crucial in separating them, and she was subsequently treated at home by another psychiatrist. Her symptoms began to subside from the first week.



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Cramer (1980)	7	M	39	<p>He was born in a small town where there was limited recreational opportunity and where spiritualist practices were an important part of the sociocultural foundation. He had seven siblings, and his family combined both Chinese and Mexican ethnic traits. They had limited financial resources, and the man could only attain six years of formal education. He had lived with his wife for over 15 years, who, before living with him, claimed to have been possessed by spirits. When the man was diagnosed with diabetes, he panicked and shortly thereafter became possessed. He doubted the authenticity of his possession. Religious leaders conducted an exorcism on him, where they ruled out the possibility of it being a mystical possession and believed that the entities governing him were beings of his own creation.</p> <p>Eldest son of a partially traditional family. He had a history of depression, alcoholism, and suicidal behavior, possibly related to the violent deaths of his mother and three relatives. He claimed that he was possessed, and his grandfather, who was a skilled shaman, drove it away with the help of other spirits and medicinal herbs. But, he felt that he had shamanic powers but that these were not strong enough to deal with the spirit.</p>	<p>He believed he was possessed by four different spirits. During his states of possession, he exhibited labored breathing, facial flushing, voice changes, excessive sweating, and spat out frothy phlegm from his mouth.</p>	<p>The report does not indicate any treatment or intervention.</p>	<p>The report does not indicate any treatment or intervention.</p>	<p>It was identified that each spirit was a direct manifestation of his emotional issues. He felt that he was not up to the task of successfully handling circumstances, with prevailing feelings of weakness and illness (his diabetes further reinforcing this thought). The scientific report does not mention the subsequent course of evolution for the case.</p>
Seltzer (1983)	8	M	24	<p>He was the eldest son of his family. His paternal figure was affectionately close and passed down certain cultural traditions to him. In contrast, he perceived his maternal figure as distant and felt that she rejected him. He claimed to have had depression and suicidal thoughts for a few years due to a confusing sexual identity. One day, he felt a spirit touch his shoulder, telling him he should marry a woman so it would leave him alone. However, since he refused, he has nightly battles with this supernatural entity, of which he later cannot recall. The stress of this situation led to a severe depressive reaction. He insisted that he had asked for help to move out of the house because, according to him, the spirit became weaker away from where he lived.</p>	<p>He exhibited nervous and inappropriate behaviors. Auditory hallucinations were identified. He claimed he had nightly encounters with a spirit that mocked him, instructed him, and told him to lie with his wife. Due to these episodes, he was accused of attempted rape.</p>	<p>Psychological (dissociative identity disorder).</p>	<p>Psychological (culturally adapted intervention with psychiatric follow-up).</p>	<p>The therapy consisted of a culturally adapted struggle-resistance against the spirit that occupied his body. Vocational guidance was combined, a symbolic amulet was used, and pharmacological treatment was applied.</p>
Seltzer (1982)	9	M	19	<p>He appeared as a man lacking self-confidence. Having received a private education, it seemingly hindered him from forming meaningful and intimate relationships with women. He professed difficulties in connecting with them. Although he was articulate, lucid, and intelligent, he acknowledged certain academic learning challenges. He also grappled with conflicts about his religious beliefs and his life's purpose. He claimed that a spirit would appear to him at night, causing insomnia. He lost interest in the Catholic faith and was apprehensive about seeking help from his own community and family.</p>	<p>He experienced episodes of nightly battles with the spirit during which he ended up with torn, ripped clothes, and there were also gunshot wounds observed. He was accused of theft, and he claimed that it had been the spirit during one of these nightly battles who was responsible.</p>	<p>Psychological (dissociative identity disorder).</p>	<p>Psychological (culturally)</p>	<p>In therapy, vocational counseling was promoted, concerns about his sexual identity were addressed, and psychiatric treatment with medication was applied. After the intervention, an improvement in sleep quality was noted and, as he argued, the strength of the spirit weakened over time.</p>
Seltzer (1982)	10	M	20	<p>He appeared as a man lacking self-confidence. Having received a private education, it seemingly hindered him from forming meaningful and intimate relationships with women. He professed difficulties in connecting with them. Although he was articulate, lucid, and intelligent, he acknowledged certain academic learning challenges. He also grappled with conflicts about his religious beliefs and his life's purpose. He claimed that a spirit would appear to him at night, causing insomnia. He lost interest in the Catholic faith and was apprehensive about seeking help from his own community and family.</p>	<p>He lamented a spiritual force that acted against his will. This force had emerged spontaneously and involuntarily. As he had claimed, the spirit had driven him to start fires, causing him distress and concern.</p>	<p>The report does not indicate any treatment or intervention.</p>	<p>Adapted intervention with psychiatric follow-up).</p>	<p>He was administered a placebo pill, which supposedly gave him the "strength" to combat the spirit. He was also encouraged to speak with the religious members of his community and share his experience. The follow-up report indicated that his symptoms had subsided, leading to functional behavior.</p>



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Melia & Mumford (1987)	11	M	19	<p>He had been experiencing generalized headaches for about a month, had difficulty concentrating, and struggled to recall instructions. He exhibited nosebleeds, which were treated upon hospital admission. He voiced some incoherent thoughts and remained unconscious for 6 days. He was discharged from the hospital shortly after. He sought advice from a witch doctor, who explained to him that the spirit of his father had attempted to possess him.</p>	<p>He exhibited an unbearable headache that had persisted for 20 days, accompanied by episodes of agitation, tremors, and seizures.</p>	<p>Religious (spirit possession).</p>	<p>The report does not indicate any</p>	<p>The patient understood that he needed to become a witch doctor to prevent his father's spirit from possessing him. There is no information on the subsequent course of the case.</p>
Melia & Mumford (1987)	12	M	43	<p>He was admitted to the hospital for presenting with fever and tremors for 24 hours after starting his vacation in Nepal. He had previously experienced a similar episode another time he had been in Nepal and was diagnosed with hypertension. During the hospital stay, he became increasingly agitated and mentioned that, while in Nepal, he had been possessed by a spirit intent on killing him. It was discovered that he was an alcoholic, and his employer expressed concern about the effects his alcohol consumption might have on his sanity.</p>	<p>He had a fever, tremors, excessive sweating, and unusual perceptions that he could hear and communicate with animals.</p>	<p>Religious (spirit possession).</p>	<p>treatment or intervention.</p>	<p>He was observed for seven days and received assistance from two healers. There was a progressive improvement in his symptoms. There is no information on the subsequent course of the case.</p>
Steadly (1988)	13	M	25	<p>He worked as a long-distance bus driver. The young man was in good general health, although he reported that he couldn't work due to his recurring episodes of illness over the past 18 months. He consulted four doctors, all of whom assured him he was healthy. He sought advice from a spiritual medium, where it was determined that the source of his issues stemmed from a fright he experienced at the age of 15 during a trip. According to the report, this scare caused his soul to either leave his body or try to escape. His father was killed when he was a baby, and his mother struggled with drug addiction. He spent his childhood in various homes where illegal drugs were sold. At the age of 6, his grandmother gained custody of him and his sister. She took them to live in her house and regularly brought them to church.</p>	<p>He exhibited signs of weakness, fatigue, frequent stomach pains and bloating, as well as occasional numbness in his limbs.</p>	<p>Religious (spirit possession).</p>	<p>Religious (an offering and liberation ritual was performed).</p>	<p>The family and the young man decided to travel to the location where the supposed "soul escape" had occurred. There, they made an offering and other gift to the native spirits to see if it was possible for his soul to be liberated and returned to his body. An exorcism was also performed on him. The young man held ambivalent beliefs regarding the healing efficacy of these rituals. He appeared tense, seemingly due to his lack of conviction or faith.</p>
Hansen et al., (1993)	14	M	8	<p>The grandparents sought help from the church regarding his behavior, but they were not provided with any solution, as they explained that exorcism was a very painful tool for such a young child. They turned to systemic therapy, where other family members were integrated into the therapeutic process to gather more information. However, despite offering techniques and improvement tasks, there was no favorable progress. His father died in a car accident, and his mother never recovered from it and couldn't take care of him. In 1986, he was in a crowd near the Western Wall in Jerusalem, where a terrorist threw a grenade, killing and injuring several people. After two months, he believed he was possessed by demons and was taken to the clinic by his wife. Due to his condition, he lost his job.</p>	<p>The grandparents believed he was possessed, stating that he consumed an abnormal amount of food, sometimes exhibited great strength, and at times couldn't control the movement of his feet. His bed shook very strongly.</p>	<p>Psychological (attention-Deficit/hyperactivity)</p>	<p>Psychological (first time: systemic)</p>	<p>The grandparents were willing to accept that he had a psychiatric disorder. With the help of psychotherapy, the grandparents began to see changes in him, and this reinforced the idea that the dynamics between them started to change.</p>
Van de Hart Witzum & Friedman (1993)	15	M	35	<p>His father died in a car accident, and his mother never recovered from it and couldn't take care of him. In 1986, he was in a crowd near the Western Wall in Jerusalem, where a terrorist threw a grenade, killing and injuring several people. After two months, he believed he was possessed by demons and was taken to the clinic by his wife. Due to his condition, he lost his job.</p>	<p>He experienced auditory hallucinations, cried, complained of physical pain, and had sleep disturbances. He had a depressed mood. He was not oriented to current events (living anchored in time), and he constantly talked to himself about bombs and people dying.</p>	<p>Psychological (reactive dissociative psychosis).</p>	<p>Psychological (hypnotherapy).</p>	<p>They asked him to write a farewell letter to his father in which he could say everything he wanted, and hypnosis was used as a means to access and regulate his terrifying dissociative experiences. Five years later, he did not exhibit psychotic symptoms.</p>



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Castillo (1994)	16	F	29	<p>She was the eldest daughter of a farmer from a family with limited financial resources. She was given up for adoption to her maternal grandmother. At the age of seven, she was forcibly separated from her grandmother and returned to her father's care because her mother needed her help with her pregnancy and her two other siblings. For this reason, she quickly married a man, even though he had problems with alcohol, mistreated her, and physically abused her. Due to this situation, she had to return to her mother's home. This return reactivated her traumatic experience, and it was there that she began her first possession by spirits.</p> <p>She moved to Israel. She had been possessed by "Kole" for 17 years. The name "Kole" referred to a Zar* spirit from over 100 years ago. She described her symptoms as intense suffering caused by a male spirit with anger, jealousy, and the need to control her. She was compelled to serve him. Since that moment, she divorced her husband because the spirit did not accept any other man in her life. Before moving to Israel, the woman lived in Ethiopia. There, she tried treatments with traditional healers, and when that failed, she even approached the Ethiopian emperor in the hope that his authority could resolve her problem.</p>	<p>She exhibited physical tremors, aggressions towards her family, and threatened to attack and devour people (or eat them alive). She experienced amnesia after these episodes occurred. She believed she was possessed by three spirits (her deceased grandmother, a demon from Sri Lanka, and the cemetery demon Mahasona).</p>	Psychological (dissociative identity disorder).	Psychological (psychotherapeutic)	<p>The report does not mention the developmental course of the case. However, there was a theory that the spirits she perceived were personalities that allowed her to better cope with the family environment and the trauma of initially being separated from her parents and then returning.</p>
Witztum & Grisaru (1996)	17	F	43	<p>She moved to Israel from Ethiopia three years ago. She had been referred to the clinic twice for somatic complaints that had been shown to have no organic cause. She was diagnosed with postpartum depression, prescribed antidepressants, and had a favorable clinical outcome. She had suffered from possession by a Zar* spirit for six years. Although her attacks were infrequent, she felt compelled to perform a ceremony to appease the Zar three times a day.</p> <p>She had been hospitalized in an internal medicine unit to explore the cause of her fever. During the hospitalization, she attempted to jump out of a fourth-floor window. She was diagnosed with severe psychotic depression. She reported that her "Kole" (Zar* spirit) blamed and accused her severely. She claimed to have tried to jump to escape the suffering. When she moved to Israel from Ethiopia, she separated from her husband and daughter. Her son was placed in a boarding school, and she remained alone.</p>	<p>In Israel, she once again felt the presence of that spirit, experiencing a lack of control over her actions, involuntary and strange head movements. In psychiatry, they did not find evidence of severe thought disorder, neither in form nor in content. There were no symptoms of any mood disorder.</p>	Psychiatric (obsessive-compulsive disorder).	Psychiatric (medication with clomipramine and carbamazepine).	<p>After the failure of traditional treatments, a pharmacological treatment was attempted, consisting of an anti-obsessive, anti-compulsive, and anxiolytic medication (clomipramine). Before starting the medication, the healthcare providers ensured that the spirit possessing her agreed to her receiving the treatment. The pharmacological treatment was unsuccessful, and the patient's subsequent progress is unknown.</p>
Witztum & Grisaru (1996)	18	F	23	<p>She moved to Israel from Ethiopia three years ago. She had been referred to the clinic twice for somatic complaints that had been shown to have no organic cause. She was diagnosed with postpartum depression, prescribed antidepressants, and had a favorable clinical outcome. She had suffered from possession by a Zar* spirit for six years. Although her attacks were infrequent, she felt compelled to perform a ceremony to appease the Zar three times a day.</p> <p>She had been hospitalized in an internal medicine unit to explore the cause of her fever. During the hospitalization, she attempted to jump out of a fourth-floor window. She was diagnosed with severe psychotic depression. She reported that her "Kole" (Zar* spirit) blamed and accused her severely. She claimed to have tried to jump to escape the suffering. When she moved to Israel from Ethiopia, she separated from her husband and daughter. Her son was placed in a boarding school, and she remained alone.</p>	<p>She experienced a reduced appetite, sleep disturbances, decreased daily functioning, aggressive behaviors, and put her family at risk by insisting on lighting fires in the room to communicate with demons and spirits.</p>	Anthropological	Anthropological (cultural)	<p>A letter was written to the officials of the "Absorption Center," explaining the Zar* phenomenon and recommending that she be allowed to carry out her ceremonies. The staff at the Center reported that after allowing her to do this, she had returned to a reasonable level of functioning at home, and the number of general visits to the medical clinic had decreased.</p>
Witztum & Grisaru (1996)	19	F	56	<p>She had been hospitalized in an internal medicine unit to explore the cause of her fever. During the hospitalization, she attempted to jump out of a fourth-floor window. She was diagnosed with severe psychotic depression. She reported that her "Kole" (Zar* spirit) blamed and accused her severely. She claimed to have tried to jump to escape the suffering. When she moved to Israel from Ethiopia, she separated from her husband and daughter. Her son was placed in a boarding school, and she remained alone.</p>	<p>She felt that the spirit attacked her on special occasions, when she was frustrated and her needs were not met (for example, when she lacked proper clothing or was under severe stress). She appeared "disconnected," spoke an incomprehensible language, and at times, broke objects.</p>	Anthropological	understanding and adaptation).	<p>Thanks to the therapist's efforts, her daughter was located and brought to Ethiopia with her. All medications were discontinued, and she was discharged. She still had depression and some ambivalent feelings. Subsequent follow-up revealed a complete recovery.</p>
Carrazana et al. (1999)	20	M	24	<p>During the wake of an uncle, she experienced her first generalized seizure. The possession episode was attributed to the death of her uncle, as it was seen as punishment for her perceived disrespect towards him. She received treatment from a priest for 6 years and saw a doctor when she went to the United States from [where?].</p>	<p>He exhibited tonic-clonic seizures and myoclonic jerks while awake.</p>	Medical (juvenile myoclonic epilepsy).	Medical (pharmacological treatment).	<p>An electroencephalogram (EEG) showed bursts of 3 to 4 Hz generalized discharges. Valproic acid was prescribed, and she remained seizure-free.</p>

Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Carrazana et al. (1999)	21	F	27	She had a history of complex partial seizures since adolescence. At age 14, she fell during a seizure in a fire, resulting in burns on her legs, parts of her face, and arms. The family took the patient to her religious community to address the "possession." It is said that the entity that has possessed her is one of the most feared, known for throwing itself into the fire and kicking to extinguish the flames.	Generalized seizures.	Medical (epilepsy)	Medical (pharmacological treatment).	The EEG showed independent bitemporal spikes. Antiepileptic medications were prescribed and contributed to a decrease in the frequency of seizures.
Carrazana et al. (1999)	22	F	36	She experienced partial seizures for many years that caused her to feel fear and epigastric pulsations. When she went to the specialist for possessions, she claimed that she was possessed by a French entity, interpreting incoherent phrases from a foreign language. When possessed by this entity, she often spoke perfectly in French or other languages, even though she herself did not know how to speak those languages. She was taken to a doctor at the age of 34 when she left Haiti.	She experienced loss of consciousness, uttered nonsensical phrases, and had complex motor automatisms.	Medical (epilepsy).	Medical (pharmacological treatment).	A magnetic resonance imaging (MRI) revealed atrophy of the right hippocampus. Seizures improved with carbamazepine medication. However, treatment adherence was affected by certain family interferences.
Carrazana et al. (1999)	23	F	44	She experienced recent partial seizures, accompanied by an overwhelming feeling of emptiness, and these were attributed to a benevolent spiritual entity leaving her while the spirits of the deceased tried to take control of her. In her culture, it is believed that when this happens, it is due to a voodoo curse that directly affects one's health and prosperity. The practitioner of these possessions claims that the exorcism did not work on her because the spirit had a strong hold on her.	She primarily experienced a sense of emptiness accompanied by partial seizures.	Medical (epilepsy).	Medical (pharmacological treatment).	The magnetic resonance imaging was normal; however, the seizures were controlled with monotherapy using phenytoin. There is no information on the subsequent course of the case..
Martínez-Taboas (1999)	24	M	44	His mother was distant, and her father was an alcoholic. His maternal grandmother was her primary caregiver and took him to spirit sessions several times, where he became convinced of the interaction between the spirits of the dead and the living. He studied sociology, is married, and has two daughters. He felt persecuted and became suspicious of her coworkers, was hospitalized for two months, and was discharged with a diagnosis of paranoid schizophrenia. He continued to experience paranoid ideas for the following year, and after 5 years, he decided to stop taking her medication. Along with his wife, they were looking for a psychiatrist to help him, as he experienced unexpected episodes of glossolalia and possession by spiritual entities. He mentioned that he participated in an exorcism, and although he initially experienced relief, the possessions returned over time.	He claimed to be possessed by spiritual entities and could experience around 3 episodes of possession in a day. He exhibited behavioral disturbances, irrational thoughts, and frequent dissociative experiences.	Psychological (dissociative identity disorder).	Psychological (cognitive-behavioral psychotherapy).	The psychotherapist focused on restructuring his beliefs and cognitive schemas about possession and glossolalia. Ten months into psychotherapy, he began traveling with his wife to distant places. It became evident that his delusions and paranoid beliefs had significantly decreased. After three years, they decided to end the psychotherapy.



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Bull (2001)	26	F	39	<p>She was raised in the Roman Catholic Church, but recently attended a Methodist church. She was hospitalized in psychiatry and diagnosed with dissociative identity disorder. Initially, she tried to find an internal "self-helper" who would encourage the other personalities to trust her and have faith, but it didn't work.</p> <p>Through therapy, she was able to overcome sexual and physical abuse from both her family and traumatic expulsion rituals from her church. During a therapy session, she reported that a new identity had emerged in her, and the purpose of this entity was for her to die. The therapist continued with the standard procedure for addressing persecutory states of the self and tried to establish a therapeutic alliance with the new entity. After twelve months, no change or improvement was observed. Later, with her therapist, they performed an expulsion prayer, and she felt that he had disappeared. However, this only lasted for a month. The entity reappeared when, according to the patient, she was engaging in behaviors that violated the moral principles of her religion.</p>	<p>She began to see monsters in her head and referred to them as "demons." She knew they were entities beyond her, but she wasn't sure if they were actually demons.</p>	<p>Psychological (dissociative identity disorder).</p>	<p>psychotherapy; second time: self-directed ritual prayer-psychotherapy).</p>	<p>The therapist did not use the word "exorcism" to describe what they did in therapy. She decided to try the expulsion technique with the therapist's assistance, which immediately brought her a sense of relief.</p>
Rosik (2004)	27	F	27	<p>She grew up in an area where the community believed in and conducted spiritist sessions. Five years ago, she was diagnosed with intractable tonic-clonic epilepsy. She experienced distress due to her "epileptic attacks" and didn't feel safe. Her seizures occurred two or three times a week, despite being treated with Tegretol. The woman recalls with anguish the traumatic experience when her grandmother's house caught fire, and she was paralyzed; her grandmother died as a result of this accident.</p>	<p>She exhibited paranoia and persecutory states about herself, interpreting that there was a supernatural entity inside her. After nearly two years of therapy, she came to understand that the identity that had developed within her was a dissociative part of herself. She realized that without addressing the dissociation, the entity would continue to be active.</p>	<p>Religious (spirit possession) and psychological (trauma-based dissociation).</p>	<p>Psychological (first time: expulsion prayer; second time: self-directed ritual prayer-psychotherapy).</p>	<p>Based on her beliefs, the therapist encouraged her to use reading materials focused on cognitive restructuring to establish an image or concept of a non-punitive and celestial god. Through a self-directed ritual prayer prescribed by the therapist, she was able to integrate the various states of self and felt relieved. From this point on, changes in her emotional management began, and she gradually started to feel better.</p>
Martínez-Taboas (2005)	28	F	24	<p>She had an ambivalent family background with substance abuse, physical and sexual abuse. Although she believed in the Catholic faith, she often transgressed that faith, causing her feelings of shame and guilt. She was also a victim of emotional and physical abuse from her partner. She was pregnant and feared that the devil sought revenge on her for having conflicts during her pregnancy. She was hospitalized and had a miscarriage. She associated this event with the idea that she had killed her child.</p>	<p>She had seizures that began with headaches, loss of consciousness, and violent agitation, sometimes leading her to harm herself. In another episode, she attempted to burn various objects in her house and begged for her life from an invisible presence. She experienced hallucinations in which she saw blood and her own image strangling herself with a rope. She believed that the spirit disturbing her was her grandmother and that it did not want to leave her alone.</p>	<p>Religious (spirit possession) and psychological (dissociative trance disorder).</p>	<p>Psychological (empty chair technique using cognitive-behavioral therapy).</p>	<p>Improvement was observed after approximately two months, and the presence of her "grandmother" ceased to be significant. She continued with follow-up sessions for twelve months. During the sessions, she only presented a single episode of dissociative trance. She had a favorable outcome.</p>
Ballon et al. (2007)	29	F	22	<p>His family had a history of psychotic disorders. He suffered a traumatic brain injury due to a traffic accident, with no evidence of seizures. Six months later, academic performance declined, and behavior changed drastically, necessitating others for personal care. At this point, he began experiencing auditory hallucinations. His family took him to a clinic, where they reported that he had undergone a change in personality, (isolated and disinterested). Man claimed that his father's appearance had changed to a "devil." Sought traditional healing practices and his family took him on a pilgrimage. Neither of these practices worked.</p>	<p>She experienced symptoms such as nausea, vomiting, headaches, tingling throughout her body, fear of fainting, and a sense of emptiness. When these symptoms worsened, her feelings reminded her of the movie "The Exorcist." She had flashbacks, dreams, and developed dissociative states related to the movie itself. Her belief of being possessed varied based on the experiences she had. Physical symptoms and somatizations were also identified.</p>	<p>Psychological (depression and post-traumatic stress disorder).</p>	<p>Psychiatric (medication with desipramine) and psychological (psychotherapy; involvement of a priest who reassured her that she was not possessed).</p>	<p>After connecting her past issues with her current crisis experiences and analyzing the movie images and how she used them in her dissociative episodes, her symptoms began to disappear. One year later, she was no longer clinically depressed.</p>
Guenedi et al. (2009)	30	M	22	<p>There were observed alterations in attention and concentration. There were changes in his personality, with abnormal auditory experiences, alterations in word generation, and dysarthria being manifested.</p>	<p>Medical (structural abnormality in the left basal ganglia and specific perfusion in the left temporal lobe).</p>	<p>Medical (pharmacological treatment).</p>	<p>Thanks to a single-photon emission computed tomography (SPECT) scan, the structural abnormality in the basal ganglia was identified. He was prescribed treatment with risperidone, and three months later, lamotrigine was added. After three weeks, there was an improvement in his mood, cognitive function, and social behavior. Follow-up sessions showed an improvement in his quality of life. He resumed his studies, and his psychotic features disappeared.</p>	



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Tajima-Pozo et al. (2011)	31	F	28	She claimed to attend exorcism and spiritism sessions and that, after that, she felt the presence of an "evil spirit." She was diagnosed with schizophrenia and was receiving pharmacological treatment at that time. She attended mass daily and attributed half of her symptoms to her mental disorder, while relating the other half to the presence of a spirit. She sought out a clergyman experienced in exorcisms, received eight sessions, and described an improvement. However, her family expressed skepticism about the exorcisms because she screamed, writhed, and vomited during and after each exorcism session.	Perception that a spirit possesses her, violates her, makes her writhe in bed, vomit, and feel unwell. Kinesthetic hallucinations and delusional interpretations.	Religious (spirit possession) and psychiatric (paranoid schizophrenia).	Psychiatric (pharmacological treatment with risperidone and alprazolam).	Her involvement in multiple exorcisms altered her response to clinical treatment. She continued to experience kinesthetic hallucinations despite receiving pharmacological treatment and psychotherapy.
Sapkota et al. (2014)	32	M	21	He lived with his wife's extended family. He was studying for a degree in education at a local university. In his spare time, he helped around the house and with the livestock. His wife became pregnant with their first child and gave birth after 7 months, but the baby died 5 days after being born. The day their child died, he saw a woman at the window, whom he mistook for his wife's grandmother. But when he realized that was unlikely, he began to feel suffocated and fainted. Since then, he began to faint frequently. When he went to the doctor, they prescribed him some medication for tension. His symptoms worsened after seeing traditional healers. Other villagers began to experience symptoms of possession.	He had the feeling that a spirit possessed him; he trembled with fear and suffered from suffocation.	The report does not indicate any treatment or intervention.	The report does not indicate any treatment or intervention.	This village did not have access to traditional healers, so they built a sanctuary where the women of the municipality would go. Over the following months, some of the affected women recovered, however, new cases continued to emerge.
Chartonas & Bose (2015)	33	F	8	She immigrated to the United Kingdom in December of 2011. A pediatrician referred her to Mental Health Services due to her exhibiting unusual and odd behaviors. The adaptation was difficult; she faced academic and social challenges, became isolated, and had limited interactions with others. She became oppositional at school, had fits of rage, and displayed defiant behaviors. Her parents believed she was possessed, but they were open to continuing with medical exploration	Loss of interest in activities, incontinence, sleep difficulties, engaging in stereotyped and purposeless activities. She had perceptions of being pursued, spoke to herself, and had memory problems.	Medical (absence epilepsy).	Medical (pharmacological treatment).	She started taking sodium valproate twice a day, which led to her improvement. Alongside this, she attended play therapy with her father, where they worked on attachment, self-image, and imaginative play. She continued with some odd behaviors and learning difficulties, so it was decided to change her school. The change was beneficial, and her symptomatic behaviors almost entirely diminished.
Pietkiewicz et al. (2017)	34	F	30	She lived with her parents in a small town and had a stable job as a teacher at the school. She was baptized in the Catholic faith and regularly participated in religious practices. Her doctor attributed her initial health problems to stress. She was harassed and sexually abused in her childhood. Her parents were distant, critical, and unsupportive of her and her education.	She saw ghosts of deceased people, had suicide attempts during episodes in which she experienced dissociation, felt emotionally fragmented, and claimed to engage in dialogues with at least one egodystonic part of herself.	Religious: (spirit possession) and psychological: (dissociative identity disorder).	Religious (through exorcism rituals).	She attended an exorcism, in which she initially did not want to participate, but after feeling pressured by the assembly, she agreed. After the exorcism, she tried to find the meaning and sense of what was happening to her. She remained ambivalent regarding the origin of her symptoms: some had a supernatural cause for her and others did not. There is no information on the subsequent course of the case.
Muhammad (2019)	35	F	33	When she was admitted to the hospital for a suspected case of encephalitis for the first time, a routine medical examination was conducted which did not reveal any organic cause, including a computed tomography scan that was also favorable. She was administered sodium valproate and was discharged. A week later, she was readmitted. The cause for the admission was viral encephalitis, and she was pharmacologically treated with intravenous acyclovir, but her clinical course did not improve. The psychiatric review indicated that she suffered from a conversion disorder as she displayed anxiety, agitation, strange behavior, hallucinations, delusions, and disorganized thoughts. She progressively deteriorated until she fell into a coma and had to be artificially intubated to keep her alive.	She exhibited strange behavior and sudden changes in personality. She experienced intense emotional fluctuations with rude and aggressive use of language. In certain states, she displayed abnormal rotations in her eyeballs.	Medical: (NMDA receptor encephalitis).	Medical (intravenous treatment, including immunoglobulins and plasmapheresis).	A head magnetic resonance imaging was performed, revealing an anomalous-diffuse signal in the gray matter of the right parietal and temporal lobe. Pharmacological intervention was carried out, and an almost complete recovery was achieved in a few months.



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Aymerich et al. (2020)	36	F	41	She mentioned that she had a happy childhood without any significant traumas. She became pregnant with her first and only child at the age of 22. At 27, she moved to Spain for work reasons. She was a very religious and cultured woman, actively participating in evangelical Christian worship, and most of her friends were from that community. She abruptly woke up one morning, claimed to be possessed, and believed that the end of the world had come. Her son took her to the church for help, and even though the evangelical pastor prayed for her, eight hours later she remained the same, so they decided to take her to the emergency room.	She displayed aggressive behavioral alterations, being self-aggressive as well as aggressive towards her surroundings. She maintained a terse discourse, using few words, with sudden outbursts of crying and laughter.	Psychiatric (unspecified dissociative disorder).	Psychiatric (pharmacological treatment).	She was hospitalized and treated with an anxiolytic. She showed rapid improvement and the medication was withdrawn a few hours later. After two days, a comprehensive analysis was carried out, identifying that the episode might have been due to her breakup with her partner. Her progress was good, without resorting to pharmacological treatment.
MSF Psychologist	37	F	15	She was taken to the emergency room by her in-laws because she had jumped off the stairs after supernatural entities told her to do so. The in-laws mentioned that she was in an arranged marriage and that this wasn't the first time something like this had occurred. When the mental health team intervened, they requested her permission to speak with the "spirit", and she agreed. The spirit stated it was angry because she was in a forced marriage and the in-laws were violent towards her.	She heard voices, could not control her movements, and had a wandering gaze.	The report does not indicate any treatment or intervention.	The report does not indicate any treatment or intervention.	Possession was a culturally accepted "conscious" choice for her suffering. Efforts were made to encourage both the family and the girl to return for treatment; however, they never came back. Informally, it was heard that they took the girl to a traditional healer, who believed she was "faking." In response, the in-laws became more enraged and abused her further.
Dein (2021)	38	F	42	She was raised in the Catholic faith. She hinted that she had been sexually abused by a close relative. At 18, a friend introduced her to the occult, and she felt a spirit had entered her room. She ended the relationship with her friend, but she doubted the existence of those spirits. At the age of 38, she was hit by a car, suffered a head injury, and underwent a computed tomography scan which found no abnormalities. She was referred to psychiatry, where she began to state that a spirit had taken over her. She felt despondent for being visited by a psychiatrist because, according to her, what she needed was an exorcism.	She experienced memory lapses and was distressed because she said a spirit had taken over her. She could "smell" the spirit. During the possession episodes, the spirit spoke to her, and she often spoke in a man's voice.	Psychiatric (dissociative identity disorder) and religious (spirit possession).	Religious (through exorcism).	A priest was called to perform an exorcism on her. After the ritual, she claimed that she still felt the spirit within her. There was a slight perception of improvement and well-being, but the clinical course remains unknown.
Pietkiewicz et al. (2021a)	39	F	21	Her parents were divorced, and she had no contact with her father or older brother, both of whom had issues with alcohol and were violent. Her mother emotionally abused her. She claimed to have no friends and had never had physically intimate relationships with anyone. Since age fourteen, she was hospitalized several times for schizophrenia but did not adhere to her treatment regimen. Since fourteen, she held the belief that she possessed supernatural telepathic powers and could communicate with extraterrestrials.	She exhibited cenesthetic hallucinations, delusions of influence, grandiose and religious delusions (telepathic communication with Jesus Christ and Lucifer). Medical practitioners determined that she did not meet the diagnostic criteria for a dissociative disorder. She sought out priests and exorcists in the hope that they would support her mission of redeeming demons.	Religious (spirit possession).	Religious (through exorcism).	No clinical progression of the case was reported.
Pietkiewicz et al. (2021a)	40	F	30	During her childhood, her mother would be absent for several weeks due to work reasons, her father and his partner abused alcohol, and she was also a victim of physical abuse. She experienced abuse and bullying at school. While underage, she provided sexual services to men in exchange for money. In her adult years, she drank alcohol and occasionally consumed hard drugs. From the age of 28, she was hospitalized several times for schizophrenia (meeting the diagnostic criteria). She consulted with priests and chose to participate in monthly exorcism rituals for 18 months, but they did not work.	She suffered from auditory hallucinations (after consuming hard drugs she began to hear voices of people she knew, which comforted her). From these hallucinatory experiences, she became convinced that she had clairvoyant abilities. She also heard positive voices from deceased friends who claimed to be the devil, and she wanted to get rid of them. She did not have dissociative symptoms with distinct identities, nor did she meet the diagnostic criteria for dissociative disorders.	Religious (spirit possession).	Religious (through exorcism).	She opted for an exorcism, through which she managed to soothe the distressed voices. However, according to her, this exorcism also allowed Lucifer to enter. She found companionship in Lucifer, who helped her control her negative impulses. She decided to stop the exorcisms because the priest did not support or validate her clairvoyance.



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Pietkiewicz et al. (2021a)	41	M	25	His parents divorced because his father was an alcoholic, a drug addict, and also violent. He reported unwanted sexual experiences with his grandmother and cousin when he was ten years old. He abused marijuana from the age of fifteen and was convicted of driving under the influence of drugs. He attempted suicide twice. At age 22, he was diagnosed with schizophrenia and hospitalized three times. His mother justified his paranoia and attacks with demonic possession, introduced him to the field of exorcism rituals, and made him participate in other liberation rituals.	When he experimented with different drugs, he began to have auditory hallucinations accompanied by strange physical sensations. The voices he heard insulted him and challenged him to be more "assertive", to be bolder and more arrogant. He had delusions of possession, reference, persecution, and grandeur. He exhibited confused and disorganized thoughts along with cenesthetic hallucinations. According to the psychiatric report, he did not meet the criteria for a dissociative identity disorder.	Religious (spirit possession).	Religious (through exorcism).	By participating in these rituals, he accepted the supernatural and religious interpretations, which reportedly allowed him to better understand his symptoms. There is no information on the subsequent course of the case.
Pietkiewicz et al. (2021a)	42	M	30	His parents divorced when he was young, they abused alcohol and his mother was also physically violent. He abused marijuana and methamphetamine from the ages of fifteen to twenty-three. He was hospitalized several times for assaulting strangers and using illegal substances. He was diagnosed with schizophrenia. When his mother died, he had trouble with daily functioning and after a suicide attempt, he was admitted to a social care home three years before the interview. Before his mother passed away, she took him to exorcists, who restrained him with leather straps. As he had been diagnosed with schizophrenia, the voices continued despite pharmacotherapy. He refused to accept the medical diagnosis of schizophrenia and attributed everything to his demonic possession. The parents divorced due to alcoholism issues and certain instances of physical abuse by the father. She had no intimate sexual relationships with others and was involved with youth religious groups since childhood. She reported difficulties with trust, establishing, and maintaining friendships. There was a predominance of emotional instability, low self-esteem, and feelings of rejection. At the age of fourteen, she consulted exorcists and underwent several individual exorcisms. She doubted that she was possessed, believing that her faith meant she could not be possessed by the devil.	He denied having hallucinations. He felt compelled to make strange gestures or movements. He felt that everyone was watching and ridiculing him and even perceived those physical objects or animals were hostile towards him. He avoided people, became vulgar, and was violent. He had issues with impulse and emotional regulation. He did not have post-traumatic stress disorder, amnesia, or symptoms of dissociative identity disorder.	Religious (spirit possession) and psychiatric (personality disorder).	Religious (through exorcism).	The exorcists became sources of support for him. However, since he entered the social assistance shelter, he only attended deliverance prayers by phone. No information was reported on the progress of the case.
Pietkiewicz et al. (2021b)	43	F	19	The parents divorced due to alcoholism issues and certain instances of physical abuse by the father. She had no intimate sexual relationships with others and was involved with youth religious groups since childhood. She reported difficulties with trust, establishing, and maintaining friendships. There was a predominance of emotional instability, low self-esteem, and feelings of rejection. At the age of fourteen, she consulted exorcists and underwent several individual exorcisms. She doubted that she was possessed, believing that her faith meant she could not be possessed by the devil.	Presence of motor attacks or crises with no epileptic origin, difficulty in receiving Holy Communion, disturbing religious dreams, and anger towards priests. She was convinced that she had "mediumistic" powers.	Religious (spirit possession) and psychiatric (dissociative identity disorder).	Religious (through exorcism).	A mentor from her youth group took her to the exorcism ritual because the medical treatment for her non-epileptic attacks was ineffective. There is no information on the subsequent course of the case.
Pietkiewicz et al. (2021b)	44	F	20	She was involved in youth religious groups from childhood, although she had limited social contacts (she only maintains friendship online with three friends). She was convinced that she made a pact with the devil at the age of sixteen in exchange for saving a friend from excessive masturbation. Members of her community showed interest and concern for her state of possession and prayed for her. She never received psychiatric treatment or psychotherapy. She was referred to a psychiatry unit for the first time following the advice of a Catholic exorcist priest. The woman claimed to be willing and motivated to receive psychological help.		Religious (spirit possession) and psychiatric (dissociative identity disorder).	The report does not indicate any treatment or intervention.	The report does not contain the clinical progress of the case.
Pietkiewicz et al. (2021b)	45	F	22	She rarely participated in religious practices, and if she did, it was under pressure from her parents. At the age of fourteen, she was diagnosed with multiple sclerosis and subsequently treated with steroids. The report mentioned problems controlling anger towards her mother, conflicts with a neglectful and absent father, difficulties calming down, lack of friendships, and a history of two suicide attempts. She was worried about her future and the limitations associated with her illness. She participated in some exorcism rituals due to parental pressure.	She had experiences of intense pain during religious rituals (essentially the sacraments and especially during confession). She suffered from amnesia when sending offensive text messages to her friends. A depressive mood prevailed, feeling empty, with outbursts of anger, suicidal thoughts, and episodes of intense physical and verbal aggression.	Religious (spirit possession) and psychiatric (dissociative identity disorder).	The report does not indicate any treatment or intervention.	The report does not contain the clinical progress of the case.



Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Pietkiewicz et al. (2021b)	46	F	22	She lived with her mother and grandparents. The grandparents were extremely religious. Her parents divorced due to her father's alcoholism and physical abuse. She never had a romantic relationship, intimate sexual contacts with others, or close friends. She rejected the idea that she was possessed and claimed to have undergone individual exorcisms for the sake of her mother. Her thoughts were focused on her mother's well-being and on pleasing her, not on what she herself believed.	Presence of total or partial amnesia for certain actions that evoked feelings of shame, guilt, and fear of losing control. She suffered from anger attacks, problems with emotional self-regulation. A depressive mood prevailed.	Religious (spirit possession).	The report does not indicate any treatment or intervention.	The report does not contain the clinical progress of the case.
Pietkiewicz et al. (2021b)	47	F	26	Her parents support her financially, but she reports conflicts with her father, as he used to physically abuse her. She has never been in a relationship nor had intimate contacts, and she has a limited social group. Involved in religious activities, she participated in church youth groups since childhood. She underwent individual exorcisms for three years, but these did not resolve her emotional issues.	Irritable behaviors, high irritability, outbursts, and anger attacks were identified. She also tended to scream and break objects during the crises of supposed possession. When attempts were made to calm her, she lacked physical and emotional reaction. She exhibited sleep disturbances.	Religious (spirit possession) and psychiatric (dissociative Identity disorder).	Religious (through exorcism).	The priest attempted to renegotiate the meaning of her symptoms, helping her to become convinced that she was suffering from a kind of spiritual oppression (as if it were a lesser degree of possession), where there were spirits representing her emotions. This was done as a therapeutic metaphor that allowed her, in part, to externalize her emotional conflicts. There is no information on the subsequent course of the case.
Pietkiewicz et al. (2021b)	48	-	27	She reported conflicts with her father, who abused alcohol and was violent. She identified as a lesbian but without sexual contacts; she ended the relationship with her girlfriend because it conflicted with her religious beliefs. She was involved in church activities, prayer groups, and had some friends from these communities. She participated in liberation rituals for eight months. Exorcisms were recommended for her due to demonic influence attributed to the music she listened to, her way of dressing, and her interest in the occult.	Intense anger towards members of the religious community, offensive text messages to her confessor, and returning the Holy Communion; she exhibits behaviors covered by amnesia. Self-aggressive intrusive thoughts, difficulties falling asleep, nightmares, and irritability.	Religious (spirit possession) and psychiatric (dissociative identity disorder).	The report does not indicate any treatment or intervention.	The report does not contain the clinical progress of the case.
Pietkiewicz et al. (2021b)	49	M	29	He engaged in religious practices. He broke up with his partner when his confessor justified his problems on the grounds that he was in an extramarital relationship. He was diagnosed with an autoimmune disease and had previously sought counseling for a few months. He saw an exorcist for six months, convinced that his neighbors were cursing him and that he was under the influence of spirits. He was convinced that his somatic symptoms worsened during conversations with the priest.	Irritability and tremors during group prayers or liberation rituals. She had similar reactions when she believed people were trying to belittle her, which could lead to screaming, breaking things, and self-harming (slapping herself, cutting, and saying she hated herself).	Religious (spirit possession) and psychiatric (dissociative identity disorder).	Religious (through exorcism).	The report does not contain the clinical progress of the case.
Pietkiewicz et al. (2021b)	50	F	37	Her ex-husband was violent and unfaithful, and now she is pregnant by her current partner. She has been visiting a psychiatrist for 15 years for anxiety and depression and has made three suicide attempts (at ages 13, 16, and 34), avoids close relationships, and reports conflicts with her parents especially with her father who was an alcoholic and violent. She participated in deliverance ministries for three years during which she had seizures, cried a lot, and became unresponsive. She was referred to an exorcist after becoming self-harming and exhibiting laughter and crying during deliverance rituals.	He had relationship issues and mood imbalances, with a certain predominance of depressive episodes accompanied by high anxiety. He developed intrusive thoughts and urges for self-harm. He believes that spirits caused his mother's neurological illness, his own suicide attempt, the car accident he was involved in, and his parents' conflicts.	Religious (spirit possession) and psychiatric (dissociative identity disorder).	The report does not indicate any treatment or intervention.	The report does not contain the clinical progress of the case.

Source	Case	Sex	Age	Background	Symptoms	Diagnosis	Treatment	Result
Exline et al. (2021)	51	F	-	<p>She and her husband frequently attended a charismatic church. She took an intensive course at her church on spiritual warfare and emotional healing, where she also identified evil spirits that could influence people. She was part of the prayer team and had experiences giving and receiving prayers for healing and liberation. Her husband suggested she came to therapy because of her mood.</p> <p>She came from a very religious family. No one in her family was undergoing psychiatric treatment. Her relationship with her maternal grandfather was good, and he brought her closer to religion. Her behavioral problems began when he died. She learned in her youth camps that the unusual behavior of group members was attributed to possession; this sparked her interest and was the first time she exhibited disruptive behavior. Since then, in religious contexts, she regularly experienced episodes of anger, convulsions, and episodes of derealization. The exorcisms began when she was 15 years old.</p>	<p>She believed she had thoughts of malevolent influence. She was frightened that the devil might deceive her into straying from God's path. She began to have obsessions with demonic influences in other people. She had fantasies about sneaking away or running away at night.</p> <p>She experienced auditory hallucinations and attributed them to supernatural thoughts. She said that individuals who believed in God might understand the spiritual dimension of such phenomena. The priests told her she was "possessed." She attributed all her behaviors to this assertion by the priests, which is why she was reluctant to give up exorcisms and to consider alternative explanations for her aggressive and sexual impulses.</p>	Religious (spirit possession) and psychological (psychological distress).	Psychiatric (pharmacological treatment).	<p>The report does not contain the clinical progress of the case.</p> <p>Over time, she felt disappointed because the priests had lost interest in her case and stopped the exorcisms. She broke off her contacts with religious groups and moved to another city. She completely changed her environment, including her social circle. Her convulsions and feelings of derealization disappeared.</p>
Pietkiewicz et al. (2022)	52	F	42	<p>She and her husband frequently attended a charismatic church. She took an intensive course at her church on spiritual warfare and emotional healing, where she also identified evil spirits that could influence people. She was part of the prayer team and had experiences giving and receiving prayers for healing and liberation. Her husband suggested she came to therapy because of her mood.</p> <p>She came from a very religious family. No one in her family was undergoing psychiatric treatment. Her relationship with her maternal grandfather was good, and he brought her closer to religion. Her behavioral problems began when he died. She learned in her youth camps that the unusual behavior of group members was attributed to possession; this sparked her interest and was the first time she exhibited disruptive behavior. Since then, in religious contexts, she regularly experienced episodes of anger, convulsions, and episodes of derealization. The exorcisms began when she was 15 years old.</p>	<p>She believed she had thoughts of malevolent influence. She was frightened that the devil might deceive her into straying from God's path. She began to have obsessions with demonic influences in other people. She had fantasies about sneaking away or running away at night.</p> <p>She experienced auditory hallucinations and attributed them to supernatural thoughts. She said that individuals who believed in God might understand the spiritual dimension of such phenomena. The priests told her she was "possessed." She attributed all her behaviors to this assertion by the priests, which is why she was reluctant to give up exorcisms and to consider alternative explanations for her aggressive and sexual impulses.</p>	Religious (spirit possession) and psychiatric (dissociative identity disorder).	Religious (through exorcism).	<p>The report does not contain the clinical progress of the case.</p> <p>Over time, she felt disappointed because the priests had lost interest in her case and stopped the exorcisms. She broke off her contacts with religious groups and moved to another city. She completely changed her environment, including her social circle. Her convulsions and feelings of derealization disappeared.</p>





ESSAY

# The Dark Spirit of the Trickster Archetype in Parapsychology

**Lance Storm**

lance.storm@adelaide.edu.au

orcid.org/0000-0002-6228-6150

School of Psychology  
University of Adelaide  
Adelaide, SA, Australia

SUBMITTED August 21, 2022

ACCEPTED April 11, 2023

PUBLISHED December 31, 2023

**HIGHLIGHTS**

All scientists, and notably those working in frontier areas, must be vigilant to protect against over-interpretations and mis-interpretations of research results even when these are not outrightly ambiguous.

**ABSTRACT**

In this paper, the phenomenology of the Trickster (its 'darker' side) is explored. The archetypal Trickster is shown to manifest as psychosociological aberrations and bizarre physical effects often associated with unique individuals during certain emotionally charged states. Though the Trickster and its many variants have mythological roots, the modern-day equivalent (free, for example, from anthropomorphization) can be seen as an activated psychological proneness to err in thinking when a liminal phase is entered into—that borderland between doubt and certainty. Mainstream academia considers the field of parapsychology to be controversial—it is marginalized because the phenomena it studies (the paranormal) is mostly illusive, usually weak even when proved to be statistically anomalous, and the psi process itself has not been theoretically explained. This state of affairs propagates uncertainty which can trigger 'tricksterish' (spurious) interpretations of parapsychological data and findings: Long-term experimenter psi and chronological decline effects are cases in point. Due caution and bias-free analysis of the data and findings may help ameliorate, perhaps even dissolve, the problem of the Trickster.

**KEYWORDS**

Archetypes, meta-analysis, paranormal, parapsychology, psi, synchronicity, Trickster.

<https://doi.org/10.31275/20232715>

**PLATINUM OPEN ACCESS**



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

**INTRODUCTION**

To write this paper, I have to admit a certain dependence on a controversial book by George Hansen, *The Trickster and the Paranormal* (Hansen, 2001). Occasionally Hansen himself seems evidently prone to Trickster

phenomenology, but his general message is nonetheless sobering and should make parapsychologists think hard about their positions in the field, no matter how entrenched and safe they think they might be inside or outside academia. Likely as not, that 'entrenchment' and apparent safety might underlie a naïve system of belief set



up by the parapsychologist to help create a false sense of security.<sup>1</sup> Ultimately, parapsychologists can find themselves marginalized, which is one of the main issues Hansen deals with in his book. However, this paper aims not to explore those issues (at least, not entirely); of greater interest is finding out how the Trickster archetype relates to a range of effects, not necessarily paranormal.

The Trickster is only one of many archetypes. Jung (1952/1969, para. 841, 847) described archetypes as nodal points or structural components of the so-called collective unconscious (deep in the mind) that govern or influence our “patterns of behavior” (para. 841). In other words, archetypes play a pivotal role in how we think, feel, and act (see also Haule, 2011, for neuropsychological parallels and justification for the construct). These effects are most often psychological but may also be parapsychological, as observed by Jung (1952/1969) in his synchronicity theory. It may help to conceive of archetypes in a similar way instincts are understood. The archetype functions (metaphorically) like a blueprint that is not evident in the building *per se*, but must be presumed to exist. Since these archetypal effects often occur outside our conscious control, they can give the impression that something other is responsible.

While I will state that it is likely some of these Trickster effects may be examples of synchronicity—an acasual connecting principle (defined shortly)—other tricksterish effects are not paranormal *per se*, but may include spurious research findings in parapsychology, which puts an even bigger burden on the parapsychologist’s shoulders. As I hope to show, readily identifying signs of tricksterish elements in psi research can help us avoid the pitfalls of the Trickster archetype.

Hansen (2001) describes the Trickster as a personification of a “collection of abstract properties that tend to occur together,” such as “disruption, deception, ... psi phenomena, and marginality” (p. 427). Further details can be found in Jung (1959/1968, para. 456-488). The Trickster is a personality of “no fixed shape, form or image” (p. 427), but ‘he’ seems more than a personality, and a changeable, fickle one at that (cf. Hermes/Mercury, Pan, and Loki for Western mythological equivalents).<sup>2</sup> Outwitting the gods of the various pantheons for his own sake (sometimes just to make a point), or for the sake of humankind, he (or it) is best described as a process and is activated (i.e., the archetypal qualities that it embodies are constellated psychologically) when a liminal phase is entered into. This liminal phase or condition can lead the individual, or a social group, to acts of subversion or deconstruction of binary (i.e., oppositional) systems whereby “there is a reversal of the positions of privilege or a blurring or collapse of the line dividing the pair [of

opposites]” (p. 62). Such opposites include God/Human, Heaven/Earth, Male/Female, Life/Death, rational/irrational, normal/paranormal, and so on. For example, rational behavior may become irrational, and even the normal physical rules we rely on can be overturned.

The Trickster, then, is activated under circumstances where conventional, privileged structures are criticized, threatened, or indeed attacked and subverted.<sup>3</sup> These criticisms can be seen as ‘liminal’ or as the embodiment of ‘liminal phases’. Thereby, the Trickster challenges the rationalistic assumptions uncritically laid down and maintained by our institutions. These conventional structures are embodied in academia—specifically our universities and other public institutions, including our political and bureaucratic structures, corporate and business enterprises, and orthodox religions (and let us not forget the media, who are never impartial when it comes to controversy). Ironically, we also see situations in our institutions where the Trickster is successful in overthrowing convention and takes root in the form of, say, new policy, and consequences such as reduced status, relationship or career failure, etc., can threaten those who fail or refuse to adopt the new perspective.

The Trickster can take a more subtle guise. There is the Trickster of misinformation or misunderstanding (or even self-deception) about the nature of things, as is propounded by amateur and professional paranormal researchers who mistake one thing for another or are too easily swayed by half-truths or insufficiently developed theories and models (the same argument can be extended to conspiratorial ideation, which is not to undermine the truth-seeking objectives of its claimants). Yet for all that, the result can be an increased consciousness, *provided one is open to being wrong*. We also have the Trickster of serendipity (accidentally finding something of use while looking for something else), which can be mistaken for synchronicity.

Then there is the Trickster of the anti-hero, who always lands on his feet and succeeds in spite of his stumbling (e.g., Maxwell Smart in the TV show of the same name, and Inspector Clouseau of the *Pink Panther* films; see also Cambray, 2009). There are so many Trickster types, it is almost impossible to keep track of them all (e.g., ‘Q’ in the TV Sci-Fi series *Star Trek: The Next Generation*, whose role is to mislead for higher, but often self-serving purposes). Of course, all these types are idealized versions to better illustrate the concept, but we can sometimes spot tricksterish activity before our very eyes, and even get caught up in it. And just as it is possible to be a saint one day and a sinner the next, tricksterish manifestations come and go, and it is that elusive unpredictability that catches the individual unprepared.

What does the Trickster have to do with the paranormal? The simple answer is the paranormal too easily threatens conventional privileged structures. While delving into the study of psi and the supernatural, or having a passing interest in it, does not mean one need fear activation of the Trickster archetype in oneself, one may be a victim of the activated Trickster in someone or something else. For example, some Trickster individuals (e.g., James Randi), Trickster institutions (e.g., the Committee for Skeptical Inquiry), and Trickster publications (e.g., *Skeptical Inquirer*), feel compelled to debunk all manner of paranormal claims without serious investigation, or (what is worse) even bring to a close, by devious practices, parapsychological research programs in university labs or units, and cause trouble for the members of those labs or units (for examples, see Thalbourne, 1995). These, I feel, are the parapsychologist's real threats—not so much activation of the archetype from within.

Historically, the supernatural, and therefore the paranormal, emerged and evolved alongside the hegemonic tradition of the various privileged structures, and since the paranormal is anything but normal, it is immediate fodder for mainstream attack, persecution, and ostracization, as just described. Jung (1959/1968) was strongly aware of these negative tricksterish forces (para. 457, 469) and their sociological impact—hence, his hesitancy to introduce synchronicity formally to the world, as indicated in his Foreword to his *Synchronicity* essay (Jung, 1952/1969, para. 816), publication of which was delayed by 20 years because of the negative reception he feared for his theory.

Most people who have read even a little history are aware of 'dichotomous' or dualistic schemas (even prejudices) that are age-old, and part of the human condition. The gender divide and the Reformation are classic examples, the repercussions of which have echoed down the proverbial corridors of time and are still with us. Hansen (2001) gets more concrete when he takes other examples from the real world. For example, in the world of the paranormal, the Trickster is activated in the relationship between UFO sightings and psychic ability—a relationship noted earlier by journalists (e.g., Keel, 1978) and researchers (e.g., Basterfield, 2001; Basterfield & Thalbourne, 2002). This relationship is not coincidental, but destined nonetheless to activate the Trickster quality of marginalization. The likely consequences? Public ridicule by the media; loss of vocation, ostracization by friends, family, and loved ones; and even early death.

Patterns of events like these occur over and over again, and they seem to have beleaguered parapsychologists since the late 1800s. Hansen (2001) points out that the Trickster is also constellated as a result of attempts

to institutionalize parapsychology and psychical research because *organizing* the paranormal is antithetical to the Trickster. Hansen gives examples to show how success in parapsychology, in the form of establishing laboratories, research output, and journal circulation, is generally short-lived (other researchers have commented on this problem—(Schlitz, 2001; White, 1994). Even successful runs of psi experiments are destined to meet with deceptive Trickster phenomenology in the form of real and *apparent* experimenter effects, decline effects, and other biases that make psi elusive and 'mercurial' (i.e., tricksterish)! But even these so-called effects could be tricksterish nonsense. For the rest of this paper, I will focus on these phenomena and show how they may be physically real but can also be mere phantoms, in both cases generated by the Trickster archetype, especially its darker side. As I will seek to demonstrate in this paper, I believe the Trickster can be foiled, and though it cannot be torn asunder from the human psyche, it loses traction when we become more vigilant and aware of our biases.

### The Trickster in the Laboratory

There is one place where the Trickster is unwelcome—the laboratory. The Trickster constellates during specific moments when events and outcomes hang in the balance—these moments mark the critical phase of an experiment when probabilities of outcomes shift so that unlikely and unwelcome results (e.g., accidents) may be likely. Notably, these may be as rare as we expect them to be, thus evoking chance as a causal factor, but that does not necessarily lead to a satisfactory solution; especially at the stage when data and patterns in the data are to be interpreted. Jung (1959/1968) warns of the types of "accident", "gaffe", "slip", or "faux pas" that can thwart one's will and one's actions which are naïvely "chalked up as defects of the conscious personality" (para. 469). Jung wants it understood that the Trickster is like a personality in its own right working behind the conscious personality, and these 'defects of the conscious personality' themselves can open the door to trickster phenomenology.

There are well-known incidents where this problem has been demonstrated. Nobel Prize winning physicist Wolfgang Pauli is a case in point. As the story goes, Pauli had such a unique but destructive psyche that experimental physicist Otto Stern banned Pauli from his Hamburg laboratory. There were other occasions at the physics laboratory in the University of Göttingen, Germany (an expensive measuring device stopped working), and likewise at Princeton University, New Jersey (a particle accelerator sustained serious fire damage). Pauli seems to have had an affinity with fire and the damage it can cause.

His peers even coined the term ‘Pauli Effect’—jokingly, a second Pauli ‘Exclusion Principle,’<sup>4</sup> According to which, “a functioning device and Wolfgang Pauli may not occupy the same room” (Burri, 2005).

The Pauli Effect, which is markedly synchronistic in nature, may have been exacerbated by the fact that Pauli drank to excess, and he was noted for his irritability when giving seminars—his students dubbed him the ‘scourge of God’ and ‘the terrible Pauli’ (Peat, 2008). Synchronistically, the breakages in the laboratory are mere physical correlates (accidental parallels) of Pauli’s fractured mental state. Jung (1951/1969, para. 984) defines and describes synchronicity in the following ways:

1. The coincidence of a psychic state in the observer with a simultaneous, objective, external event that corresponds to the psychic state or content ..., where there is no evidence of causal connection between the psychic state and the external event, and where, considering the psychic relativity of space and time, such a connection is not even conceivable.
2. The coincidence of a psychic state with a corresponding (more or less simultaneous) external event taking place outside the observer’s field of perception, i.e., at a distance and only verifiable afterward.
3. The coincidence of a psychic state with a corresponding, not yet existent future event that is distant in time and can likewise only be verified afterward.

Jung adds that an archetype usually underpins synchronicity. C. A. Meier (2001) relates a synchronistic event involving inner and outer fire which took place outside the Café Odeon in Zurich where Pauli was seated, “pondering over his inferior function (feeling-color red)” (p. xviii):

There was a large, unoccupied car parked outside the café. [Pauli] could not take his eyes off it, and then it suddenly caught fire and burst into flames. (p. xviii)

This example gives further evidence of the psychological (inner) link of the experient to the physical (outer) event without the need to assume the link is causal, which is to say, Pauli did not *cause* the car to catch fire—that can be explained in any number of normal ways. In fact, relatively speaking, acausality *per se* is not the mys-

tery; the real mystery is how Pauli managed to get himself into these situations. Perhaps seeking an answer, it is worth noting that Pauli entered into therapy with Jungian analyst Marie-Louise von Franz whose toils with him have been made public (Gieser, 2005).

But what does the Trickster have to do with Pauli? Does it mean Pauli played tricks on people? No, of course not. At least, not out-rightly and certainly not consciously—when it comes to the slippery concept of the paranormal, we never really learn the source of the mischief (for want of a better term), even if we have our suspicions. Notwithstanding the fact that even scientific equipment can fail, and quite dramatically, and there is the possibility of incompetence on the part of Pauli’s peers who might have been looking for a scapegoat to cover their own ineptitude, the Pauli Effect might still be referred to by some as Pauli’s psi. But ‘psi’ could be a misnomer—as was the case with Ted Owens (the PK Man). Mishlove (2000) was never sure that chance could not account for some of the seemingly paranormal feats attributed to Owens. In the real world, though we may convincingly rule out causal connections, we still do not know how to rule out chance factors. For example, mechanical devices and equipment can also fail of their own accord, and since the phenomena are rare and surprising and seem to happen in the presence of certain people, our interest and attention should, by rights, switch to those persons rather than the phenomena (see Braude, 2007, pp. 148-149). As already noted, acausality *per se* then becomes less of a mystery compared to the greater mystery of how it is that Pauli managed to get himself into these situations. In the laboratory, we must note that Pauli was not welcomed as an experimenter or collaborator; quite the opposite—he was uninvited, a *persona non grata*—which speaks volumes.

Any experimenter can be a ‘Pauli-type’, though most would say they were just ‘having a bad day’ (such phenomena are referred to elsewhere as “experimental miscarriages”, and can include “various accidents such as equipment failure, procedural error, inappropriate randomizations, etc.”—Kennedy & Taddonio, 1976, p. 10). Of course, the Pauli-type *in reverse* is also possible, resulting in positive outcomes. Though nobody really knows if it is psi, whose it is, and whose is the strongest (the experimenter’s or the participant’s), psi from the experimenter has come to be known as the ‘psi experimenter effect,’ and many parapsychologists make hypotheses about it, they discuss it, they argue about it, and they even expect it (more on that later).

Given these few points, let us now consider the Trickster in slightly more positive aspect (some might say ‘Trickster in reverse’)—an arguably favorable effect.

In another synchronistic case, we have tricksterish phenomena at play in Jung's (1952/1969, para. 872-915) research into astrology. Jung conducted a series of studies in the 1940s as an attempt to test his theory of an underlying meaningfulness that would connect causally unrelated events. Jung was trying to establish empirical (statistical) evidence of a "psychic equation" between external events (astrological aspect) and inner experience (choice of marriage partner). Results suggested the presence of synchronicity in the form of three Lunar aspects of special interest to Jung (i.e., Moon/Sun, Moon/Moon, and Moon/Ascendant), each of which appeared in three respective subsets of data (para. 902), formed seemingly randomly "just as the post brought them in" (para. 873). The corrected statistics calculated on the pooled data were first regarded by Jung as "inconclusive" (1951/1969, para. 989), but not to "a degree which one could have described as probable" (1952/1969, para. 906), meaning the results were too improbable to be attributable to chance alone. Oddly, he still referred to "the chance nature of the result" (para. 909). The upshot of the whole effort is that Jung first found something, then he wasn't sure, then he was, then he wasn't!

The story, however, does not end there. Of particular relevance, synchronistically speaking, are three smaller experiments that Jung himself instigated. Three experimenter-subjects were instructed to select sub-samples randomly from the larger sample of natal charts used in the main analysis. The type of conjunction that appeared more often than any other in each sub-sample exactly described the psychological profile of each of the relevant subjects who selected that sub-sample:

1. The first subject was "in a state of intense emotional excitement." Mars is the "emotional" planet, and the sub-sample was dominated by Mars aspects (para. 897).
2. The second subject was a female patient "whose main problem was to realize and assert her personality in the face of her self-suppressive tendencies." Her sub-sample featured the ascendant-Moon conjunction, which has a passive (suppressed) influence in the chart (para. 898).
3. The third subject was a woman "with strong inner opposition whose union and reconciliation constituted her main problem" (para. 899). Sun-Moon conjunctions dominated her selection, symbolizing the union of opposites.

Statistically, the results were not considered significant, but the variances in the data, which indicated the featured conjunctions of each sub-sample, corresponded with the psychic state of the subject. Serendipitously, Jung had found a variant of what he was looking for—suggestive evidence of meaningful coincidence, not once, but three times.

Seemingly in denial, Jung later made this unwarranted remark to a friend: "what an excellent joke was made with the use of astrological statistics; people have even thought I wanted to prove something in favor of astrology. It is hardly worthwhile to deal with all this pack of nonsense" (J. Kirsch, 1972, as cited in Progoff, 1973, p. 137). In truth, Jung was seeking a proof of sorts for *meaningful coincidence* as an *astrological effect* (1952/1969, para. 867). As a side issue, he refers to the three above-listed effects as synchronistic demonstrations of the "secret, mutual connivance" (para. 905) and definitely claimed his co-workers' psyches were connected to the physical material (natal charts) by way of their apparently random selections that demarcated outcomes as nothing other than meaningful coincidence. While those 'selection biases' were not categorical proofs of astrology, it can be conjectured that the human psyche was involved in the synchronistic process.

A similar case of serendipity occurred in Christopher Moreman's (2003) fabrication of a so-called cross-correspondence effect.<sup>5</sup> Using pseudo-scripts (randomly selected portions of text from 15 randomly selected library books) and pseudo-mediums, he showed how very easy it is for investigators to concur that similar (meaningful) patterns can present across unrelated texts from different books. Parapsychologists and statisticians might wish to muse over the implications of Moreman's finding, but I also make the point that in the very same study, Moreman spotted a "surprising coincidence": One of his randomly sampled texts was by Rudyard Kipling, whose sister Alice Kipling Fleming (as 'Mrs. Holland') was a medium involved in the original cross-correspondences work. Moreman was prompted to note "how often strikingly meaningful coincidences actually occur" (p. 232). While Moreman shows how cross-correspondences can be fabricated and, therefore, can be meaningless, the irony and meaningfulness of the Kipling correspondence did not escape Moreman.

These trains of events are Trickster phenomenology at its most surprising, or even frustrating, if one wants to view it that way, as most people will see that these timely interferences get in the way of the so-called objectivity of science. Speaking of Jung's study, Progoff (1973) even noted that Jung thought there was some "trickster element at work" (p. 137). Slightly appropriate in this instance, it is interesting to note how Jung describes the Trickster

in a person's behavior whereby the person "manages to achieve through his [*sic*] stupidity what others fail to accomplish with their best efforts" (para. 456). But I am certainly not insinuating incompetence on Jung's part (only impatience, as he freely admits) or implying it is a characteristic of anyone working in fringe or mainstream science. And we have to take note of the second part of the quote—that our best intentions can still result in failure or misunderstanding. I will not elaborate on these aspects here—more importantly, the point I want to convey is that the Trickster plays out in a process that 'turns the tables' on us (as Jung and Moreman noted), and like all archetypes, it concludes with a shortlist of possible outcomes, all of which are predictable, and it is up to experimenters not to allow themselves to be deceived (the usual outcome) merely because they are swayed by what they perceive to be insurmountable evidence (for or against) that may later prove to be premature and/or not all that convincing upon closer inspection.

Jung (1959/1968) notes that the Trickster would be viewed with skepticism in a civilized society (for example, Parker & Millar, 2014, wish to avoid the anthropomorphic aspect the concept entails), but many of us would still describe our slip-ups as "fate playing tricks" or "things being bewitched" (para. 478) as if some outside entity was at work. And if we upscale, and propose that the Trickster might manifest in a more subtler guise, anything that happens worldwide to large groups of researchers over sustained periods of time might be naïvely viewed as good science when it was merely tricksterish science all along. That is a most important lesson to learn and highly relevant to the rest of this paper.

### Experimenter Psi and the Decline Effect

In this section, I will speak of two major problems that are, to varying degrees, the bane of the psi experimenter's existence—the experimenter psi effect and the decline effect. These problems are not unique to parapsychology, and they are not necessarily as bad as each other—experimenters can expect to come across one or both of these problems from time to time. Of course, experimenters will disagree with each other over which is worse. The point of this section is not to settle that score, but demonstrate the relevance of each problem to psi experimentation in the context of Trickster phenomenology, and show how subtle and tricksterish elements can be involved in the interpretation of experimental results.

The experimenter psi effect (a.k.a. 'E-psi') refers to "unintentional psi which affects experimental outcomes in ways that are directly related to the experimenter's needs, wishes, expectancies, or moods" (Kennedy & Tad-

donio, 1976, p. 1; for a discussion of E-psi, see Palmer & Millar, 2015, pp. 295-299).<sup>6</sup> This definition is limited, as we cannot rule out the experimenter's intentional (i.e., deliberate) psi, implied in the fact that some experimenters/investigators arguably try to "psychically influence their results" (see Palmer & Millar, 2015, p. 296). Also, those needs, etc., could be pro-psi or anti-psi. Either way, the experimenter is likely to have more motivation than participants, so the assumption of E-psi seems not only plausible but seemingly confirmed in some instances. However, this motivational bias does not mean E-Psi is always present; nor should we assume any outcome from E-Psi is necessarily in the direction favored. E-Psi is well documented but tends only to be discussed as a within-study effect (Kennedy & Taddonio, 1976). Sometimes related to E-Psi, is the so-called decline effect (DE), which is defined as "the tendency for high scores in a test of psi to decrease, either within a run, within a session, or over a longer period of time" (Thalbourne, 2003, p. 27). The DE is also well documented (Colborn, 2007; Rhine, 1969).

I must clarify my position on E-Psi and DEs. First, I am sure E-Psi will always be a problem as long as there are experimenters,<sup>7</sup> although I only see it as a problem *within* studies (if only because we cannot accurately determine participants' psi contributions let alone those of experimenters), but not so much a problem across studies (i.e., *between* studies). A solution to the problem of E-Psi is unlikely, but it is likely that E-Psi across studies (i.e., *between-studies* E-Psi)—as can be shown in the meta-analyses—is a pseudo-problem anyway.

Second, Thalbourne's definition of DE indicates there are two kinds of decline—'*within* study' and '*between* studies'.<sup>8</sup> In this paper, my main focus is on the *between-studies* DE, which is a steady decline in psi across studies conducted by a broad range of experimenters and laboratories. My reasons for this focus will become evident throughout this paper, but basically, *within-study* declines are mostly caused by boredom, lapses in interest, and loss of motivation (I do not dispute these reasons), whereas the *between-studies* DE requires more sophisticated explanations such as improvements in study quality over the years, or deliberate changes in experimental design (from simple and fun, to complex and tedious) because theoretically oriented experimenters want to understand the psi *process* rather than merely *prove* psi's existence. To varying degrees, Bierman (2001) disputes both explanations for DE, as I do. I argue that *if* there appears to be a *between-studies* DE, that decline is *more than likely* an artifact. However, mistakenly accepting the DE artifact as a genuine effect (this happens, and often) illustrates how Trickster phenomenology can hold unwarranted sway over a community. I will make the

same argument for E-Psi.

## Types of Experimenter

Millar (2012) argued that “parapsychology’s elite are themselves particularly endowed with psi ability: they attribute scoring to subjects, in line with the psychological tradition, while it actually comes from their own psi” (p. 1). The ‘elite’ are the experimenters, and ‘subjects’ are participants. Under the assumption that experimenter psi (E-Psi) exists (albeit to varying degrees), there are only two mutually exclusive ways it might manifest: Either exactly as Millar proposes—Hypothesis 1 (H1): Experimenters cause *all* the psi and participants do not have any psi—or Hypothesis 2 (H2): Experimenters can combine their psi with their participants’ psi (this is the more conventional view).<sup>9</sup> Whichever is the case, it is the custom for psi researchers to seek support for the psi hypothesis by finding a significant effect as psi-hitting, but E-Psi can sometimes manifest as psi-missing, and intentionally so (more on psi-missing later).

Having stated H1 and H2, I find I need to consider both in the light of the “distinct groups” conceived by Palmer and Millar (2015), who classify experimenters as “Virtuoso” (one who “regularly produces clearly significant results”), “So-So” (“occasional significance”), and “Psi Challenged”, a group who “(almost) never reports significance” (p. 298).<sup>10</sup> Parker and Millar (2014) argue that there are some star experimenters or ‘Virtuosos’ (e.g., Helmut Schmidt, Rupert Sheldrake) who do well on their own (i.e., they produce significant results when they self-test), which explains why they produce significant results in studies with participants (under the premise that participants have no psi), whereas less-gifted (‘Psi Challenged’) experimenters who do poorly on their own prove unable to replicate Schmidt’s and Sheldrake’s results (‘So-So’ experimenters are somewhere in between).

To argue that virtuoso solo experimenters must bring their psi to their experiments *because they are virtuosos* is not a valid assumption, as it is based on inductive logic (not straight-forward deduction). After all, I am not entitled to say there must be a black cat on my roof, and I need not check, because looking through my windows, I can see black cats on both my neighbors’ roofs. Granted, there may be *some* ideal scenarios as outlined, but perhaps ‘Virtuosos’ are merely good at encouraging psi in their participants. ‘Psi Challenged’ experimenters, however, may discourage psi in their participants. It is also possible that participants use psi to pick up the ‘vibe’ of their assigned experimenter to give him/her what they want. Despite the seemingly adequate measures to control such overt and covert psychological effects, some-

thing like this may have occurred in the landmark study by West and Fisk (1953), where West was notably psi-inhibitive, and Fisk was notably psi-conductive: West’s participants produced chance results, but Fisk’s produced psi-hitting (see also Wiseman & Schlitz, 1997). As Palmer noted: “each hypothesis can explain the results of the other” (Palmer & Millar, p. 297).

We must also consider intention, which manifests in the sheep-goat effect, as well as outcomes in systems of divination, such as *I Ching* (Storm & Rock, 2014) and Tarot (Blackmore, 1983). The unique divinatory outcomes (as feedback) are pertinent (meaningful) as far as participants are concerned (see Storm & Rock, 2014), but the best Millar would offer is that E-Psi is used to probe individual minds to determine their beliefs and/or mental states, and outcomes are E-psi-adjusted accordingly. But surely, these are virtuoso performances of a capacity far beyond Schmidt and Sheldrake. And because the effects are so obviously synchronistic (not garden-variety psi)—that is, outcomes are *meaningful*—the participant, as an individual, surely deserves all bragging rights if they produce a significant effect. It is perhaps no surprise that common sense prevailed, and Parker (not so much Millar) made a concession, admitting that participants must have their own agency: “if there are psychic experimenters then there have to also be psychic participants” (Parker & Millar, p. 45). So, as a matter of convenience, the problem of E-Psi invariably confines itself to the premise put forth in H2 above, and we have to abandon the idea that experimenters can maintain E-Psi consistently *and* do it with or without participants.

To add to the argument, Palmer and Millar (2015) argue that the “influence of the experimenter” could be found in a “large scale meta-analysis” (p. 298). While it is arguable that the Palmer-and-Millar classifications are transferable from solo-based to participant-based studies, we can agree that meta-analysis may tell us something more substantive about the limits of E-Psi. As it happened, Parker and Millar (2014) had earlier pointed out that the Ganzfeld meta-analytic results (in Storm, Tressoldi, and Di Risio, 2010) are “relatively independent of the experimenter” (p. 48; for other examples, see the next subsection). Those results indicate that at least *some* Ganzfeld psi (arguably most) *must be coming from participants*. I note, however, that the ‘E-Psi isolation problem’ is born of the nature of psi itself as a hypothesized effect that has virtually no limits—theorists can always conceptualize and re-conceptualize psi parameters to meet any theoretical contingency, so we cannot exclude H1 absolutely, but on parsimonious grounds, H2 is preferred.

## The Meta-Analyses: I. Experimenter Psi

Given H2, participants must be regarded as doing most of the psi work, and must account for most of the psi variance, but to a lesser extent E-Psi has variance of its own, which is to say, it too has positive or negative influence, but sometimes fails, and has no influence at all (even Millar would agree about E-Psi variance given his part in forming the above-listed classifications). I reach this conclusion about participant-psi and the limited role of E-Psi on empirical grounds: the meta-analyses I have co-authored (Storm, Sherwood, et al., 2017; Storm & Tressoldi, 2017; Storm et al., 2010, 2012) have found no significant investigator/laboratory differences in the following domains: free response,<sup>11</sup> ganzfeld,<sup>12</sup> forced choice,<sup>13</sup> dream ESP,<sup>14</sup> and sheep-goat effect (SGE). I find the same patterns in other researchers' meta-analyses dating back decades (NB: the following meta-analyses were conducted on databases comprised of many dozens, or scores, or even hundreds of studies):

- Ganzfeld: "... the significance of the overall effect is not dependent on one or two investigators" (Honorton, 1985, p. 61);
- Forced-Choice Precognition: "The effect is clearly not due to a few major contributors" (Honorton & Ferrari, 1989, p. 285);
- Dice Throwing: "the overall effect does not appear to be due to a few exceptional investigators" (Radin & Ferrari, 1991, p. 68);
- Sheep-Goat Effect: "these data provide strong evidence against the view that the results ... are attributable to a few 'lucky' major contributors" (Lawrence, 1993, p. 78);
- Free Response: "... no significant difference in effect size between studies with different principal authors" (Milton, 1997, p. 289);
- Extraversion/ESP Forced Choice: "... the impact of ESP/extraversion testing order is consistent across investigators and is not attributable to idiosyncratic research styles or other characteristics of a single prolific investigator" (Honorton, Ferrari, & Bem, 1998, pp. 264-266);
- Extraversion/ESP Free Response: "the ESP/extraversion relationship is consistent across investigators" (Honorton et al., 1998, p. 267);
- Direct Mental Interaction: "... no significant difference among the mean effect sizes obtained in these labs ["San Antonio, Las Vegas, Edinburgh, and Freiburg"]" (Schmidt, Schneider, Utts, & Walach, 2002, p. 12).

Ignoring my own studies for the moment, the parapsychological community had these facts about experimenters and laboratories before the end of the twentieth century—i.e., quite some time ago.<sup>15</sup> There appeared to be no convincing evidence of long-term E-Psi, yet it seemed that virtually no one noticed. We could argue that these experimenters may mostly be psi-believers, and that is why the meta-analyses produce significant overall effects, which also tend to cluster (hence, no experimenter/lab difference), even though there may be a few psi-non-believers conducting studies. In fact, one comparison (Storm et al., 2012) included the very successful psi-believing experimenter Rupert Sheldrake who was highly praised by Brian Millar (see Palmer & Millar, 2015), but we see that he did not excel (was not an outlier) when compared to other experimenters, and neither was the skeptical experimenter Richard Wiseman an outlier in the opposite (psi-missing) direction.

Most authors of the relevant meta-analytic studies seem rather casual (or quietly confident) and merely reported their findings in a perfunctory way, and only a couple downplayed the concern that had been generated by such critics as Akers (1987). For example, Honorton and Ferrari (1989) made the point that Akers was wrong in claiming that "successful parapsychological outcomes are achieved by only a few investigators" (p. 285). Lawrence (1993) also dismissed Akers's remarks. Overall, to maintain that between-studies E-Psi is a serious impediment to parapsychology is perhaps not the most productive attitude to hold—the meta-analysts should certainly agree. Yet many parapsychologists still appear to be overly concerned by E-Psi, and still express this concern (e.g., Hövelmann, 2015; Palmer & Millar, 2015; Parker & Millar, 2014). Irwin (2014), in his survey of members of the Parapsychological Association, stated:

The possibility that parapsychological effects on experimental psi data may stem from experimenters themselves has been recognized for nearly 30 years. Nevertheless, many contemporary parapsychologists continue to be mindful of our failure to resolve this dilemma and see it as one of the major problems facing parapsychology today. (p. 158)

Pertinent here is the earlier effort taken by Parker and Millar (2014) to identify the source of psi: They profiled some key figures in parapsychology based on psi-conducive style and manner that may have worked favorably on participants to elicit their psi, at least as much as E-Psi, if not more so. Other factors to be noted included laboratory ambiance, motivational factors such

as experimenter attitude, history effects over the duration of testing, prior experiences of success (and failure), and what is even more revealing, the “morphing” effect (an admitted “trickster effect” where the psi effect changes its guise across time and situation; p. 48). Despite this broad-based approach, they demonstrated that controls and manipulations have never been good enough to isolate E-Psi.

While some academic curiosity concerning *within-study* E-Psi may be warranted, parapsychologists should perhaps entertain less tricksterish notions and not be so dismayed by the pseudo-dilemma of *between-studies* E-Psi. Irwin (2014) noted that only one respondent “seemed prepared to accept experimenter-psi effects as intrinsic to the modus operandi of psi” (p. 159)—in the respondent’s own words: “*Experimenter effects are expected if consciousness has nonlocal properties*” (p. 159). We might take that to mean most other respondents are still bothered by E-psi nearly two decades into the 21st century. Of relevance, another respondent said there was “*Not enough consideration of the effects of ... the “Trickster archetype”*” (p. 155). Some degree of awareness might be all we need—just enough to curb our concern and limit our credulity. I must remind readers that the Trickster, as an activated archetype, is a psychological proneness to err in our thinking when a liminal phase is entered into—that borderland between doubt and certainty—that provides the trigger to err.

I suggest the Trickster archetype has been at play over many decades, giving us one big paranormal headache, but it has been found out. We cannot completely bury the phenomenon; it is reasonable to expect it to turn up in any given experiment. That is equally our problem; E-Psi will not go away entirely, but its global effect across studies looks more like a mere phantom than anything else. All that aside, the time spent looking for E-Psi was not wasted—parapsychologists found something worth knowing, and if they can adopt appropriate levels of *warranted* confidence and (not false) certainty commensurate with that finding, they are one step further towards relinquishing the doubt that triggers the Trickster that subsequently leads to the creation of spurious beliefs and findings.

Where the Trickster still rears his ugly head is in the insistence on E-Psi being a ubiquitous effect, occurring both *within* studies and *between* studies. As usual, the skeptics are our nemesis. Wiseman over-generalizes in dismissing E-Psi as the “get out of a null effect free” card (Wiseman, 2009, p. 37) when he should know that the string of meta-analyses cited above yield no evidence of between-studies E-Psi. At the very least, Wiseman should change his argument and tell parapsychologists to con-

fine their argument to within-studies E-Psi only, for Wiseman knows *from personal experience* that within-study E-Psi has been demonstrated (see Wiseman & Schlitz, 1997). Wiseman even managed to have his cake and eat it too, having gainfully used the so-called “Wiseman experimenter effect” (O’Neill, 2001, p. 5) to facilitate a non-significant result (Wiseman, 2001). Reference to later failed attempts to demonstrate E-Psi (as experimenter differences) only furthers my point (Parker & Millar, 2014).

Finally, Alcock (2003) says the psi-experimenter effect is really just “a lack of consistency, a lack of general replicability” (pp. 38-39), so we can take his comments as generally referring to within-study *and* between-studies E-Psi. Like Wiseman, Alcock is wrong on two counts: (a) long-term consistency and replicability *have* been demonstrated in the meta-analyses; and (b) only within-study E-Psi exists (see West & Fisk, 1953; Wiseman & Schlitz, 1997). This refinement on the limits of E-Psi is an issue that will need more focus in the future.

### The Decline Effect

The decline effect, generally speaking, is a complicated multi-factorial affair manifesting in many and varied guises, depending on how the psi effects and the decline effects themselves are defined and how they are tested (for a review, see Colborn, 2007). Nevertheless, the common understanding is that psi goes into decline over a given time period (Colborn, 2007; Kennedy, 2003). Rhine, for example, said:

We destroy the phenomena in the very act of trying to demonstrate them. Evidently, the tests themselves get in the way of the abilities they are designed to measure. (Rhine, 1947, p. 190)

However, Alcock (2003) and Wiseman (2009) both argue that the psi-decline is just another excuse for failure to replicate. Like E-Psi, I find no conclusive evidence for psi-decline in the long run (i.e., *between* studies), though I allow for the possibility in the short term (i.e., *within* studies, including the natural attrition of *recurrent spontaneous psychokinesis*; RSPK; see Roll et al., 2021, pp. 94-98). Colborn (2007, p. 2) refers to these two types of decline as “chronological” and “episodic”, respectively. As will be seen, the argument for declines is complicated by issues to do with study quality, but my meta-analyses tend not to show long-term declines—the distributions are generally flat or even *inclining* in one instance (i.e., forced choice).<sup>16</sup>

Contributors to Wolman’s (1977) classic handbook spent very little time discussing the decline effect—the

word 'decline' is not even in Wolman's Index—and furthermore, although it was somewhat of a talking point amongst Rhineans (Pratt et al., 1940/1966), that was only in the context of within-study declines. Some have made passing reference to the possibility of broad-ranging (but still limited) declines (e.g., Beloff, 1994; Pratt, 1978). Like the between-studies E-Psi, long-term (between-studies) declines seem to have come to our attention in the 1980s and 1990s via the meta-analytic literature but, like the between-studies E-Psi, these meta-analyses gave us early warning that the declines were probably aberrations.

While chronological declines can reasonably be expected (and explained) in single studies (e.g., for the psychological reasons already given), the problem with declines spanning many years or decades is that we need some kind of historical or methodological change to explain it. After all, it could be argued that when we find such declines, it possibly indicates *improvements* in study quality over the years (i.e., psi effects are artifacts of poor experimental design), and psi effects would diminish or vanish with the flaws. As will be seen shortly, there is no support for that hypothesis. The other possible reason was given above—shifts in experimental designs to complex and tedious tasks that demotivate participants and thus lower psi responses (for the Ganzfeld anyway; see Radin, 2006). Demotivation would not be the case in earlier studies, but nobody has tested this claim, and Bierman (2001) refutes its likelihood across a number of paradigms anyway. Bem, Palmer, and Broughton (2001) presented a similar argument for the Ganzfeld—deviations from the standard protocol tended to result in failure, but they did not stipulate what is inherent in the deviations that inhibit psi (e.g., what is so offensive about a musical target compared to a visual target?). Thus, we never did find convincing explanations for these alleged declines, yet continued to believe in them based on well-meaning articles that highlighted the effects (Bierman, 2001; Colborn, 2007; Kennedy, 2003).

## The Meta-Analyses: II. Declines and Inclines

As it happens, the earlier meta-analyses (forced choice [precognition only], free response, dice throwing) give us some evidence to dispute the between studies (chronological) DE in the form of an array of correlations that are easily interpreted. In those same meta-analyses from the 1980s and 1990s referred to above, we find that methodological quality *improves* significantly over time (using publication date as the time measure),<sup>17</sup> While effect sizes are *constant*<sup>18</sup> over time (Honorton & Ferrari, 1989; Milton, 1997; Radin & Ferrari, 1991).

Alternatively, in other earlier meta-analyses (extra-

version-ESP, sheep-goat effect), when methodological quality is *constant* over time, effect size is either *constant* over time (Honorton et al., 1998; Lawrence, 1993) or in *decline* (Honorton et al., 1998), although that one decline refers to extraversion/ESP forced-choice studies only (not extraversion/ESP free response), and the authors attribute the decline to an artifact due to administration of the extraversion measure *before* the ESP task in earlier studies. In these cases, we could have an artifact caused by poor quality, but there is little to go on.

Furthermore, in these and other meta-analyses, the relationship between study quality and effect size was also investigated (a negative relationship would also suggest that psi effects are artifacts). Overwhelmingly, the relationships were not significant (Honorton, 1985; Honorton & Ferrari, 1989; Lawrence, 1993; Milton, 1997; Radin & Ferrari, 1991;<sup>19</sup> Radin & Nelson, 1989; Schmidt et al., 2004<sup>20</sup>). Again, no evidence of artifacts.<sup>21</sup>

For the Ganzfeld domain, significant declines over time have been observed (see Bierman, 2001; Milton & Wiseman, 1999), but ostensible declines<sup>22</sup> existed long before Hyman and Honorton (1986) implemented guidelines that focussed on qualitatively improving the Ganzfeld methodology, so it cannot be assumed that study quality was single-handedly responsible for those declines. As Palmer (1986) pointed out, it should not be assumed that declines result from removal of flaws, just as it is presumptuous to claim that past Ganzfeld successes were due to the presence of flaws. Furthermore, Bierman (2001) does not present an overwhelming case for declines, as he also found a so-called rebound effect (i.e., U-shaped curve) in the Ganzfeld effect-size distribution, suggesting a "recovery from the decline effect" (p. 5), and he found a rebound effect in the RNG domain, but no proof either way for a decline in the Remote Viewing domain (see also Utts, 1996).

Taken together, the above meta-analyses do not provide conclusive evidence for chronological DEs, and the argument for quality-based DEs is simply not convincing. This is a subtle issue, and it is easy to overlook or just brush aside as frivolous, but we have to realize that it becomes more and more apparent, as we dig deeper, that a major ongoing (many decades long) state-of-play in parapsychology has been this phantom of chronological declines. Critically, parapsychologists had the evidence to hand *at the time* to dismiss the effect outright (just as they could in regard to E-Psi).

While the occasional commentator has not been convinced by the claims for chronological DEs (Utts, 1996; Walach et al., 2002), the effects seem to have been taken at face value. Thus, many parapsychologists and skeptics spoke of chronological declines in real terms. Bierman

(2001) states:

... it soon became clear that apart from sequential effects within a run of trials, it was quite difficult to exactly 'replicate' ... the results of original studies: a sequence of similar studies tended to show a decline of effect size from study to study. (p. 3)

It is a peculiar response from Bierman, given he found those rebound effects. Bierman even saw the need for a "radical change in world view" to explain the failure to replicate. Perhaps parapsychologists need not go so far just yet—not until they know what it is they are supposed to be explaining. Yet other parapsychologists have followed Bierman's lead and taken the effect seriously:

- Stokes (2007) declared: "... most investigators are not able to obtain reliable and replicable experimental evidence for psi ..." (p. 80). He puts the initial significant findings down to fraud (more on that shortly);
- In regard to the Ganzfeld studies, Radin (2006) rightly disputed the skeptical claim that the "decline [over time] is due to improving methodologies" (p. 122). However, he does attribute the decline to "changes in experimental goals" (p. 122)—a worthy rationalization possibly or partially befitting the facts, but not really called for at the time if the databases (i.e., the meta-analyses) had been examined more thoroughly. And evidence of declines in other disciplines does not get us off the hook (assuming there is a 'hook')—*two wrongs don't make a right*;
- Kennedy (2003) also spoke of "widespread declines in psi effects" (p. 58), concluding that "psi effects are unsustainable" (p. 69);
- Despite Colborn's (2007) own warning not to reify declines out of credulity, he still reviewed and considered the likelihood of a range of empirically related causal factors for declines (I am particularly focussing on chronological declines here). For theoretical reasons, that is not necessarily inappropriate, but it implies a problem that was poorly substantiated in the first place. Colborn does, however, list "counter-advocates" who also do not believe in long-term declines (e.g., Walach et al., 2002).

Have we reached that point where we should drop the whole idea of chronological DEs as we find more and more evidence justifying that move? For example, simi-

lar patterns to those described above emerged in later Ganzfeld and forced-choice meta-analyses, in an RNG meta-analysis (Bösch, Steinkamp, & Boller, 2006), and in a meta-analysis by Mossbridge, Tressoldi, and Utts (2012) on presentiment. (Note that *ES* = effect size in the list below):

- Ganzfeld: there is "a linear decline in [effect-size strength] over a 34-year period ... [but] a rebound effect is also indicated" (Storm et al., 2010, p. 478);
- Ganzfeld: "... the correlation between mean quality scores and *ES* values ... was extremely weak and not significant" (Storm et al., 2010, p. 475);
- Forced Choice: "We note that the correlation between year of study and *ES* is positive and significant for the database ... indicating an incline, meaning that *ES* values increased over the 24-year period" (Storm et al., 2012, p. 257);
- Forced Choice: "The correlation between mean Quality Scores and *ES* values ... was very weak, negative, and not significant, ..., suggesting that effect size was not an artifact of poor experimental design" (Storm et al., 2012, pp. 251-252);
- RNG: "... the quality of studies was high" (Bösch et al., 2006, p. 507); and "study quality was also positively correlated with year of publication" (p. 508);
- Presentiment: "the higher-quality studies produced a higher overall *ES* and level of significance than the lower-quality studies" (Mossbridge et al., 2012, p. 7), whereas the correlation "between quality score and *ES* was not significant" (p. 8).

In spite of these new findings, coupled with the earlier findings, explanations for DEs still persist, resurrected in the form of a slightly modified argument from fraud—"fraudulent experimenters" in the early stages of research are replaced by newer "nonfraudulent experimenters" at a later date (Stokes, 2015, p. 47). Hence the decline. In other words, Stokes was still arguing the case for fraud, as he did back in 2007. Yet he knew well enough that

Many meta-analyses have found no evidence for a positive relation between methodological flaws and the size of reported psi effects. (p. 44)

This problem is simply explained away as more fraud!

... people who report fraudulent results may also report more perfect methodology than was actually used (assuming that the experiment was even conducted). (p. 44)

Unsubstantiated statements like this prove beyond a doubt that the Trickster knows no bounds. Again, the mud-slinging only starts when doubt and suspicion arise: “My newfound skepticism regarding the existence of psi is not based on any new concrete evidence for fraud among parapsychologists [emphasis added], but rather on a general lowering of my respect for all scientists” (Stokes, 2015, p. 45). What are we to make of a science where empirical evidence can be trumped by opinion?

Contemporaneous contrary findings from other researchers may help steer a reasonable course for parapsychology (Baptista, Derakhshani, & Tressoldi, 2015), while more recent meta-analytic evidence gives even more justification to dismiss the DE as a *chronological* (not *episodic*) problem.<sup>23</sup>

- Ganzfeld update: “There was no statistical evidence for an effect-size decline in the ganzfeld domain ...” (Storm & Tressoldi, 2020, p. 213);
- Ganzfeld update: “The correlation between mean Quality and *ES* was weak and not significant ... so we claim that effect size is not likely to be an artifact of poor experimental design” (Storm & Tressoldi, 2020, p. 200);
- Remote Viewing: “Looking at the *ES*s ... we can affirm that there is no sign of decline in almost 40 years” (Baptista, Derakhshani, & Tressoldi, 2015, p. 203);
- Sheep-Goat Effect (SGE): “The relationship between the sheep-goat CR(*ES*) [critical ratio effect size] values and year of publication is positive and significant.... In other words, the SGE has increased across the span of about 20 years ...” (Storm & Tressoldi, 2017, pp. 93-94);
- Sheep-Goat Effect (ESP): “ESP effects [over the years] generally have not increased significantly [in a two-tailed test, but the ESP effect is marginally significant in a one-tailed test]” (Storm & Tressoldi, 2017, pp. 93-94);
- Sheep-Goat Effect (SGE & ESP): Storm and Tressoldi (2017) state, “in both cases [SGE and ESP] ... increases in effects have been independent of study quality” (p. 94);
- Dream-ESP: Storm, Sherwood, et al. (2017) report “no significant decline in *ES* related to quality, ..., but quality control in experiments has

improved over the 49-year period” (p. 130).

We actually see an *incline* effect for the SGE, while the ESP effect is stable (Storm & Tressoldi, 2017). Regarding the dream-ESP meta-analysis, Storm, Sherwood, et al. (2017) did find that the correlation between year of study and effect size was negative and significant, but they also found suggestive evidence that “illustrates the complete opposite of the sceptical hypothesis that improvements in quality necessarily mean *ES* must plummet” (p. 130). Although it was found that two dream-ESP databases (Maimonides Dream Laboratory [MDL] studies and post-MDL studies) were not significantly different from each other in terms of mean effect size, the difference did approach significance. Though not reported in the paper (Storm, Sherwood, et al.), I tested both databases separately for effect size declines over their respective periods, and neither DE was significant.<sup>24</sup>

### Ramifications of Experimenter Psi and Decline Effect

We now come to the ramifications of these findings in the context of the Trickster, but first, here is how the Trickster has manifested itself: On the evidence, the parapsychology community argued the case for the experimenter psi effect (E-Psi)—it argued a similar case for chronological DEs. This went on for decades. Most parapsychologists accepted the ‘evidence’ for both effects based on single studies, or small sets of studies, and then larger sets. The propositions seemed valid, reputations were at stake, time and money had been invested; reasonable explanations had to be proffered to the wider community to save face. The mainstream (largely skeptical) community took and ran with the parapsychologists’ arguments and, *in their opinion*, saw them as mere excuses used to explain the failure to reject the so-called Null hypothesis (i.e., the hypothesis of no effect). That gave cause for embarrassment, even ridicule (trickster outcomes). True to Trickster form, however, there is a twist—perhaps parapsychologists spoke too soon: E-Psi and DEs do seem to occur in a number of studies, but these apply mainly to short-term (within-study) effects, whereas no (or debatably too few) long-term (between-studies) E-Psi and DEs are demonstrated in the various meta-analyses comprising many studies that are considered representative of the respective experimental domains (i.e., free response, forced choice, etc.). Given the evidence, chronological manifestations of the effects appear to be unfounded, but episodic effects look genuine (the evidence persists).

It is important to note that my thesis is not that the Trickster lies behind E-psi and DE effects in the sense that it actually causes them. These two effects could occur,

but it would not be the Trickster that caused them if they did occur, but if they did not occur, it would not be the Trickster that prevented them. Instead, I have asked (and answered) the question, Was there evidence for these effects, and if there wasn't, and it was thought there was, what is behind that mistake?

If we were somewhat myopic, we could argue that the parapsychological community might have spared itself some embarrassment if it had waited a little longer, but how long is a 'little longer'? Science is an accumulative enterprise, and scientists make discoveries and present them in fits and starts; the point being science is an ongoing process of continual revelation. Truth be told, parapsychologists, singly or as a community, simply did not know better and can only work with the best data available at the time. So it is easy to argue that hindsight has 20/20 vision, whereas science does not. But that is to ignore the earlier clues. The literature should have helped ameliorate the negative 'exposure' caused by E-Psi and DEs, and perhaps both issues could or should have been downplayed given that there was not a lot to go on—indeed, some investigators did that.

Interestingly, Radin (2006) gives an appropriate metaphor that conveys more than is first realized. He refers to the Pygmalion effect, which he parallels with the experimenter expectancy effect (i.e., E-Psi). The Pygmalion effect owes its origins to the myth of a Greek sculptor Pygmalion, who fell in love with a statue he carved from ivory and subsequently named Galatea. Aphrodite, the Goddess of Love, rewarded his fervor by bringing the statue to life—as Radin says: "This myth reflects the concept of a self-fulfilling prophecy" (p. 285); a classic cautionary tale warning us to be careful what we wish for (although Pygmalion seems to have done well out of it for the couple lived happily ever after).

While Radin directly acknowledges the point that sufficiently motivated experimenters can use their own good manner and/or psi in the laboratory, the less direct point is that the myth also warns researchers not to make too much of anything they *think* they find because that gives it reality—parapsychologists have to be careful they do not talk an effect into existence; and this *caveat* applies to DEs, not just E-Psi. Indeed, Colborn (2007) makes the point about the decline effect: "we might call it into existence via reification" (p. 3). I would argue that parapsychologists have made too much of these long-term effects—they appealed to them too often (again, I emphasize I am not discounting *within* study declines). I give the final word to physicist and parapsychologist Roger Nelson, who said my findings are matched by his experiences exactly,

... in the lab, in meta-analysis, and in long-term programs of research. EE [i.e., E-Psi] explanations are too easy and need (as we often say) prospective research to really establish bona fides. (personal communication, August 21, 2017)

And the same can be said of decline effects.

### Overcoming the Trickster

So, how does modern parapsychology resolve the Trickster dilemma? Thus far, I believe I have rendered aid just in identifying the types and situations of which one should be wary, and thus hinted at ways of dealing with the Trickster. But parapsychologists must become more conscious of their aims, their behaviors and methodologies, the way they interpret their findings, and the social ambiance in which they are immersed. This is not to imply that a state of paranoia be adopted—Palmer (2016) warned that excessive policing of parapsychological research was enough to make one "paranoid" (p. 14)—but a healthy and vigilant attitude about the movements and changes within the social sphere is a must. An attitude like that can only help.

Will keeping a low profile also help? Most parapsychologists who happen to be academics find themselves braving the worst on occasion (see again, Thalbourne, 1995), and nothing is more inimical to the parapsychologist's ventures than exposure to judgmental, disapproving, conservative, and naïve authority figures. Those figures will invariably seek the aid of mass media to garner support from that subpopulation of the general public that laps up scandal. But persistence can win the day (for example, see Rupert Sheldrake's successful struggle with TED and YouTube described in Weiler, 2020).<sup>25</sup>

Parapsychology will continue to have its ups and downs, and parapsychologists simply have to ride them out. That 'ride' is part of the big picture view of science which incorporates the human aspect—that means more than how scientists deal with unpalatable glitches in their findings, for it goes deep into the psyche to the archetypal core of our being. As an archetype, the Trickster shows how our minds meld and interact with the world, social and otherwise, and call into existence the various anomalies, whether we intend them or not.

### CONCLUSION

Trickster phenomenology permeates deeply into the sciences. It is not a simple matter of dismissing the Trickster as mere superstition and calling out its anomalous effects as the result of delusional states or chance. Certainly, supernatural agency is not proposed as a cause though

some phenomena are so bizarre it is hard to resist. However, in the modern era, we have learned we must take responsibility for our psychological aberrations, but we still often fail to see that they are our own, and we thus dismiss them as attributable to 'other' (external) sources. Renaming the Trickster does not rid us of it. The Trickster (whatever it really is) not only manifests acausally in the laboratory (as Pauli may have discovered), and in how sets of data are collected and collated (as Jung may have realized), it has a unique way of clouding the issue and rendering effects that can confuse and lead to false understanding, as is the case in parapsychology—specifically in relation to E-Psi and chronological decline effects. We must be careful we do not over-reach, even when the evidence looks conclusive, but what is to be said when evidence is ignored or not seen for what it is? Avoiding these pitfalls successfully calls for constant vigilance based on a clearer understanding of the human factors in psi research. Researchers make a virtue of their conservatism (implying they take a cautious approach), but that does not entirely rid them of their preferences, prejudices, cherished hypotheses, and entrenched notions and beliefs. This paper suggests that interpretations and positions can be hard to shift despite the findings.

## ENDNOTES

- <sup>1</sup> The sense of security is false because of the unresolved prejudice faced by parapsychologists, especially in academia. The scene is changing for the better in some parts of the world (noticeably Europe, especially the UK), but I (writing in Australia) have personally experienced institutional career-threatening prejudice (twice, in fact), and I know a number of parapsychologists overseas who have similar stories to tell. This prejudice extends beyond centers of learning to the media and mainstream society.
- <sup>2</sup> Jung (1959/1968) equates the Trickster with the alchemical Mercurius, which is the equivalent of the Greek god Hermes (see Combs & Holland, 1996). The mythological parallels are too complex and interwoven to go into detail here.
- <sup>3</sup> One reviewer stated that Social Identity Theory, or theorists like Marx, Durkheim, and Weber, have explained how these kinds of conflict can occur, but they do not appeal to Trickster activation. What they do appeal to is some kind of causal factor which, at its root, I suggest must be archetypal (fundamental) in human nature. Also, these theories/theorists do not speak to psi (unless from a skeptical standpoint).
- <sup>4</sup> Pauli's Exclusion Principle (the first one for which he won the Nobel Prize) is so-called because matter is explained as occupying its own space to the exclusion of other material objects, such that one cannot pass through the other. Light and radiation are given exclusive exception to this rule. This principle is fundamental to our understanding of the nature of matter, for example, in its formal presentation in the periodic table of elements.
- <sup>5</sup> In the original Cross-Correspondences work (see Saltmarsh, 1938/1975, for a review), members of the Society for Psychical Research found correspondences hidden within messages from different mediumistic communications. The messages in these communications were singly meaningless and only seemed to make sense once the contents were cross referenced. The findings were considered evidence for survival, though others argued that ESP would explain them.
- <sup>6</sup> Eisenbud (1963) is probably one of the earliest researchers to bring E-Psi to the attention of parapsychologists.
- <sup>7</sup> A survey of members of the Parapsychological Association (Irwin, 2014) reported that many parapsychologists regard experimenter psi as a major problem for parapsychologists, and many refer to the need to disentangle participant and experimenter effects.
- <sup>8</sup> Between-studies DEs might also be called "*chronological declines*" (CDs; Irwin, 1999, cited in Colborn, 2007, p. 2), but I will not use that term because CDs can be either across experimental paradigms (e.g., Ganzfeld), or over the lifetime of an individual, and I only want to focus on the paradigms. CDs contrast with "*episodic declines*" (EDs), which are "within an experimental run or within a session" (Colborn, 2007, p. 2)—I refer to these as within-study DEs.
- <sup>9</sup> As I am focusing on E-Psi, I will not be discussing the third (unlikely) option, that experimenters do not have E-Psi, and all effects come from participants only.
- <sup>10</sup> Palmer and Millar (2015) do not dwell too much on participant-psi. It appears they regard participants' psi as constant (and inconsequential?), and prevalent within and between studies. It also appears they take "significance" to mean psi-hitting since they state that parapsychologists are "rigorously" selected (even self-selected) "for success in their experiments" (p. 298), and success usually means significant psi-hitting.
- <sup>11</sup> Free response is a term that "describes any test of ESP in which the range of possible targets is relatively unlimited and is unknown to the percipient [perceiver/receiver]" (Thalbourne, 2003, p. 44).
- <sup>12</sup> The Ganzfeld is a "special type of environment (or the technique for producing it) consisting of homogenous, unpatterned sensory stimulation" to the eyes and ears of the participant, who is usually in "a state of bodily comfort" (Thalbourne, 2003, p. 45).

- <sup>13</sup> The forced-choice design is so named because the target guess is “one of a limited range of possibilities which are known to [the participant] in advance” (Thalbourne, 2003, p. 44).
- <sup>14</sup> Dream ESP involves ostensibly paranormal communication while in an altered state of consciousness, commonly known as dreaming. Pioneer research into the telepathic nature of dreams was first conducted at the Maimonides Dream Laboratory in New York during the 1960s and 1970s
- <sup>15</sup> The Schmidt et al. (2004) study was, in fact, started well before 2002 (an abstract was published that year and results presented at a PA Convention). They used a database of studies up to the year 2000, so I include Schmidt et al. as indicative of DMILS research around the turn of the century.
- <sup>16</sup> We can make the argument that E-Psi is responsible for these declines—experimenters (like participants) tire and lose motivation, focus, and interest, as they get older. We might also argue that aging ‘star’ experimenters eventually retire, and perhaps they are not replaced by younger ‘star’ experimenters. Then we could expect DEs. However, since I find no convincing evidence of long-term declines in the meta-analyses, all experimenters (assuming E-Psi) must, *on average* and *on occasion*, be putting in equal amounts of their own psi across the decades (a pretty tall order), or they put in none at all.
- <sup>17</sup> Note that Schmidt et al. (2004) did not look at quality over time. (Footnote 15 explains this study’s inclusion).
- <sup>18</sup> Schmidt et al. (2004) may loosely be considered an exception; they report two significant declines over time (DMILS and Remote Staring [RS]). However, date of study (year of publication) dropped out in a regression analysis (DMILS), and for RS, it was shown that *N* (sample size) correlated significantly with date—thus, the earlier smaller studies tended to “overestimate the true effect size” (p. 13); besides which, there were only 15 studies in the sample.
- <sup>19</sup> At first, Radin and Ferrari (1991) found that quality correlated negatively and significantly with effect size, suggesting that design flaws present in low quality studies were contributing to the success of earlier experiments, but further analysis of a homogeneous subset of data (i.e., outliers were removed) revealed no suggestive evidence of decline in psi effect due to poor quality.
- <sup>20</sup> For DMILS, I used the revised non-significant “overall study quality and effect size” correlation (Schmidt et al., 2004, p. 244). For Remote Staring, the effect-size/quality correlation was positive and non-significant.
- <sup>21</sup> In some studies, we cannot draw any strong conclusions because findings were limited—that is, patterns over time were not checked for quality (Schmidt et al., 2004) or were not checked for both quality *and* effect size (Honorton et al., 1998).
- <sup>22</sup> Surprisingly, Honorton (1985) did not test the correlation between effect size and year of study—if he did, he would have found a weak negative (albeit crucially non-significant) relationship for his 28-study database,  $r(26) = -0.20, p = .155$  (one-tailed).
- <sup>23</sup> Declines over time have not been reported in the more recent RNG meta-analyses (Bösch, Steinkamp, & Boller, 2006; Radin & Nelson, 2003).
- <sup>24</sup> MDL studies:  $r(12) = -0.02, p = .943$  (two-tailed); post-MDL studies:  $r(34) = -0.20, p = .238$  (two-tailed).
- <sup>25</sup> TED (‘Technology, Entertainment, Design’) is an organization that engineers public speaking events for anyone with something to say.

## REFERENCES

- Akers, C. (1987). Parapsychology is science, but its findings are inconclusive. *Behavioral and Brain Sciences*, *10*, 566–568. <https://doi.org/10.1017/S0140525X00054480>
- Alcock, J. E. (2003). Give the null hypothesis a chance: Reasons to remain doubtful about the existence of psi. In J. Alcock, J. Burns, & A. Freeman (Eds.), *Psi wars: Getting to grips with the paranormal* (pp. 29–50). Imprint Academic.
- Baptista, J., Derakhshani, M., & Tressoldi, P. (2015). Explicit anomalous cognition: A review of the best evidence in ganzfeld, forced-choice, remote viewing and dream studies. In E. Cardeña, J. Palmer & D. Marcusson-Clavertz (Eds.), *Parapsychology. A handbook for the 21st century* (pp. 192–214). McFarland.
- Basterfield, K. (2001). Paranormal aspects of the UFO phenomenon. *Australian Journal of Parapsychology*, *1*, 30–55.
- Basterfield, K., & Thalbourne, M. A. (2002). Belief in, and alleged experience of, the paranormal in ostensible UFO abductees. *Australian Journal of Parapsychology*, *2*, 2–18.
- Beloff, J. (1994). Lessons of history. *Journal of the American Society for Psychological Research*, *88*, 7–22.
- Bem, D. J., Palmer, J., & Broughton, R. S. (2001). Updating the ganzfeld database: A victim of its own success? *Journal of Parapsychology*, *65*, 207–218.
- Bierman, D. J. (2001). On the nature of anomalous phenomena: Another reality between the world of subjective consciousness and the objective world of physics? In P. Van Loocke (Ed.), *The physical nature of consciousness* (pp. 269–292). Benjamins. [https://doi.org/10.1007/978-1-4020-0000-0\\_10](https://doi.org/10.1007/978-1-4020-0000-0_10)

- org/10.1075/aicr.29.12bie
- Blackmore, S. (J.) (1983). Divination with tarot cards: An empirical study. *Journal of the Society for Psychical Research*, 52, 97–101.
- Bösch, H., Steinkamp, F., & Boller, E. (2006). Examining psychokinesis: The interaction of human intention with random number generators—A meta-analysis. *Psychological Bulletin*, 132, 497–523. <https://doi.org/10.1037/0033-2909.132.4.497>
- Braude, S. E. (2007). *The gold leaf lady and other parapsychological investigations*. University of Chicago Press. <https://doi.org/10.7208/chicago/9780226071534.001.0001>
- Burri, M. (2005). *Der "Pauli-Effekt"*. ETHistory. <http://www.ethistory.ethz.ch/besichtigungen/objekte/paulieffekt/>
- Cambray, J. (2009). *Synchronicity: Nature and psyche in an interconnected universe*. Texas A&M University Press.
- Colborn, M. (2007). The decline effect in spontaneous and experimental psychical research. *Journal of the Society for Psychical Research*, 71, 1–21.
- Combs, A., & Holland, M. (1996). *Synchronicity: Through the eyes of science, myth, and the Trickster*. Marlowe & Company.
- Eisenbud, J. (1963). Psi and the nature of things. *International Journal of Parapsychology*, 5, 245–268.
- Gieser, S. (2005). *The innermost kernel: Depth psychology and quantum physics. Wolfgang Pauli's dialogue with C.G. Jung*. Springer.
- Hansen, G. P. (2001). *The Trickster and the paranormal*. Xlibris Corporation.
- Haule, J. R. (2011). *Jung in the 21st Century. Volume 1: Evolution and archetype*. Routledge. <https://doi.org/10.4324/9780203833612>
- Honorton, C. (1985). Meta-analysis of psi ganzfeld research: A response to Hyman. *Journal of Parapsychology*, 49, 51–91.
- Honorton, C., & Ferrari, D. C. (1989). "Future telling": A meta-analysis of forced-choice precognition experiments, 1935-1987. *Journal of Parapsychology*, 53, 281–308.
- Honorton, C., Ferrari, D. C., & Bem, D. J. (1998). Extraversion and ESP performance: A meta-analysis and a new confirmation. *Journal of Parapsychology*, 62, 255–276.
- Hövelmann, G. H. (2015). On the usefulness of parapsychology for science at large. In E. Cardeña, J. Palmer & D. Marcusson-Clavertz (Eds.), *Parapsychology. A handbook for the 21st century* (pp. 389–398). McFarland.
- Hyman, R., & Honorton, C. (1986). Joint communiqué: The psi ganzfeld controversy. *Journal of Parapsychology*, 50, 351–364.
- Irwin, H. J. (2009). *Psychology of paranormal belief: A researcher handbook*. University Of Hertfordshire Press.
- Irwin, H. J. (2014). The major problems faced by parapsychology today: A survey of members of the Parapsychological Association. *Australian Journal of Parapsychology*, 14, 143–162.
- Jung, C. G. (1968). *The archetypes and the collective unconscious* (2d. ed.). CW9i. (Original work published in 1959).
- Jung, C. G. (1969). Appendix: On synchronicity. CW8 (pp. 520–531). (Original work published in 1951).
- Jung, C. G. (1969). Synchronicity: An acausal connecting principle. CW8 (pp. 417–519). (Original work published in 1952).
- Keel, J. A. (1978). *The cosmic question*. Granada/Panther.
- Kennedy, J. E. (2003). The capricious, actively evasive, unsustainable nature of psi: A summary and hypotheses. *Journal of Parapsychology*, 67, 53–74.
- Kennedy, J. E., & Taddonio, J. L. (1976). Experimenter effects in parapsychological research. *Journal of Parapsychology*, 40, 1–33.
- Lawrence, T. R. (1993). Gathering in the sheep and goats: A meta-analysis of forced-choice sheep-goat ESP studies, 1947-1993. In *Proceedings of the 36th Annual Convention of the Parapsychological Association* (pp. 75–86). Parapsychological Association.
- Meier, C. A. (Ed.) (2001). *Atom and archetype: The Pauli/Jung letters, 1932-1958*. Routledge.
- Millar, B. (2012). From warehouse to temple: Science axioms and the frameworks they build. *Journal of Nonlocality*, 1, <http://journals.sfu.ca/jnonlocality/index.php/jnonlocality/article/viewFile/10/9>
- Millar, B. (2012). Towards a forensic parapsychology in the OT paradigm. *Journal of Nonlocality*, 1(1), 1–23.
- Milton, J. (1997). A meta-analytic comparison of the sensitivity of direct hits and sums of ranks as outcome measures for free-response studies. *Journal of Parapsychology*, 61, 227–237.
- Milton, J., & Wiseman, R. (1999). Does psi exist? Lack of replication of an anomalous process of information transfer. *Psychological Bulletin*, 125(4), 387–391. doi:10.1037/0033-2909.125.4.387
- Mishlove, J. (2000). *The PK man: A true story of mind over matter*. Hampton Roads.
- Moreman, C. M. (2003). A re-examination of the possibility of chance coincidence as an alternative explanation for mediumistic communication in the cross-correspondences. *Journal of the Society for Psychical Research*, 67, 225–242.
- Mossbridge, J., Tressoldi, P. & Utts, J. (2012). Predictive physiological anticipation preceding seemingly unpredictable stimuli: A meta-analysis. *Frontiers in*

- Psychology*, 3, Article 390. <https://doi.org/10.3389/fpsyg.2012.00390>
- O'Neill, M. (2001). "The world's largest ESP experiment ever": Wiseman's 'experimenter effect' examined. *Paranormal Review*, 17, 5–8.
- Palmer, J. (1986). Comments on the "joint communique'." *Journal of Parapsychology*, 50, 377–381.
- Palmer, J. (2016). Hansel's ghost: Resurrection of the experimenter fraud hypothesis in parapsychology [Editorial]. *Journal of Parapsychology*, 80, 5–16.
- Palmer, J., & Millar, B. (2015). Experimenter effects in parapsychological research. In E. Cardeña, J. Palmer & D. Marcusson-Clavertz (Eds.), *Parapsychology. A handbook for the 21st century* (pp. 293–300). McFarland.
- Parker, A., & Millar, B. (2014). Revealing psi secrets: Successful experimenters seem to succeed by using their own psi. *Journal of Parapsychology*, 78, 39–55.
- Peat, F. D. (2008). Divine contenders: Wolfgang Pauli and the symmetry of the world. In L. Storm (Ed.), *Synchronicity: Multiple perspectives on meaningful coincidence* (pp. 15–24). Pari Publishing.
- Pratt, J. G. (1978). Prologue to a debate: Some assumptions relevant to research in parapsychology. *Journal of the American Society for Psychical Research*, 72, 127–139.
- Pratt, J. G., Rhine, J. B., Smith, B. M., Stuart, C. E., & Greenwood, J. A. (1966). *Extra-sensory perception after sixty years*. Bruce Humphries. (Original work published in 1940).
- Progoff, I. (1973). *Jung, synchronicity, and human destiny: Noncausal dimensions of human experience*. Julian Press, Inc.
- Radin, D. I. (2006). *Entangled minds: Extrasensory experiences in a quantum reality*. Paraview/Pocket Books.
- Radin, D. I., & Ferrari, D. C. (1991). Effects of consciousness on the fall of dice: A meta-analysis. *Journal of Scientific Exploration*, 5, 61–83. <https://doi.org/10.2134/agronj1991.00021962008300040018x>
- Radin, D. I., & Nelson, R. D. (1989). Evidence for consciousness-related anomalies in random physical systems. *Foundations of Physics*, 19, 1499–1514. <https://doi.org/10.1007/BF00732509>
- Radin, D. I., & Nelson, R. D. (2003). Research on mind-matter interactions (MMI): Individual intention. In W. B. Jonas & C. C. Crawford (Eds.), *Healing, intention and energy medicine: Research and clinical implications* (pp. 39–48). Churchill Livingstone.
- Rhine, J. B. (1947). *The reach of the mind*. William Sloane Associates, Inc.
- Rhine, J. B. (1969). Position effects in psi test results. *Journal of Parapsychology*, 33, 136–157.
- Roll, W. G., Alexander, C. H., Williams, B. J., & Persinger, M. A. (2021). Parapsychology, quantum theory and neuroscience. In S. Krippner, A. J. Rock, H. L. Friedman, & N. L. Zingrone (Eds.), *Advances in parapsychological research 10* (pp. 70–166). McFarland.
- Saltmarsh, H. F. (1975). *Evidence of personal survival from cross correspondences*. Arno Press. (Original work published in 1938).
- Schlitz, M. J. (2001). Boundless mind: Coming of age in parapsychology. *Journal of Parapsychology*, 65, 335–350.
- Schmidt, S., Müller, S., & Walach, H. (2004). Do you know who is on the phone? Replication of an experiment on telephone telepathy. In *Proceedings of the 47th Annual Convention of the Parapsychological Association* (pp. 245–254). Parapsychological Association.
- Schmidt, S., Schneider, R., Utts, J., & Walach, H. (2002). Remote intention on electrodermal activity: Two meta-analyses. *Proceedings of the 45th Annual Convention of the Parapsychological Association* (pp. 27–47). Parapsychological Association. <https://doi.org/10.1348/000712604773952449>
- Schmidt, S., Schneider, R., Utts, J., & Walach, H. (2004). Distant intentionality and the feeling of being stared at: Two meta-analyses. *British Journal of Psychology*, 95, 235–247. <https://doi.org/10.1348/000712604773952449>
- Stokes, D. M. (2007). *The conscious mind and the material world*. McFarland.
- Stokes, D. M. (2015). The case against psi. In E. Cardeña, J. Palmer, & D. Marcusson-Clavertz (Eds.), *Parapsychology: A handbook for the 21st century*, (pp. 42–48). McFarland.
- Storm, L., & Rock, A. J. (2014). An investigation of the *I Ching* using the Q-Sort Method and an RNG-PK design: I. Four possible psi predictors. *Australian Journal of Parapsychology*, 14, 29–67.
- Storm, L., Sherwood, S. J., Roe, C. A., Tressoldi, P. E., Rock, A. J., & Di Risio, L. (2017). On the correspondence between dream content and target material under laboratory conditions: A meta-analysis of dream-ESP studies, 1966–2016. *International Journal of Dream Research* 10(2), 120–140. <https://doi.org/10.11588/ijodr.2017.2.34888>
- Storm, L., & Tressoldi, P. E. (2017). Gathering in more sheep and goats: A meta-analysis of forced-choice sheep-goat studies, 1994–2015. *Journal of the Society for Psychical Research*, 81, 79–107.
- Storm, L., & Tressoldi, P. E. (2020). Meta-analysis of free-response studies 2009–2018: Assessing the noise-reduction model ten years on. *Journal of the Society for Psychical Research*, 84, 193–219. <https://doi.org/10.11588/ijodr.2020.2.34888>

- org/10.31234/osf.io/3d7at
- Storm, L., Tressoldi, P. E., & Di Risio, L. (2010). Meta-analyses of free-response studies 1992-2008: Assessing the noise reduction model in parapsychology. *Psychological Bulletin*, 136(4), 471-485. <https://doi.org/10.1037/a0019457>
- Storm, L., Tressoldi, P. E., & Di Risio, L. (2012). Meta-analyses of ESP studies 1987-2008: Assessing the success of the forced-choice design in parapsychology. *Journal of Parapsychology*, 76, 243-273.
- Thalbourne, M. A. (1995). Science versus showmanship: A history of the Randi hoax. *Journal of the American Society for Psychical Research*, 89, 344-366.
- Thalbourne, M. A. (2003). *A glossary of terms used in parapsychology*. Puente.
- Utts, J. (1996). An assessment of the evidence for psychic functioning. *Journal of Scientific Exploration*, 10(1), 3-30.
- Walach, H., Schmidt, S., Schneider, R., Seiter, C., & Bösch, H. (2002). Melting boundaries: Subjectivity and intersubjectivity in the light of parapsychological data. *European Journal of Parapsychology*, 17, 72-96.
- Weiler, C. (2020). *Psi wars: TED, Wikipedia and the battle for the Internet*. Whitecrow.
- West, D. J., & Fisk, G. W. (1953). A dual ESP experiment with clock cards. *Journal of the Society for Psychical Research*, 37, 185-189.
- White, R. A. (1994). Seek ye first the kingdom of heaven: What are EHEs and what can we do about them? In R. A. White (Ed.), *Exceptional human experience: Background papers I* (pp. 34-46). Exceptional Human Experience Network.
- Wiseman, R. (2001). A reply to O'Neill. *Paranormal Review*, 17, 8-10.
- Wiseman, R. (2009). Heads I win, tails you lose: How parapsychologists nullify null results. *Skeptical Inquirer*, 34(1), 36-40.
- Wiseman, R., & Schlitz, M. (1997). Experimenter effects and the remote detection of staring. *Journal of Parapsychology*, 61, 197-207.
- Wolman, B. B. (Ed.). (1977). *Handbook of parapsychology*. Van Nostrand Reinhold.



ESSAY

# The Darker Side of Near-Death Experiences

**Bruce Greyson**

cbg4d@uvahealth.org

orcid.org/0000-0002-2192-7898

Division of Perceptual Studies  
Department of Psychiatry & Neuro-  
behavioral Sciences, University of  
Virginia Health System

SUBMITTED January 1, 2023

ACCEPTED April 21, 2023

PUBLISHED December 31, 2023

<https://doi.org/10.31275/20232843>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## HIGHLIGHTS

Although most near-death experiences involve profound bliss, research also shows that some involve different types of negative or frightening perceptions which deserve detailed study.

## ABSTRACT

Modern research on near-death experiences (NDEs), powerful spiritual experiences triggered by a close brush with death, has focused on experiences characterized by profound positive feelings, ranging from incredible peace and calmness to bliss and ecstasy. However, throughout history there have been accounts of frightening deathbed visions and terrifying journeys to a hellish realm peopled by evil forces or beings. It is difficult to determine the prevalence of these distressing NDEs because the anxiety and judgmentalism they evoke deter experiencers from acknowledging and revealing them. Nevertheless, most recent studies estimate their prevalence at between 11% and 22% of all NDEs. Their phenomenology varies widely, but attempts to categorize distressing NDEs have yielded several distinct types. Various researchers have attributed distressing NDEs to the personal characteristics of the experiencer, to biological factors of the brush with death, or to other circumstances around the event. Overall, distressing NDEs appear to be associated with fewer permanent aftereffects than the more common pleasant NDEs, which may reflect the reluctance of experiencers to focus attention on unpleasant experiences. Nevertheless, some distressing NDEs lead to long-lasting emotional trauma. Several strategies have been described by which experiencers try to come to terms with and find meaning in, their distressing NDEs. Much research remains to be done on the causes and aftereffects of distressing NDEs and their relationship to other dark spiritual experiences.

## KEYWORDS

Near-death experience, frightening near-death experience, distressing near-death experience, hellish near-death experience, void near-death experience.

## INTRODUCTION

Near-death experiences (NDEs) are powerful percepts with features often considered spiritual, typically occurring to individuals close to death or in intense danger. While life-threatening situations are reliable triggers for NDEs, comparable mystical experiences can occur in a wide variety of other circumstances.

Most reported NDEs include profound feelings of peace or bliss, joy, a sense of cosmic unity (“being one with everything”), an out-of-body experience, passing through a darkness, encountering a light (often described as “a loving being of light”), meeting spiritual beings and/or deceased persons, a life review, and an altered sense of time. In contrast to most people’s idea of the dying process, for the most part, NDErs are not terrified or panicking as they



face death. In fact, most people who report NDEs describe overwhelmingly positive feelings, ranging from incredible calmness to joy and ecstasy.

But, not all NDEs are described as blissful or pleasant. Although only a minority of experiencers describe frightening or distressing experiences, it is possible that there are more people who have unpleasant NDEs but are unwilling to talk about them or that clinicians and researchers are reluctant to hear about them. The topic is so laden with anxiety and judgmentalism that it is difficult to gather reliable information about unpleasant NDEs and their aftereffects (Bush, 2002, 2012). For those reasons, we cannot be confident that frightening near-death experiences are as rare as they appear to be (Clark, cited in Flynn, 1986).

Frightening deathbed visions were well-known in past centuries. Christian and Hindu iconography were replete with examples of postmortem horrors, including terrifying encounters with evil forces or beings (Grosso, 1981). The medieval Christian literature included an abundance of journeys to Hell or purgatory and back, and comparable stories of travel to an underworld realm of the dead can be found in nearly all cultures (Zaleski, 1987a, 1987b). Yet modern research on NDEs has tended to focus almost exclusively on blissful experiences. As Zaleski summarized this divergence from the historical accounts, “gone were the bad deaths, harsh judgmental scenes, purgatorial moments, and infernal terrors of medieval visions; by comparison, the modern other world is a congenial place, a democracy, a school for continuing education, and a garden of earthly delights” (1987a, p. 21).

In keeping with the focus of this issue of the Journal on “The Darker Side of Spirituality,” encompassing beliefs, activities, perceptions, or experiences with ostensibly unpleasant, negative, troubling, or even sinister themes, this article will focus on NDEs that are dominated by scary, malevolent, or otherwise unpleasant content and emotions.

## TERMINOLOGY

There has been little agreement among different researchers as to what to call unpleasant NDEs. They were initially labeled “negative NDEs” (e.g., Grey, 1985; Irwin & Bramwell, 1988; Lindley, Bryan, & Conley, 1981; Rogo, 1979). However, that label was rejected by some NDErs as judgmental or pejorative, and by some researchers because unpleasant experiences can promote positive introspection and spiritual growth, and because the term “negative experience” had also been used to refer to close brushes with death without an NDE. To avoid the condemnatory term “negative NDE,” Ellwood (1996) referred to unpleasant NDEs as “photographic negatives,” giving a true picture but with the values reversed, and a necessary stage in the

development of the final picture.

Unpleasant NDEs have also been called “hellish experiences” (e.g., Rawlings, 1978, 1980), “frightening NDEs” (e.g., Jambor, 1997; Ring, 1994a, 1994b, 1996), and “painful NDEs” (Ellwood, 2001), but those terms are applicable to only one variety of unpleasant experience. They have also been called “distressing NDEs” (e.g., Bush, 2009; Bush & Greyson, 2014; Cassol, Martial, Annen, et al., 2019; Ellwood, 1996; Greyson & Bush, 1992) and “less-than-positive NDEs” (e.g., Rommer, 2000, 2002), but those labels struck some researchers as too mild to convey the intense emotions evoked by these experiences. Nevertheless, I will refer to these unpleasant experiences as “distressing NDEs,” in keeping with the terminology used in *The Handbook of Near-Death Experiences* (Bush, 2009) and in subsequent publications, and to focus on the unpleasant emotions that characterize these NDEs rather than on the metaphorical content of these diverse experiences.

## PREVALENCE OF DISTRESSING NEAR-DEATH EXPERIENCES

Most research into NDEs in the 1970s and 1980s focused on pleasant experiences. Scales developed in the 1980s to identify and quantify NDEs, the Weighted Core Experience Index (Ring, 1980) and the NDE Scale (Greyson, 1983) placed high value on pleasant emotions but did not include unpleasant emotions (Cassol et al., 2019; Greyson & Bush, 1992). These scales’ bias toward pleasant NDEs and lack of sensitivity in identifying distressing experiences may have contributed to their underrepresentation, and was one factor in the development of the modified NDE-C scale, which included one item addressing unpleasant emotions (Martial, Simon, Puttaert, et al., 2020). However, that item in the NDE-C has been criticized for its wording that mixed a condition (“non-existence”), a context (“void”), and an emotion (“fear”), rendering it “illogical and unanswerable” (Bush, 2021).

Wider attention to distressing NDEs began in the 1990s. Prevalence estimates of distressing NDEs have varied widely, perhaps influenced by the small sample size of most studies and by differing criteria for differentiating pleasant from distressing NDEs (Cassol et al., 2019).

The first estimate of the prevalence of distressing NDEs was published by Rawlings in 1978, in which he speculated that more than half of all NDEs started with “hell-like” experiences but that most experiencers repress memories of these painful incidents before researchers can interview them. Rawlings’ conclusions (1978, 1980) were not widely accepted, however, partly because they were not supported by his own data (e.g., most of his NDE accounts were collected years after the event) and other

researchers found no evidence that distressing NDEs were rapidly repressed or were reported more often immediately upon resuscitation, and partly because his acknowledged intent in studying NDEs was to persuade readers to commit themselves to Christian doctrines as the only way to avoid Hell (Grey, 1985; Ring, 1980; Sabom, 1979). Indeed, Rawlings himself acknowledged that his research was biased by his role as a “born-again” Christian (Auchmutey, 1979).

In 1992, Atwater noted that most researchers at that time regarded distressing NDEs as quite rare, citing an estimate of 1 percent of all NDEs in the Gallup Poll (Gallup & Proctor, 1982). That 1 percent estimate was later endorsed by Ring (1984) and by Charland-Verville, Jourdan, Thonnard, et al. (2014).

On the other hand, Garfield (1979) identified 8 intensive care or coronary care patients who had distressing NDEs after a close brush with death, amounting to 22 percent of the 36 patients he interviewed who could recall any experience; Lindley, Bryan, and Conley (1981) identified 11 distressing experiences (20%) among a sample of 55 NDEs; Atwater (1992) reported that her collection of “more than 700” NDE accounts included 105 distressing experiences, a prevalence of up to 15 percent; Gibson (1996) reported 12 distressing experiences (18%) among a sample of 68 NDEs; Rommer (2000, 2002) found that 18 percent of NDEs in her database had distressing experiences; Cassol, et al. (2019) reported that of their sample of 123 NDEs, 17 (14%) reported distressing experiences; and in an unpublished analysis of 546 experiencers in the University of Virginia NDE database, 437 (80%) said their NDE was primarily “pleasant,” 51 (9%) said it was “emotionally neutral,” and 58 (11%) said it was primarily “unpleasant” (i.e., distressing).

In summary, Rawlings (1978), who acknowledged bias based on his religious beliefs, estimated the prevalence of distressing NDEs at more than half. At the other extreme, three reports estimated the prevalence at 1 percent: Gallup and Proctor (1982), Ring (1984), and Charland-Verville et al. (2014).

Despite these extreme estimates of 1 percent to more than half, the majority of researchers who investigated distressing NDEs have come up with an intermediate estimate of between 11 and 22 percent: Garfield (1979), 22 percent; Lindley, Bryan, and Conley (1981), 20 percent; Gibson (1996) and Rommer (2000, 2002), 18 percent; Atwater (1992), up to 15 percent; Cassol, et al. (2019), 14 percent, and the unpublished University of Virginia analysis, 11 percent.

## DESCRIPTIONS OF DISTRESSING NEAR-DEATH EXPERIENCES

The first modern published reference to distressing NDEs was by Delacour (1974), who described horrific visions of descents into a pit or cave with ghastly, eyeless figures and flames of fire, although later researchers regarded his work as fictionalized (Ellwood, 1996).

Rawlings (1978) described distressing NDEs (which he called “hellish”) as including being surrounded by grotesque human and animal forms, hearing other people moaning and in pain, violence, and demonic types of torture, reminiscent of Dante’s *Inferno*. He noted great variety in content among distressing NDEs, in contrast to the consistency among pleasant experiences.

Lindley, Bryan, and Conley (1981) described distressing NDEs (which they called “negative”) as containing extreme fear, panic, or anger and added that some contain visions of demonic creatures that threaten or taunt the experiencer.

The nationwide Gallup poll (Gallup & Proctor, 1982) reported that the rare distressing NDEs they found included featureless, forbidding faces, a sense of discomfort or emotional unrest, confusion, and a sense of being tricked into annihilation.

Grey (1985) described distressing NDEs as characterized by extreme fear or panic, emotional or mental anguish, utmost desperation, an intense feeling of loneliness, and a great sense of desolation. She also identified a “hell-like” experience that included a sense of being dragged down by an evil force, being threatened by wrathful or demonic creatures, extreme cold or heat, hearing the wailing or tormented souls and the snarling of wild beasts, and sometimes proverbial fire and an encounter with the devil.

Atwater (1992) described distressing NDEs as including lifeless or threatening apparitions; barren or ugly expanses; threats, screams, or silence; violence or torture; feeling of cold; diminished light; fear or anxiety; and struggling to stay alive.

An unpublished 2023 qualitative study distressing NDEs at Lund University in Sweden (Ait Melloul, A., & Kinnunen, K. The phenomenology of distressing near-death experiences and their aftereffects. Lund University) that used interpretive phenomenological analysis to study eight distressing NDEs qualitatively reported 11 themes in the content of the experiences: fear (in 7 of 8 narratives), confusion (in 3 of 8), being in a dark realm (in 4 of 8) sometimes identified as Hell (in 3 of 8), being judged by God as unworthy (in 3 of 8) or of judging oneself as unworthy (in 2 of 8), feeling out of control (in 5 of 8) or conversely having some degree of control over the situation (in 2 of 8), pleading for divine help (in 2 of 8) or being rescued by some entity without pleading (in 2 of 8), and feeling alone and rejected (in 2 of 8).

## Mixed Pleasant and Unpleasant Near-Death Expe-

## periences

It should be noted that some NDEs include both pleasant (often heavenly) and unpleasant (often hellish) features (Cassol et al., 2019), which have recently been labeled “hybrid experiences” (Ait Melloul, A., & Kinnunen, K. The phenomenology of distressing near-death experiences and their aftereffects. Lund University unpublished study). Lindley, Bryan, and Conley (1981) reported that distressing NDEs are usually transformed at some point into peaceful experiences. They also noted that unpleasant emotions occur at the end of some NDEs, although their descriptions suggested that they included in that category NDEs that were entirely pleasant but were followed by anger or panic at the experiencers’ return to the physical body and to mundane reality.

Sabom (1982) found that out of 34 hospitalized patients who described NDEs when interviewed after a near-death crisis, 14 (41%) reported the transcendental experience began with a sense of entering a dark region or void, sometimes accompanied by momentary fright or bewilderment, but that in time these unpleasant emotions were replaced with calm, peace, or tranquility. Irwin and Bramwell (1988) reported the NDE of a 50-year-old woman that began as a blissful experience but changed into a frightening one upon an encounter with the devil. Conversely, Bonenfant (2001) reported the NDE of a 6-year-old boy that began as a frightening encounter with the devil but later changed to a pleasant experience with God and a protective angel.

## Types of Distressing Near-Death Experiences

Garfield (1979) described four types of altered state experiences at the approach of death: (1) a powerful light, celestial music, and an encounter with religious figures of deceased relatives; (2) demonic figures and nightmarish images of great lucidity; (3) dreamlike images, sometimes blissful, sometimes terrifying, and sometimes alternating, with variable content and less lucidity than the other types; and (4) drifting aimlessly on outer space or being encapsulated in a limited environment with obvious spatial constraints, sometimes called a void or tunnel. The last three types can be considered categories of distressing NDE, although Garfield did not label them as such.

Greyson and Bush (1992) suggested the first classification of types of distressing NDE based on a study of 50 such experiences. Their typology had some overlap with Garfield’s altered states types 2, 3, and 4. They suggested that the most common type, which Ring later labeled “inverted NDEs” (Ring, 1994a), contained phenomenological features typical of pleasant NDEs, such as a bright light, a tunnel, a sense of leaving the body, and a life review, but

were experienced as terrifying rather than comforting. Many experiencers identified the loss of ego control as the frightening aspect of the inverted NDE, and Greyson and Bush (1992) noted that some inverted NDEs eventually converted to pleasant experiences, a phenomenon noted previously by Lindley, Bryan, and Conley (1981) and by Sabom (1982).

An example of an inverted NDE was reported by a 27-year-old woman:

Suddenly I became aware that something really strange was happening. It was as if I had been pulled up and away from my body, and I found myself watching my doctor and his nurse working on my body from a corner or the room near the ceiling. I felt so startled at being able to hover above like that. And I wanted to feel in control of my situation but I was unable to do anything except watch helplessly. I made some attempts to get the attention of the other two in the room, but they were totally oblivious to anything I was saying to them.

Then I found myself no longer in the room but traveling through a tunnel, slowly at first then picking up speed as I went. As I entered the tunnel, I began hearing the sound of an engine, the kind that operates heavy machinery. Then, as I was moving slowly I could hear voices on each side of my head, the voices of people whom I’ve known before because they were vaguely familiar. About this time I became frightened, so I didn’t concentrate on trying to recognize any of the voices.

I found myself growing more and more afraid as the speed picked up and I realized that I was headed toward the pinpoint of light at the end of the tunnel. The thought came to me that this was probably what it was like to die. I decided then and there that I wanted to go no further, and tried to backpedal, stop, and turn around, but to no avail. I could control nothing, and the pinpoint of light grew larger and larger. Before I knew it, that light exploded all around me. My attitude at this time was quite terrified; I did *not* want to be there, and I was determined that I was *not*, by God, going to stay. (Greyson & Bush, 1992, p. 101)

The second, less common type of distressing NDE, the “void NDE,” was characterized by a paradoxical experience of nothingness or of existing in an isolated and eternal featureless void, corresponding to Garfield’s altered state type 4. Sometimes void NDEs included a sense of despair

that life as we know it never existed, but was all a cruel joke, and left the experiencer with a pervasive sense of emptiness and fatalistic despair after the event.

An example of a void NDE was reported by a 26-year-old woman:

I passed through different stages of "torment." Voices were laughing at me, telling me all of life was a "dream," that there was no Heaven, Hell, or Earth, really, and that all I had experienced in life was actually an hallucination....

I passed through the stage of terrible thirst and the voices kept laughing and telling me, "You think this is bad? Wait till the *next* stage!" I found myself hurtling towards the final torment: I was to be suspended in a total vacuum with nothing to see or do for eternity. I was naked and I was sad about that because I thought, "If only I had clothing I could pull the threads and knot them and reweave them for something to do!" And, "If only I were sitting in a chair I could splinter it and try to make something of the splinters." And then the overwhelming realization that eternity was forever and ever, time without end! What to do in a vacuum forever?

After all these years, the nightmare remains vivid in my mind. I assure you the worst form of Hell, in my mind at least, would be myself suspended, naked, in a vacuum!

Not all NDEs characterized by the void are distressing experiences, however. Just as the features typical of pleasant NDEs can occasionally be perceived as distressing experiences in inverted NDEs, so too some void NDEs, which are usually characterized by fear, terror, and despair, can occasionally be experienced as liberation from suffering. Such pleasant void NDEs are reminiscent of the Buddhist concept of the empty void as an experience of nirvana, in which there is no essence or fundamental nature in anything, and everything is empty, with no abiding self or soul in any being, and all subject-object discrimination and polarities disappear, there is no conventional reality, and the only ultimate reality of emptiness is all that remains.

An example of a blissful experience of a void NDE was reported by a 59-year-old man:

It was the deepest darkness I had ever known. I felt utterly secure in my darkness. I had "come home" to a state beyond all danger, where I no longer needed or wanted to see anything, because everything I could possibly need was already mine.

That shining darkness seemed to contain everything that ever was or could be, and all space and all time. Yet it contained nothing at all, because "thing" implies separate entities, whereas what I experienced was a simple "beingness" without any kind of separation of one thing from another, the essence of "aliveness" prior to any individual living entities. A paradoxical expression from Eastern mysticism is the only one that is remotely adequate: "the living void." The idea of a void being interesting would have seemed nonsense to me before, but now it makes total sense. In fact, the state I am trying to describe seems to defy all ordinary canons of logic.

It was in no way merely negative. It was certainly "a very peaceful blackness," but there was nothing passive or lifeless about it. Words like "bliss" or "joy" are equally inadequate, for they are far too limited.

I have no recollection of the transition from ordinary into Nirvanic consciousness. In the shining darkness, there was no feeling of having gone anywhere; it was more like everywhere being present to me. Yet there was a sense of having ceased to be the ordinary me.

My feeling is of being beyond death – though I do not mean surviving death. The Self that I had become was so much greater than my ordinary self that I had little recollection of, or interest in, my personal history. Yet, I did not lose my past or the people I have known in ordinary life. Although my NDE did not contain a "life review" like many other NDEs, I still sensed that my whole life was completely present, and could have been reviewed if I had wanted. But in that "deep and dazzling darkness" I felt no need.

The whole experience was blissful. The bud that was me opened out in response to that black sun, which was also, paradoxically, my-Self. I was alpha and omega, the beginning and end of the creation process. The shining dark consciousness is all the happiness I could possibly want.

A similar experience of a blissful void was reported by a 37-year-old man:

Things became dim or dark. I was suspended, looking down at me alone in the jail cell. I was sad. The shame was unbearable. I wasn't supposed to be like this, what happened to me. I was alone in this cell and it served me right I would just spend

eternity alone. It was sinking in that I was dead. I was in this cell alone with nowhere to go. It was absolutely the worst feeling in the world: I was alone, dead, and nobody knew. I remember what seemed like I was traveling out of my body and then coming back, like I could leave but had nowhere to go.

The tunnel really didn't feel like a tunnel. It's hard to describe. I didn't feel I had any control over what was happening. I heard what appeared to be loud clicking or banging with a swooshing sound. I was moving and lights were flashing. I then felt as if I was floating or suspended in a milky black area. It seemed like there were layers of this milky black that went forever, or as far as I could see.

While suspended in this milky area, I began to feel a feeling and I was immediately drawn to it. I don't remember seeing any light, but this feeling was not of this world: all my pain was gone. I was drawn to it. My whole self, being, whatever, wanted nothing but this feeling. I just can't put into words what this felt like: perhaps nirvana, purest form of love, whatever. I just wanted more. I sensed something special and monumental was going on. I just knew I would never be the same, and frankly didn't care. I felt I was moving toward this feeling through the milky stuff, being drawn to it.

I found myself at some sort of crossing or border. I knew that if I crossed I could not come back. I knew I was at some point of no return and felt like a decision needed to be made. That was the last thing I remember.

These unusual examples of void NDEs that are not distressing experiences illustrate the differences in how NDEs may be experienced by different individuals, just as do classical pleasant NDEs and inverted NDEs.

The third and least common type identified by Greyson and Bush (1992), the "hellish NDE," was described as visiting hell-like regions and encountering demonic beings, corresponding to Garfield's altered state type 2. Grey (1985) and Ring (1994a) regarded hellish NDEs as a more intense and culturally derived version of inverted NDEs.

An example of a hellish NDE was reported by a 26-year-old woman:

Instantly I started plummeting downward, falling into darkness, a horrible endless black space. Imagine standing in an elevator and all of a sudden the floor drops out and down you go, that terrible sensation of falling. I was terrified in the darkness

that surrounded me but very aware of the horrible pain burning and searing my entire body, agonizing pain beyond description that would never leave. There were the tortured screams of others but I could see nothing but the darkness. There was no fire, just this dreadful burning pain over every part of me and I knew that this was Hell.

I felt hopeless – knowing this was for eternity! There was no escape from the nightmare: I wouldn't wake up; I wouldn't hit bottom and die; I wouldn't be rescued by anyone. I would fall and burn in this gruesome place forever and ever and ever, screaming out with all these other lost souls crying out in the darkness, totally helpless as we fell further into the pit of Hell. Not even God entered into this place and the torture would go on forever and ever and ever. There was no way to describe the terror that filled me, realizing that I actually sent my self to Hell through my choice of not believing. I had chosen this. I had chosen not to believe in God.

I felt a separation, as if I had never existed. There is no lonelier place than separation from God. I saw no flames, just total darkness and the sensation of burning. I heard many people screaming but I saw no one. It was a dark, desolate, horrible place with no hope of escape. I felt the hopelessness of being lost in torment, separated from God for eternity. (Greyson, 2021, p. 145)

Gibson (1996) suggested an additional category of distressing NDE that he called "instructional," in which experiencers are led by a "spirit guide" to a realm where they can witness deceased beings suffering extreme agony in a hellish type of existence, but the experiencers themselves are not subjected to the agony of the witnessed beings.

An example of an instructional NDE was reported by a 27-year-old woman:

I looked down upon the accident scene. I looked into my car and saw myself trapped and unconscious.... A hand touched mine, and I turned to see where this peace and serenity was coming from ... and there was Jesus Christ – I mean the way he is made out to be in all the paintings.

I was led around a well, because I wanted to stay with him and hold his hand. He led me from a side of bliss to a side of misery. I did not want to look, but he made me look – and I was disgusted and horrified and scared, it was so ugly. The people were blackened and sweaty and moaning in pain and chained to their spots. And I had to walk

through the area back to the well. One was even chained to the evil side of the well. The man was so skeletal and in such pain – the one chained to the evil side of the well – I wanted to help him, but no one would, and I knew that I would be one of those creatures if I stayed. I hated it there. I couldn't wait to get to the well and go around it. He led me to it, but he made me go through it alone as he watched. Someone else followed me through and then stepped in front of me to help me walk over the debris on the ground – snakes or something. I never looked at this thing, but I know it was dark. (Greyson & Bush, 1992, pp. 105-106)

Ellwood (1996) suggested subdividing hellish experiences into (a) those that are entity-centered, including malevolent beings, which Ellwood thought were analogous to figures sometimes encountered in schizophrenia and nightmares, but no fire; and (b) those that are fire-centered, including hellfire but no powerful or malevolent beings, which Ellwood thought were analogous to the experiences of saints and mystics. She also speculated that, with further research, there may be a third subcategory of hellish NDE, characterized by neither malevolent beings nor hellfire but rather spinning vortex-like energies, as described previously by Atwater (1994).

An example of a distressing NDE characterized by a vortex was reported by a 21-year-old woman:

I recall being pulled down into a spinning vortex. At first, I did not know what was happening. Then I realized my body was being drawn downward, head first. I panicked and fought, trying to grab at the sides of the vortex....

I tried to see something, but all there was to see was this cyclonic void that tapered into a funnel. I kept grabbing at the sides but my fingers had nothing to grasp. Terror set in, true terror. I saw a black spot, darker than the funnel and like a black curtain, falling in front of me. Then there was a white dot, like a bright light at the end of the funnel. But as I grew closer, it was a small white skull. It became larger, grinning at me with bare sockets and gaping mouth, and traveling straight toward me like a baseball. Not only was I terrified, I was rally livid, too, I struggled to grab hold of anything to keep me from falling, but the skull loomed larger. (Atwater, 1994, p. 30)

Ellwood further identified a possible additional type of distressing NDE, which involves a painful empathic life

review in which experiencers relive not only the details of their lives but also the impact of their acts on others, including all the suffering they had caused for other people and animals, and, in some cases, plants.

An example of a painful empathic life review was reported by a 39-year-old woman:

I remembered hearing stories of past life reviews, where your life passes before you at great speed for final review.... Mine was not a review, it was a reliving. For me, it was a total reliving of *every* thought I had ever thought, *every* word I had ever spoken, and *every* deed I had ever done; *plus* the effect of each thought, word, and deed on everyone and anyone who had ever come within my environment or sphere of influence, whether I knew them or not (including unknown passersby on the street); *plus* the effect of each thought, word, and deed on weather, plants, animals, soil, trees, water, and air.

It was a reliving of the total gestalt ... complete with all the consequences of ever having lived at all. No detail was left out. No slip of the tongue or slur was missed. No mistake nor accident went unaccounted for. If there is such a thing as Hell, as far as I am concerned, this was Hell.

I had no idea, no idea at all, not even the slightest hint of an idea, that every thought, word, and deed was remembered, accounted for, and went out and had a life of its own, once released; nor did I know that the energy of that life directly affected all it touched or came near. It's as if we must live in some kind of vast sea or soup of each other's energy residue and thought waves, and we are each held responsible for our contributions and the quality of "ingredients" we add.

This knowledge overwhelmed me!... There wasn't any heavenly St. Peter in charge. It was me judging me, and my judgment was most severe. (Atwater, 1988, pp. 36-37)

Rommer (2000) elaborated on this empathic life review type of distressing NDE, including terror caused by a disturbing life review with a negative judgment by a higher power, leading to overwhelming feelings of guilt. Bush (2002) later wrote that such negative judgments from a higher power could be considered a subset of hellish NDE.

Jambor (1997), based on a bliss/abyss model derived from her study of mysticism, speculated that there may be several more types of distressing NDEs, some including states beyond the sensory or conceptual.

Although Greyson and Bush (1992) did not provide

data supporting their assertion that inverted NDEs were the most common type of distressing NDE and that hellish experiences were the least common type, Lindley, Bryan, and Conley (1981) had previously reported that among 11 distressing NDEs they studied, 10 (91%) were characterized by fear, panic, or anger, and only 1 (8%) was hellish, involving hellfire and damnation. On the other hand, Rommer (2000, 2002) found among her near-death experiencers that 17 percent had inverted NDEs, 28 percent had void NDEs, 42 percent had hellish NDEs, and 14 percent had frightening life review NDEs; and more recently, Cassol et al. (2019) found that among their sample 17 distressing NDEs, 8 (47%) were inverted, 8 (47%) were hellish, and only 1 (6%) was void.

In summary, the following types of distressing NDE have been proposed:

- (1) Inverted (Greyson & Bush, 1992; Ring, 1994a);
- (2) Void (Greyson & Bush, 1992);
- (3) Hellish (Greyson & Bush, 1992), which may be a culturally-derived version of inverted NDEs (Grey, 1985; Ring, 1994a)
  - (3a) Entity-centered hellish (Ellwood, 1996)
  - (3b) Fire-centered hellish (Ellwood, 1996)
  - (3c) Vortex-centered hellish (Ellwood, 1996)
- (4) Instructional (Gibson, 1996);
- (5) Painful life review (Ellwood, 1996; Rommer, 2000, 2002), which may be a subtype of hellish NDE (Bush, 2002); and
- (6) Metasensory and metaconceptual (Jambor, 1997).

### CORRELATES OF DISTRESSING NEAR-DEATH EXPERIENCES

In an unpublished analysis of the University of Virginia NDE database, among a sample of 546 near-death experiencers, 437 (76%) reported pleasant NDEs, 58 (11%) reported distressing NDEs, and 51 (9%) reported emotionally neutral experiences.

Gender was not associated with emotional valence of the NDE ( $\chi^2 = 1.447$ ,  $df = 2$ , *N.S.*), nor was a happy or unhappy childhood ( $\chi^2 = 0.225$ ,  $df = 2$ , *N.S.*), age at the time of the NDE ( $F = 0.701$ ;  $df = 2$ , 543; *N.S.*), years elapsed since the NDE ( $F = 2.606$ ;  $df = 2$ , 543; *N.S.*), cause of the near-death crisis (e.g., surgery, illness, accident) ( $\chi^2 = 4.325$ ,  $df = 6$ , *N.S.*), religious affiliation at the time of the NDE ( $\chi^2 = 9.984$ ,  $df = 12$ , *N.S.*), unusual stress at the time of the NDE ( $\chi^2 = 0.451$ ,  $df = 2$ , *N.S.*), desire to live or to die just before the NDE ( $\chi^2 = 3.994$ ,  $df = 2$ , *N.S.*), or mood just prior to the NDE ( $\chi^2 = 4.009$ ,  $df = 4$ , *N.S.*).

However, intent to fight for life or accept death just before the NDE was significantly associated with emotion-

al valence of the NDE ( $\chi^2 = 10.887$ ,  $df = 2$ ,  $p = .004$ ). Among the 68 percent of near-death experiencers who, just before the NDE, intended to let go or give in to what was happening, 87 percent reported pleasant experiences, 7 percent reported emotionally neutral experiences, and 6 percent reported distressing experiences. On the other hand, among the 32 percent of experiencers who, just before the NDE, intended to fight for life or struggle to remain in control, 71 percent reported pleasant experiences, 11 percent reported emotionally neutral experiences, and 17 percent reported distressing experiences. This analysis supports the notion that resisting the experience and trying to stay in control increase the likelihood of a distressing NDE.

### RELATIONSHIP BETWEEN DISTRESSING AND PLEASANT NEAR-DEATH EXPERIENCES

Distressing NDEs have been reported to include more phenomenological variety than do pleasant NDEs (Greyson & Bush, 1992; Rawlings, 1978). Nevertheless, there are some overarching themes in distressing NDEs that bear some similarities to, and some differences from, the overarching themes of pleasant NDEs.

Grey (1985) described a common sequence of events in distressing NDEs that included (1) fear and panic, (2) out-of-body experience, (3) entering a black void, (4) sensing an evil force, and (5) entering a hell-like environment. She noted that this sequence closely paralleled the sequence Ring (1980) identified for pleasant NDEs: (1) peace and well-being, (2) out-of-body experience, (3) entering a tunnel, (4) seeing the brilliant light, and (5) entering a heavenly environment.

Irwin and Bramwell (1988) compared and contrasted the parallel phenomena of pleasant and distressing NDEs. They noted that both types may include out-of-body experiences, moving through a tunnel or dark void, contact with a being of light, and entry into a transcendental realm, where they may meet deceased spirits and religious figures. They noted that in pleasant NDEs, contact with a divine being of light may include a feeling of unconditional love and acceptance of their past behaviors, good and bad, whereas in distressing NDE, contact with a divine being is likely to involve a sense of being judged negatively for past deeds. In pleasant NDEs, passage through a tunnel or dark area is often in an upward direction, whereas in distressing NDEs, the movement is commonly downward. Most critically, the transcendental realm of pleasant NDEs is often described as "heavenly" or as a pastoral setting of preternatural beauty, whereas the transcendental realm of distressing NDEs is typically a "hellish" place: a dark, dank, misty cave or lake of fire and brimstone, with the devil or other menacing demonic figures.

Atwater (1992) also noted consistent settings and elements in heavenly and hellish NDEs, but with contrasting details. She wrote that hellish experiences included lifeless or threatening apparitions, in contrast to the friendly beings of heavenly NDEs; barren or ugly expanses, in contrast to the beautiful environments of heavenly NDEs; threats, screams, and silence, in contrast to the conversations and dialogue of heavenly NDEs; danger and the possibility of violence and torture, in contrast to the total acceptance and overwhelming sensation of love in heavenly NDEs; and a feeling of coldness, in contrast to a feeling of warmth in heavenly NDEs. She noted furthermore that the same details can be experienced as wonderfully positive by some people and as horrific by others, such as a light at the end of a tunnel or a voice in the darkness.

Cassol et al. (2019) noted little difference in content between pleasant and distressing NDEs. Most notably, they reported that pleasant and distressing NDEs had comparable scores on the NDE Scale; pleasant NDEs had a higher score than distressing NDEs only on the affective component subscale ( $p < .0001$ ).

On the other hand, our unpublished data from the University of Virginia NDE database do show a significant difference in NDE Scale scores between pleasant and distressing NDEs. Mean scores on the NDE Scale (Greyson, 1983) were 16.60 ( $S.D. = 6.64$ ) for those NDErs with a pleasant experience, 9.65 ( $S.D. = 7.18$ ) for those with an emotionally neutral experience, and 8.78 ( $S.D. = 5.15$ ) for those with a distressing experience. This difference between groups was statistically significant ( $F = 56.153$ ;  $df = 2, 543$ ;  $p < .001$ ). A similar hierarchy was found between the groups for the cognitive, affective, paranormal, and transcendental factors of the NDE Scale, with NDErs with a pleasant experience showing the highest scores and those with emotionally neutral and distressing experiences showing equivalent lower scores, all significant at  $p < .001$  (cognitive factor:  $F = 12.753$ ; affective factor:  $F = 131.612$ ; paranormal factor:  $F = 7.326$ ; transcendental factor:  $F = 26.051$ ).

Nancy Evans Bush and I compiled a list of 64 features that we hypothesized might differentiate distressing from pleasant NDEs, based on the accumulated literature and on our experience interviewing NDErs. Of those 64 features, only 17 showed statistical differences between pleasant and distressing NDEs, after applying a Bonferroni correction for multiple simultaneous tests. Thirteen of those features were more common in distressing NDEs, and 4 were more common in pleasant NDEs.

Features that were statistically more common in distressing NDEs ( $p < .001$ ) included:

1. Being in Hell or a place of torment ( $\chi^2 = 20.574, df = 2$ );
2. Heading toward Hell or a place of torment but not reach-

- ing it ( $\chi^2 = 34.628, df = 2$ );
3. A terrifying, horrible, or painful separation from the body ( $\chi^2 = 15.713, df = 2$ );
4. Any other terrifying, horrible, or painful incident during the NDE ( $\chi^2 = 44.826, df = 2$ );
5. Being cold ( $\chi^2 = 18.760, df = 2$ );
6. Feeling fear, dread, terror, or panic ( $\chi^2 = 87.205, df = 2$ );
7. Feeling horror, disgust, or repulsion ( $\chi^2 = 21.363, df = 2$ );
8. Feeling despair or hopelessness ( $\chi^2 = 31.228, df = 2$ );
9. Trying to scream or cry out, but being unable to make any sound ( $\chi^2 = 30.922, df = 2$ );
10. Feeling that the experience would never end or would repeat itself forever ( $\chi^2 = 14.249, df = 2$ );
11. Trying to escape by fighting, running, or climbing out ( $\chi^2 = 41.436, df = 2$ );
12. Trying to get back in control of your situation yourself ( $\chi^2 = 31.357, df = 2$ ); and
13. A sense that you would be completely annihilated or cease to exist ( $\chi^2 = 30.923, df = 2$ ).

Features that were statistically more common in pleasant NDEs ( $p < .001$ ) included:

1. Being in outer space, or in the heavens, or in the sky ( $\chi^2 = 15.653, df = 2$ );
2. Seeing a radiant light ( $\chi^2 = 25.603, df = 2$ );
3. Seeing a "being" of light ( $\chi^2 = 16.203, df = 2$ ); and
4. Being with a benevolent guide ( $\chi^2 = 50.180, df = 2$ ).

Features that, contrary to our expectations, did not differentiate pleasant and distressing NDEs included: being in a void or empty space; hearing wails, moans, gnashing of teeth, or sounds of torment; being in a pit, cave, or tunnel; being in darkness without any light; being encompassed or engulfed by light, or becoming part of the light; rising or moving upward; falling or moving downward; feeling a magnetic pull or suction of some kind; being hot; being someplace wet, slimy, or being submerged in water; being totally alone; being with grotesque or terrifying creatures; being laughed at or mocked; feeling exhaustion or weariness; spinning out of control; complete absence of any sensations; feeling no control over what was happening; being rescued from your situation; arguing or pleading your case; begging for mercy; praying for help; being told or having a sense that your life was a game or a joke; being told or having a sense that you were about to lose all sense of personal identity; being told or having a sense that nothing Earthly ever existed or was real; being told or having a sense that you had imagined your hallucinated your entire Earthly life; feeling your type of experience was related to your actions or lifestyle; feeling your type of experience was related to your religious faith; feeling your type of ex-

perience was related to your beliefs and attitudes; feeling your type of experience was related to a physiological accident; feeling your type of experience was related to something else about your or your situation; feeling your type of experience was related to some universal truth not specific to you; and feeling your type of experience was related to chance.

## PROPOSED EXPLANATIONS FOR DISTRESSING NEAR-DEATH EXPERIENCES

From the hundreds of NDE accounts in the University of Virginia NDE database, and the investigations of other near-death researchers, no obvious factor has emerged to explain why some people have pleasant, even blissful NDEs, while others have distressing, even terrifying ones. The meager amount of evidence we have from distressing NDEs at this point suggests that they can occur under the same conditions as do pleasant NDEs. We have no data to explain why some people have distressing NDEs while others have pleasant ones. Despite the paucity of data, however, several researchers have offered theoretical speculations to explain the type of NDE an experiencer may have.

### Personal Characteristics

Some researchers have suggested that the experiencers' personal characteristics play a role in bringing about distressing NDEs. Rawlings argued that all those who have not acknowledged Jesus as Savior and accepted His death on the cross as a substitute punishment for their own sins will have a hellish NDE, and, indeed, a hellish eternal afterlife, however good and admirable their lives had been. He regarded the unconditional divine love reported in most pleasant NDEs as a deceit of the devil (Ellwood, 1996). But the data do not support Rawlings' assertions. In an unpublished analysis of 443 NDEs from the University of Virginia database, the rate of distressing NDEs was 13 percent among those who were Roman Catholics at the time of their NDE, 9 percent among Protestants, 8 percent among Jews, 6 percent among atheists, and 6 percent among agnostics, which were not significantly different. In aggregate, distressing NDEs were reported by 11 percent of the Christians and by 9 percent of the non-Christians ( $\chi^2 = 4.50$ ,  $df = 2$ , *N.S.*).

Neither is it true that people who live "saintly" lives always have pleasant NDEs while "bad" people always have distressing ones. Throughout history, revered mystics like the 16<sup>th</sup>-century Saints Teresa of Ávila (Teresa of Ávila, 1912/1577) and John of the Cross (John of the Cross, 1905/1584), and the 20<sup>th</sup>-century Mother Teresa of Calcutta (Teresa of Calcutta, 2007) described their "dark night of

the soul" as a necessary first stage on the path to union with the Divine. On the other hand, there are accounts of blissful NDEs from career criminals, including murderers serving life sentences in prison (Greyson, 2021).

Atwater (1992) wrote that distressing or hell-like NDEs were usually experienced by people who have deeply suppressed or repressed guilts, fears, and angers, and/or those who expected some kind of punishment or accountability after death; although Bush (2002) later noted that *everyone* has deeply suppressed or repressed guilt, fears, and anger, and that many people who do also report pleasant NDEs. Greyson and Bush (1992) suggested that inverted NDEs might be associated with fear of losing one's ego, which leads to resisting the NDE rather than surrendering to it, creating a fear that pervades the entire experience. Bush (2002) noted that there is abundant evidence across centuries and continents to corroborate that idea. In support of that notion, Greyson and Bush (1992) pointed to the conversion of distressing inverted NDEs to pleasant experiences once the experiencers eventually exhaust their resistance and let go. Bush (2002) later argued that resisting a distressing NDE is likely to intensify fearfulness in experiencers. Kungurtsev (1991) noted a parallel dynamic in ketamine-induced NDE-like experiences, reporting that people who are very controlling and have difficulty letting go often have distressing experiences, as the dissolving of the individual sense of self is perceived as horrifying, whereas people who are more relaxed and able to surrender usually have blissful or ecstatic experiences.

Rommer (2000, 2002) suggested that experiencers are responsible for the content and imagery of distressing NDEs (and also of pleasant NDEs), in that they see, hear, and feel what they need in order to reevaluate their lives. She identified four reasons why experiencers might have a distressing NDE: (1) to challenge the experiencers to reevaluate their lives and make necessary changes; (2) if the experiencers' mindset going into the NDE was fear-based; (3) if the experiencers were raised to expect Hell, fire, and brimstone; and (4) so the experiencers could act as a moral messenger to others.

Ring (1994a) argued that "frightening NDEs are themselves illusory phantasmagories thrown up by the ego in response to the threat of its own seeming imminent annihilation" (p. 22). He cited support for that perspective in *A Course in Miracles* (Schucman, Thetford, & Wapnick, 1975), which posits that the only thing that is real is divine love and acceptance and that anything else, including your ego, is an illusion. In this understanding, distressing NDEs, being rooted in fear of the ego being dissolved, are essentially illusions, whereas pleasant NDEs, being rooted in a realm of love and acceptance, are real.

Jambor (1997) argued that both pleasant and dis-

tressing NDEs hinted at the same ultimate reality, viewed through the experiencers' individual colored glasses of bliss or horror. Modeling her understanding of NDEs on the bliss/abyss duality derived from various mystical traditions, she conceptualized the ultimate reality as being beyond any pair of opposites, such as bliss and abyss. In her view, pleasant (bliss) and distressing (abyss) NDEs are parallel paths that both lead to the indivisible wholeness of ultimate reality.

### Biological Factors

Other researchers have suggested that distressing NDEs are not ontologically real in the sense that pleasant NDEs are, but are rather illusions or hallucinations. Rogo (1979) argued that distressing NDEs may be hallucinations produced by the experiencer's mind in reaction to violent resuscitation procedures such as chest pounding and electrical shock.

Ring (1994a, 1996) argued that distressing void NDEs could be understood as emergence reactions to inadequate anesthesia, citing examples of drug-induced states that had similar sensations of being in an endless void and coming to a realization that life ever existed but was only an illusion. He did allow, however, that drugs may simply trigger the distressing experience but not directly cause it, and that distressing NDEs have psychological reality of great consequence (Ring, 1994b).

Bache (1994, 1996) agreed with Ring that distressing NDEs do not have the same ontological significance as pleasant NDEs, but are rather shadows of the ego, just as illusory as is the ego itself. He offered an understanding of distressing NDEs based in the perinatal symptomatology outlined by Grof (1975), which involves not personal characteristics but rather universal biological imperatives. The perinatal level of consciousness, in Grof's paradigm, focuses on universal experiences, including existential despair, such that the resistance to ego death is not an individual character trait but rather an experience embedded in our collective unconscious. But properly seen, this terrifying experience is not a punishment but rather a purification that leads to spiritual growth. Bache proposed that pleasant and distressing NDEs are two aspects of the same underlying process, but that distressing experiences represent a truncated form when the dying process is interrupted before it progresses to a pleasant NDE. If allowed to run their full course, NDEs culminate in ego death followed by spiritual rebirth; it is the ego's resistance to its annihilation that makes that portion of the NDE distressing. The dilemma for an understanding based on universal perinatal levels of consciousness is why *all* NDEs do not start with a terrifying sense of existential despair.

### Circumstantial Factors

Still other researchers have suggested that the distressing quality of some NDEs is due not to personal traits or to biological mechanisms, but rather to the circumstances of the near-death crisis. Lindley, Bryan, and Conley (1981), note that the distressing stage of NDEs often comes at the beginning of an NDE, before the transition into a pleasant experience, or at the end of a pleasant NDE, in the transition back to normal waking consciousness, suggested that the distressing experience is a product of the process of transitioning to and from a pleasant NDE. They speculated that this distressing state was comparable to the anxiety of a flight-or-fight reaction and conjectured that this transitional distressing experience might have been the source of the mythological "fall from grace."

Garfield (1979) speculated that the context of the near-death event might play a role in whether the experience is pleasant or distressing, just as it does with hypnotic, meditative, and psychedelic-altered states of consciousness. He recommended a caring environment, including supportive family and friends, in order to minimize the likelihood of a distressing NDE.

In keeping with this focus on the context of the near-death event, Cassol et al. (2019) reported that 4 of their 17 near-death experiences who had distressing NDEs (24%) had them associated with a suicidal attempt, contrasted to only 1 of their 106 near-death experiencers who had pleasant NDEs (1%). However, studies specifically examining NDEs associated with attempted suicide have shown no phenomenological difference between those and other NDEs, including the emotional tone of the experience (Ring & Franklin, 1982; Rosen, 1975). Gibson (1996) found that whether suicide attempters had pleasant or distressing NDEs seemed to depend on what they needed at the time to turn their lives around. Among 546 participants in the University of Virginia NDE database, 3 out of 58 NDEs with distressing NDEs had attempted suicide (5%), contrasted with 15 out of 422 NDEs with pleasant NDEs (4%) and none of the 51 NDEs with emotionally neutral NDEs. That difference was not statistically significant ( $\chi^2 = 2.404$ ,  $df = 2$ ;  $p = .301$ ).

Given the empirical (albeit limited) and theoretical support for these varied proposed explanations, it is likely that there is no single path to distressing NDEs but rather a convergence of factors that may play a role in influencing the emotional valence of a near-death experience.

### AFTEREFFECTS OF DISTRESSING NEAR-DEATH EXPERIENCES

Cassol et al. (2019) reported that distressing NDEs are remembered subsequently with as much overall phenom-

enological detail, clarity, and sensory and emotional detail as are pleasant NDEs; and that NDErs with pleasant and distressing experiences have comparable confidence in their memories of the event and assign comparable personal importance to the experience.

Clark (cited in Flynn, 1986, pp. 83-86) implied that, unlike pleasant NDEs that often enhance a universal or non-sectarian spirituality, distressing NDEs tend to lead experiencers to a strict Bible-based Christianity.

Many researchers have reported that pleasant or heavenly NDEs are associated with far more permanent aftereffects than are distressing or hellish NDEs, and some have attributed that difference to the reluctance of NDErs who have a distressing experience to focus on it, suppressing the aftereffects (Atwater, 1992). Reluctance to face frightening NDEs may lead to long-lasting emotional trauma, with difficulty integrating the experience and development of a sense of stigma (Bush & Greyson, 2014). Alternatively, some experiencers regard a distressing NDE as a warning about unwise behavior and a message to turn their lives around, or by treating it as if it did not matter (Bush & Greyson, 2014; Greyson & Bush, 1992).

Unpublished findings from the University of Virginia NDE database corroborate this observation that pleasant NDEs are associated with more profound life changes than are distressing NDEs. We administered Ring's Life Changes Inventory—Revised (LCI-R; Greyson & Ring, 2004) to 448 near-death experiencers, of whom 367 (82%) reported pleasant experiences, 39 (9%) reported emotionally neutral experiences, and 42 (9%) reported distressing experiences. The absolute change score on the LCI-R was 1.18 (on a scale of +2 to -2) for those with pleasant NDEs, 0.87 for those with emotionally neutral NDEs, and 0.95 for those with distressing NDEs ( $F = 9.280$ ;  $df = 2, 445$ ;  $p < .001$ ).

This finding of more profound changes after pleasant as contrasted to distressing NDEs was also seen in 6 of the 9 factors of the LCI-R at a significance of  $p < .001$ , after applying a Bonferroni correction for multiple simultaneous tests: appreciation of death ( $F = 16.308$ ), spirituality ( $F = 15.169$ ), concern for others ( $F = 11.736$ ), appreciation for life ( $F = 9.190$ ), quest for meaning ( $F = 8.270$ ), and self-acceptance ( $F = 7.727$ ). The remaining 3 factors showed no significant differences between pleasant and distressing experiences: concern with worldly achievement ( $F = 6.270$ ), religiousness ( $F = 2.377$ ), and concern with social/plane-tary matters ( $F = 2.138$ ).

In the 2023 unpublished qualitative analysis of distressing NDEs from Lund University (Ait Melloul, A., & Kinnunen, K. The phenomenology of distressing near-death experiences and their aftereffects. Lund University), 6 of their 8 analyzed narratives mentioned aftereffects, in which they found three themes: the positive effect of be-

ing "high on life" (in 2 narratives), the negative effect of not being understood when they tried to recount their experiences (in 3 narratives), and the negative effect of being left with long-term negative emotions to process (in 4 narratives).

## RESOLVING DISTRESSING NEAR-DEATH EXPERIENCES

As noted in the Introduction, the topic of distressing NDEs is so laden with anxiety and judgmentalism that it is difficult for many experiencers to focus on them or to disclose them to others. When most NDErs report pleasant experiences, it is hard for people who have distressing NDEs to avoid feeling that the experience was a devastating commentary on their lives, that they were singled out for a harsher experience by some higher power or because of some personal character flaw (Bache, 1994). As Bush put it, "We assume in our bones that people get what they deserve" (2002, p. 110). As a result, many experiencers who had distressing NDEs either repress the memory or struggle to make sense of it.

Bush (2002, 2012) made the salient point that one's explanation for how distressing NDEs come about is largely irrelevant to how experiencers can make sense of them. She noted that whatever the precipitant for a distressing NDE, such as a drug effect or an expectation of eternal punishment, the precipitant is not the experience. Regardless of the explanatory model, the memory of a distressing NDE, with its accompanying destruction of former patterns and concepts, remains vividly embedded in the experiencers' reality of everyday functioning and must be dealt with in those terms.

Bush outlined three types of responses distressing NDErs often use to make sense of their experience, if they do not succeed in repressing the memory entirely (Bush, 2002, 2012). First, experiencers may respond to a distressing NDE by viewing it as a warning to turn their lives around. If they are able to identify past behaviors they regard as unwise or wrong, they find ways to modify their lives and make amends. Bush found this response most often among experiencers who had an explicitly hellish NDE, and felt they had been given a second chance to craft a more deserving life.

A second response some distressing NDErs use is to reduce the experience to a materialistic cause, a familiar precipitant less troublesome than their own character or behavior. What this response does is to push the experience itself into the background in favor of focusing on the naturalistic cause. This assigns the distressing NDE no particular meaning other than a physiological accident, such as a drug reaction, which for some distressing NDErs is

more palatable than trying to find some meaning in the experience through self-examination. This reaction is satisfying for some distressing NDErs in the short term, masking questions and anxieties about the meaning of the experience, but it does not resolve those issues in the long term.

A third response, if experiencers cannot view the distressing NDE as a warning to turn their lives around or reduce it to a meaningless accident, is to embark on a long-term struggle with the existential implications of the experience. Bush found this response to be the most common after void NDEs, and among reflective experiencers haunted by the existential dimensions of the event. They tend to reject a literal reading of the distressing NDE as a warning and a reductionistic explanation as inadequate, because those responses assign a *cause* for the distressing NDE but do not address its *meaning*. Instead, they view the distressing NDE as a different kind of spiritual experience, which, just like pleasant NDEs, has meaning, purpose, and value.

Guidebooks throughout the centuries, including the *Egyptian Book of the Dead* (Budge, 1898/16<sup>th</sup> century B.C.), *The Tibetan Book of the Dead* (Evans-Wentz, 1957/11<sup>th</sup> century), and the medieval European *Ars Moriendi* (Rylands and Bullen, 1881/15<sup>th</sup> century), warned those preparing for death to avoid denial and instead to recognize dying as an opportunity for liberation (Bush, 2002). The German Catholic mystic Eckhart von Hochheim taught that the only thing that burns in Hell is the part of us that won't let go of our lives: our memories and attachments. Hell burns them away, not to punish us, but to free our souls. If we're frightened of dying and we're holding on, we'll see devils tearing our lives away; but if we've made our peace, then the devils are really angels, freeing us from the Earth (von Hochheim, 1981). Bush (1994) argued that the task of making sense of distressing NDEs is not to deny or ignore them, but to come to terms with the power of the dark. The goal is not to destroy the ego, but rather to *redeem* it, to recognize that you are not who you thought you were. She acknowledged, however, that such a struggle may not be fruitful for every experiencer. Unless experiencers are already comfortable with the idea of the material world and the ego being illusions, solutions based on ego death may create more anxiety than enlightenment.

Bush (2002, 2012) noted that experiencers of distressing NDEs can find enormous healing potential in the archetype of the hero's or heroine's journey as described by Campbell (1968), in which the hero or heroine suffers excruciating pain, perhaps being tortured or battling horrific monsters, before escaping and defeating the enemy and obtaining the magnificent treasure the monsters had been guarding (Ellwood, 1996). This requires experiencers to recast their assumptions that pain is equivalent to punish-

ment, that suffering is itself malevolent, and that there is no gift in the darkness. The elements in the hero's or heroine's journey form the template of many distressing NDEs: the challenges by terrifying entities with great powers, the need for courage and resourcefulness in facing them, the finding of the gift within the experience that is needed for resolution, and the struggle to return home. Bush (2002, 2012) pointed out that these mythical voyages, which are never easy but always worthwhile, are stories of the *hero's* journey, not the loser's journey or the damned's journey.

Ellwood (1996), echoing this guidance from the worldwide books of the dead, advised that once experiencers overcome their fear and revulsion of demonic beings in a distressing NDE and accept those entities as destroyers of the experiencers' illusory ego, they can unite with the Clear Light of the Void. Likewise, she noted that in the hellish visions of the "dark night of the soul" described by John of the Cross (1905/1584) and 17<sup>th</sup>-century Lutheran mystic Jacob Boehme (1978/1624), the void was not ultimate meaninglessness, but rather the Divine seen from the back; and the hellfire and heavenly light were not irreconcilable opposites but rather necessary stages in the spiritual journey that ended in the ultimate union of fire and light as perfect divine love.

In conclusion, Bush (2002, 2012) advised that there is no one right way for experiencers to find meaning in their distressing NDEs. The experiencers' understanding of "self" and "reality," their temperament, and their experience may play a role in finding the most helpful path, whether that be through reforming their behavior in response to the warning of their distressing NDE, through understanding the distressing NDE as a meaningless accident, or through struggling with the existential meaning of the distressing NDE.

## DISCUSSION: CONFOUNDING EFFECTS OF SAMPLES AND DEFINITIONS

Cassol, et al. (2019) found no statistical difference on the NDE Scale between NDErs with pleasant or distressing NDEs, with the expected exception of the affective factor. This is contradicted by the data from the University of Virginia collection of NDErs, which did show those with pleasant experiences scoring higher on the NDE Scale and on each of the four factors than did those with distressing experiences. This contradiction may be associated with the larger sample in the University of Virginia database (58 distressing experiences and 437 pleasant experiences) than in that of Cassol et al. (2019) (17 distressing experiences and 106 pleasant experiences).

Alternatively (or in addition), it may be associated with the different criteria for identifying distressing NDEs. Cas-

sol et al. (2019) based their identification of distressing experiences on NDErs' rating on the Memory Characteristics Questionnaire of their emotion when the event happened; whereas in the University of Virginia database, distressing experiences were identified based on NDErs' rating of whether their NDE was predominantly pleasant, emotionally neutral, or unpleasant.

Finally, the difference between Cassol et al.'s findings and the University of Virginia's may be related to the source of the two samples. Cassol et al. (2019) included participants from European countries, where the majority described themselves as Catholic, whereas the University of Virginia database included participants primarily from the United States, where the majority describe themselves as Protestant. Furthermore, Cassol et al. (2019) included only NDEs following severe brain injury, coma, and intensive care unit hospitalization, whereas the University of Virginia collection included NDEs from a wide variety of injuries, accidents, and illnesses.

The difference in religious affiliation between the samples of Cassol et al. (2019) and of Greyson and Bush (1992) may also contribute to the higher prevalence of hellish NDEs reported by Cassol et al. (2019), consonant with Ring's (1994a) conjecture that hellish NDEs are culturally-derived elaborations of inverted NDEs. Supporting that conjecture is that the NDEr database of Rommer (2000, 2002), who found hellish NDEs to be the most common type of distressing NDE, included three times as many Catholics as Protestants, and she herself concluded that religious indoctrination played a role in the type of NDE an experiencer had. The difference in religious affiliation may also contribute as well as to the higher rate of distressing NDEs associated with attempted suicide in the study by Cassol et al. (2019).

## IMPLICATIONS AND APPLICATIONS

Much has been learned in recent years about the prevalence and phenomenology of distressing NDEs. I have described what we know of the prevalence, phenomenology, typology, correlates, possible causes, aftereffects, and common responses of experiencers to distressing NDEs. Yet much research needs to be done, particularly regarding their connection to the more common pleasant NDEs, the possible precipitants of distressing experiences, and their effect on experiencers' subsequent values, beliefs, and attitudes toward life and death. This summary reflects my interpretation of the data, meager as it is. Explorations into the phenomenology of other types of dark spiritual experience may shed light on the imagery of distressing NDEs. For example, sleep paralysis has been found to be more common in near-death experiencers, and both experiences

have a common link to REM intrusion (Nelson, Mattingly, Lee, et al., 2006), but phenomenological similarities between the two experiences have not been investigated. Likewise, the content of NDEs and that of psychedelic drug experiences may both be influenced by context (Garfield, 1979); and Ring (1994a, 1994b, 1996) noted that distressing void NDEs share some common sensations with drug-induced states, suggesting that further exploration of psychedelic experiences may help us understand the phenomenology of distressing NDEs. Additional findings from future research into distressing NDEs may well yield different understandings of the different possible causes or precipitants, and the different ways experiencers react to, these distressing but profound spiritual experiences.

## REFERENCES

- Atwater, P. M. H. (1988). *Coming back to life: The after-effects of the near-death experience*. Dodd, Mead.
- Atwater, P. M. H. (1992). Guest editorial: Is there a hell? Surprising observations about the near-death experience. *Journal of Near-Death Studies*, 10, 149-160. <https://doi.org/10.17514/JNDS-1992-10-3-p149-160>
- Atwater, P. M. H. (1994). *Beyond the light: What isn't being said about the near-death experience*. Birch Lane Press.
- Auchmutey, J. (1979). Is Hell for real? *Presbyterian Survey*, 69(1), 9-11.
- Bache, C. M. (1994). A perinatal interpretation of frightening near-death experiences: A dialogue with Kenneth Ring. *Journal of Near-Death Studies*, 13, 25-45. <https://doi.org/10.17514/JNDS-1994-13-1-p25-45>
- Bache, C. M. (1996). Expanding Grof's concept of the perinatal: Deepening the inquiry into frightening near-death experiences. *Journal of Near-Death Studies*, 15, 115-139. <https://doi.org/10.17514/JNDS-1996-15-2-p115-139>
- Boehme, J. (1978). *The way to Christ*. Paulist Press. (Original work published 1624.)
- Bonenfant, R. J. (2001). A child's encounter with the devil: An unusual near-death experience with both blissful and frightening elements. *Journal of Near-Death Studies*, 20, 87-100. <https://doi.org/10.17514/JNDS-2001-20-2-p87-100>
- Budge, E. A. W. (1898). *The book of the dead: The papyrus of Ani*. Kegan Paul, Trench, Trübner. (Original work written 16th century B.C.)
- Bush, N. E. (1994). The paradox of Jonah: Response to "Solving the riddle of frightening near-death experiences." *Journal of Near-Death Studies*, 13, 47-54. <https://doi.org/10.17514/JNDS-1994-13-1-p47-54>
- Bush, N. E. (2002). Afterward: Making meaning after a frightening near-death experience. *Journal of Near-*

- Death Studies*, 21, 99-133. <https://doi.org/10.17514/JNDS-2002-21-2-p99-133>
- Bush, N. E. (2009). Distressing Western near-death experiences: Finding a way through the abyss. In Holden, J. M., Greyson, B., and James, D. (Eds.), *The handbook of near-death experiences: Thirty years of investigation* (pp. 63-86). Praeger/ABC-CLIO.
- Bush, N. E. (2012). *Dancing past the dark: Distressing near-death experiences*. Parson's Porch.
- Bush, N. E. (2021). More comments on the new NDE-C scale [Letter]. *Journal of Near-Death Studies*, 39, 55-58. <https://doi.org/10.17514/JNDS-2021-39-1-p55-58>
- Bush, N. E., & Greyson, B. (2014). Distressing near-death experiences: The basics. *Missouri Medicine*, 111, 372-376. U.I.: 25665233
- Campbell, J. (1968). *The hero with a thousand faces*. World.
- Cassol, H., Martial, C., Annen, J., Martens, G., Charland-Verville, V., Majerus, S., and Laureys, S. (2019). A systematic analysis of distressing near-death experience accounts. *Memory*, 27, 1122-1129. <https://doi.org/10.1080/096582111.2019.1626438>
- Charland-Verville, V., Jourdan, J.-P., Thonnard, M., Ledoux, D., Donneau, A.-F., Quertermont, E., and Laureys, S. (2014). Near-death experiences in non-life-threatening events and coma of different etiologies. *Frontiers in Human Neuroscience*, 8, Article 203. <https://doi.org/10.3389/fnhum.2014.00203>
- Delacour, J.-B. (1974). *Glimpses of the beyond: The extraordinary experiences of people who crossed the brink of death and returned*. (Garside, E. B., Trans.). Dell. (Original work published in German in 1973 as *Aus dem Jenseits Zurück*.)
- Ellwood, G. F. (1996). Distressing near-death experiences as photographic negatives. *Journal of Near-Death Studies*, 15, 83-114. <https://doi.org/10.17514/JNDS-1996-15-2-p83-114>
- Ellwood, G. F. (2001). *The uttermost deep: The challenge of near-death experiences*. Lantern Books.
- Evans-Wentz, W. Y. (Trans.). (1957). *The Tibetan book of the dead* (3<sup>rd</sup> ed). Oxford University Press. (Original work written 11th century.)
- Flynn, C. P. (1986). *After the beyond: Human transformation and the near-death experience*. Prentice-Hall.
- Gallup, G., & Proctor, W. (1982). *Adventures in immortality: A look beyond the threshold of death*. McGraw-Hill.
- Garfield, C. A. (1979). The dying patient's concern with "life after death." In Kastenbaum, R. (Ed.), *Between life and death* (pp. 45-60) Springer.
- Gibson, A. S. (1996). Commentary on "Frightening near-death experiences." *Journal of Near-Death Studies*, 15, 141-148. <https://doi.org/10.17514/JNDS-1996-15-2-p141-148>
- Grey, M. (1985). *Return from death: An exploration of the near-death experience*. Arkana.
- Greyson, B. (2021). *After: A doctor explores what near-death experiences reveal about life and beyond*. St. Martin's Essentials. <https://doi.org/10.17514/JNDS-2021-39-3-p184-194>.
- Greyson, B., & Bush, N.E. (1992). Distressing near-death experiences. *Psychiatry*, 55, 95-110. <https://doi.org/10.1080/0032747.1992.11024583>
- Grof, S. (1975). *Realms of the human unconscious*. Dutton.
- Grosso, M. (1981). Toward an explanation of near-death phenomena. *Journal of the American Society for Psychological Research*, 75, 37-60.
- Irwin, H. J., & Bramwell, B. A. (1988). The devil in heaven: A near-death experience with both positive and negative aspects. *Journal of Near-Death Studies*, 7, 38-43. <https://doi.org/10.17514/JNDS-1988-7-1-p38-43>
- Jambor, M. (1997). The mystery of frightening transcendent experiences: A rejoinder to Nancy Evans Bush and Christopher Bache. *Journal of Near-Death Studies*, 16, 163-176. <https://doi.org/10.17514/JNDS-1997-16-2-p163-176>
- John of the Cross. (1905). *Dark night of the soul*. John M. Watkins. (Original work written 1584.)
- Kungurtsev, I. (1991). "Death-rebirth" psychotherapy with ketamine. *Bulletin of the Albert Hofmann Foundation*, 2(4), 2-6.
- Lindley, J. H., Bryan, S., & Conley, B. (1981). Near-death experiences in a Pacific Northwest American population: The Evergreen study. *Anabiosis: The Journal of Near-Death Studies*, 1, 104-124. <https://doi.org/10.17514/JNDS-1981-1-2-p104-124>
- Martial, C., Simon, J., Puttaert, N., Gosseries, O., Charland-Verville, V., Nyssen, A.-S., Greyson, B., Laureys, S., & Cassol, H. (2020). The Near-Death Experience Content (NDE-C) Scale: Development and psychometric validation. *Consciousness and Cognition*, 86, Article 103049. <https://doi.org/10.1016/j.concog.2020.103049>
- Nelson, K. R., Mattingly, M., Lee, S. A., & Schmitt, F. A. (2006). Does the arousal system contribute to near death experience? *Neurology*, 66, 1003-1009. <https://doi.org/10.1212/01.wnl.0000204296.15607.37>
- Rawlings, M. (1978). *Beyond death's door*. Thomas Nelson.
- Rawlings, M. (1980). *Before death comes*. Thomas Nelson.
- Ring, K. (1980). *Life at death: A scientific investigation of the near-death experience*. Coward, McCann and Geoghegan.
- Ring, K. (1994a). Solving the riddle of frightening near-death experiences: Some testable hypotheses and a perspective based on *A course in miracles*. *Journal of Near-Death Studies*, 13, 5-23. <https://doi.org/10.17514/>

JNDS-1994-13-1-p5-23

- Ring, K. (1994b). Frightening near-death experiences revisited: A commentary on the responses to my paper by Christopher Bache and Nancy Evans Bush. *Journal of Near-Death Studies*, 13, 55-64. <https://doi.org/10.17514/JNDS-1994-13-1-p55-64>
- Ring, K. (1996). A note on anesthetically-induced frightening "near-death experiences." *Journal of Near-Death Studies*, 15, 17-23. <https://doi.org/10.17514/JNDS-1996-15-1-p17-23>
- Ring, K., & Franklin, S. (1982). Do suicide survivors report near-death experiences? *Omega: Journal of Death and Dying*, 12, 191-208. <https://doi.org/10.2190/47xb-egmr-9wkp-h3bx>
- Rogo, D. S. (1979). *Return from silence: A study of near-death experiences*. Aquarian Press.
- Rommer, B. (2000). *Blessing in disguise: Another side of the near-death experience*. Llewellyn.
- Rommer, B. (2002). The frightening near-death experience: A catalyst for positive spiritual transformation. *Journal of Religion and Psychological Research*, 25, 9-18.
- Rosen, D. H. (1975). Suicide survivors: A follow-up study of persons who survived jumping from the Golden Gate and San Francisco Bay Bridges. *Western Journal of Medicine*, 122, (4), 289-294.
- Rylands, W. H., & Bullen, G. (Eds.). (1881). *Ars Moriendi*. Holbein Society/ Wyman. (Original work written 15<sup>th</sup> century.)
- Sabom, M. B. (1979). Review of *Beyond death's door. Anabiosis: The Journal of Near-Death Studies*, 1(3), 9.
- Sabom, M. B. (1982). *Recollections of death: A medical investigation*. Harper and Row.
- Schucman, H., Thetford, B., & Wapnick, K. (Eds.). (1975). *A course in miracles*. Foundation for Inner Peace.
- Teresa of Ávila. (1912). *Interior castle*. Benzinger Brothers. (Original work written 1577.)
- Teresa of Calcutta. (2007). *Come be my light*. Doubleday.
- von Hochheim, E. (1981). *Meister Eckhart: The essential sermons, commentaries, treatises and defense*. (B. McGinn, & E. Colledge, Trans. and Eds.). Paulist Press. (Original work written 13<sup>th</sup> century.)
- Zaleski, C. (1987a). Evaluating near-death testimony: A challenge for theology. *Anabiosis: The Journal of Near-Death Studies*, 5(2), 17-52. <https://doi.org/10.17514/JNDS-1987-5-2-p17-52>
- Zaleski, C. (1987b). *Otherworld journeys: Accounts of near-death experience in medieval and modern times*. Oxford University Press.

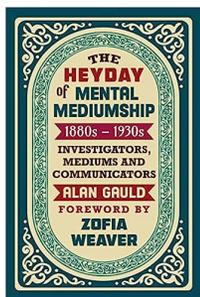


**BOOK AND  
MULTIMEDIA  
REVIEW**

# The Heyday of Mental Mediumship 1880s-1930s: Investigators Mediums and Communications

James McClenon

beinghere@gmail.com



ISBN-13 978-1786771858

<https://doi.org/10.31275/20232761>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

Anyone interested in the history of Spiritualism should read this book. Alan Gould is a former president of the Society for Psychical Research and well-known for his previous outstanding books: *The Founders of Psychical Research* (1968), *Poltergeists* (1979, with Tony Cornell), *Mediumship and Survival: A Century of Investigations* (1983), and *History of Hypnotism* (1992). *The Heyday of Mental Mediumship 1880s-1930s* extends this legacy. Gaud discusses the personalities, backgrounds, and the social interactions of major investigators and mental mediums of this era.

Although a major focus is on Leonora Piper, other mediums, and the “cross-correspondences,” are also discussed. *Cross-correspondences* refer to fragmentary phrases, written or spoken by geographically distant mediums or automatists, which can be fit together to form coherent messages. These messages, when assembled, seemed to originate from a specific deceased person (Frederic Myers, for example). The messages were complex and specific, making it seem unlikely that they originated from the minds of individual mediums. As a result, the *cross-correspondences* constitute evidence supporting belief in life after death.

Researchers during this era included William James (considered *the Father of American psychology*), Richard Hodgson (Australian-born psychical researcher), James Harvey Hyslop (professor of ethics and logic at Columbia University), William Romaine Newbold (professor of Philosophy at the University of Pennsylvania), Walter Franklin Prince (Episcopalian Rector), and John F. Thomas (education administrator). Their efforts, described by Gaud, demonstrated methodological progression. For example, John F. Thomas, in the early 1930s, devised an evaluative scheme for calculating the statistical improbability associated with the relationships between séance information and corresponding facts.

To what degree were these researchers successful? Does their evidence compel belief in ESP and/or life after death? Gaud describes numerous séances during which mediums, such as Mrs. Piper, provided valid information about deceased individuals. Did she hire investigators to gather this information? Could she have guessed the information through skillful observation or shrewd guessing? Gaud carefully evaluates the historical data. His conclusion: the probability that skeptical arguments explain *all* the evidence is extremely slight. The evidence supports belief in paranormal processes.

Does the evidence support belief in life after death? Although many mediums provided information unknown to their sitters, perhaps this information was derived through ESP (the “super-ESP” hypothesis). Spiritualist investigators attempted to refute this argument. They observed that mediums sometimes took on the mannerisms, accents, verbal peculiarities, and speaking style of a particular deceased person. Many sitters felt compelled to believe that they were communicating with their loved ones.



Sometimes “drop-in” communicators (unplanned “spirits”) provided information unknown at the time, which was later verified (seemingly a refutation of the super-ESP hypothesis). How did proponents of the super-ESP theory respond? Gauld argues that they must arbitrarily stretch their arguments, twisting the known facts in quite an arbitrary way to promote their favored hypothesis. But Gauld describes cases obscuring this issue. Although Hodgson, Hyslop, and Newbold felt their finds confirmed afterlife belief, William James and even Mrs. Piper were not fully convinced.

The evidence is not crystal clear. Even the best mediums, such as Mrs. Piper, held séances with absurd, fallacious, and silly features. Spiritualist mediums often had a “spirit control,” an entity who acted as a kind of master of ceremonies during séances. Many spirit controls revealed absurd qualities. One of Mrs. Piper’s early controls, Dr. Phinuit, was “a preposterous scoundrel” with “distinctly suspicious features” (page 43). He claimed to be French and spoke with a French accent but could not speak or understand French. Another group of controls, the *Imperator Band*, claimed to be in contact with prominent Spiritualist figures but failed to pass tests evaluating this claim. Instead, they offered preposterous, sometimes contradictory, “teachings.”

Seemingly good evidence was often mixed with absurdity. One of Mrs. Piper’s controls, George Pellow, correctly identified his former friends, a remarkable ability. Mrs. Piper’s investigator, Richard Hodgson, believed Pellow’s spirit was authentic. Another researcher asked the Pellow spirit about an important philosophical manuscript that Pellow had authored. The spirit seemed unaware of this text. During further conversations, the Pellow spirit revealed deficiencies in his philosophical understanding, a knowledge inferior to that of the living Pellow. The living George Pellow knew Latin and ancient Greek, but the spirit struggled to translate simple Latin and Greek sentences.

Perhaps most amusing among these absurdities was the strange saga surrounding Dean Bridgman Conner. Conner, an American working in Mexico, fell ill and died in 1885. His father had a vivid dream in which Conner told him that he was not dead but was a captive. Richard Hodgson took Dean’s effects to Mrs. Piper, seeking to gain insights regarding the story’s validity. Mrs. Piper’s spirit control, George Pellow, provided Conner’s name (demonstrating ESP, it seems). Pellow’s spirit then provided a series of cues with the goal of helping investigators locate Conner. An agent, following these cues, searched specified locations. He was told by Pellow’s spirit that he was extremely close. In the end, the endeavor turned out to be completely bogus. Dean Conner was confirmed to have

died in Mexico City. Gauld writes, “The Piper communicators would maintain errors and absurdities with great persistence, preferring to wriggle and find excuses rather than admit they had been wrong; and they would do this despite the trouble and distress that their continued errors might cause to those involved on ‘this side.’ Such behavior was all the odder in that Mrs. Piper herself seems from all accounts to have been a decent and sympathetic individual” (page 131).

What should we conclude? William James states (with reference to Mrs. Piper and Hobson’s spirit), “I remain uncertain and await more facts” (page 177). We have waited many decades. Gauld presents the available facts. He notes that the types of powerful mediums investigated during the Spiritualist era do not exist today. In reference to life after death, he writes: “We... find ourselves with a hypothesis that no empirical investigation can confirm or disconfirm, which is a situation most scientists would regard as undesirable if not unscientific” (page 242).

Gauld mentions possible paths toward resolution. Some people pin their hopes on quantum theory. My opinion: Progress within quantum mechanisms seems to lead to increasing levels of puzzlement. We must wait for resolution. Other theorists argue that ideas from pantheism, coinciding with quantum theory, offer an answer. In harmony with this, the ancient Hindus stated, “Everything is consciousness, and thou art that.” My question: Does this allow testable hypotheses?

The quirkiness within the Spiritualist “evidence” coincides with what George Hansen (2001) has labeled the “Trickster.” The *Trickster* is an archetype within mythology, folklore, and anthropology, associated with disruption, deception, psi phenomena, and marginality. The *Trickster* is mischievous, crafty, deceitful, and clever. The *Trickster* rejects established doctrines, boundaries, and norms. Some parapsychologists argue that the *Trickster* explains parapsychology’s difficulties with replicability. The Spiritualist *Trickster* seems equally powerful. It tarnishes both super-ESP and Spiritualist explanations through its absurdity.

What does the evidence imply? Gauld refers to a “scientific stalemate,” an inability to reach satisfactory conclusions. My opinion: the evidence offers an unacceptable image of the afterlife. The evidence suggests that some deceased people, probably a minority, survive bodily death. Mediums’ messages portray them as suffering from selective memory loss, reduced empathy, and moral deficiency, possible symptoms of brain damage. This idea is unsatisfactory. Who wants to believe this?

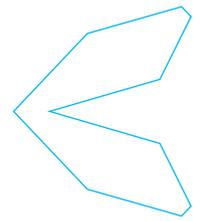
The *Trickster* idea, present throughout history, provides a hypothesis. It predicts that future psychological researchers will not generate evidence acceptable to the

mainstream scientific community. My opinion: Social scientific research strategies regarding belief allow testable hypotheses (McClenon, 2002). Anomalous experiences shape belief in spirits, souls, life after death, and magical abilities.

No matter what the reader's predisposition regarding ESP or life after death, I predict that most readers will find this book to be well-written, informative, and historically well-grounded. Gauld offers a clear-eyed portrayal of the information he evaluates. This book constitutes a major contribution to the literature regarding mental mediumship.

## REFERENCES

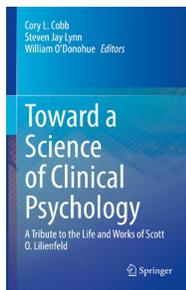
- Hansen, G. P. (2001). *The Trickster and the paranormal*. Xlibris.
- Kennedy, J. (2016). *Coming to terms with the Trickster*, presented at the Trickster Theory Panel, 2016 Convention of the Parapsychological Association, Boulder, Colorado [ <http://jeksite.org> > psi > trickster panel paper]
- McClenon, J. (2002). *Wondrous healing: Shamanism, human evolution, and the origin of religion*. Northern Illinois University Press.



**BOOK AND  
MULTIMEDIA  
REVIEW**

# Toward a Science of Clinical Psychology: A Tribute to the Life and Works of Scott O. Lilienfeld

**Tana Dineen**  
tanadineen@gmail.com



ISBN-13 978-3031143311

<https://doi.org/10.31275/20233157>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

It seems appropriate to begin this review with the disclosure that I have a Ph.D. in cognitive psychology and was, for many years, a licensed clinical psychologist. I left the profession in 1993 to take a cold, hard look at what it had become and long ago dismissed the notion that clinical psychology is headed in the direction of becoming a science.

It wasn't the title that attracted me to this book; what drew my attention was the subtitle - *A Tribute to the Life and Works of Scott O. Lilienfeld*.

The name rang a bell; I found myself recalling vividly how, in the 1990s, this outspoken psychologist was sounding alarms about harmful therapies, openly questioning pervasive psychological "truths", and stressing the importance of distinguishing between science and pseudo(or junk)science. He had been critiquing from inside the profession many of the things I was more brutally challenging from outside. I had never met him, so I was curious to learn more about him and about those who were, a quarter century later, paying tribute to him.

The impetus for the creation of this book was his death on September 30, 2020, at age 59, from pancreatic cancer. Having recently become intrigued by eulogy writing as a particularly powerful literary form, I was rather hoping that it would read like a collection of eulogies.

It certainly starts off that way. The *Preface*, jointly written by three colleagues, each of whom was both a friend and frequent collaborator, reads like an uncommonly well-written eulogy. It presents Scott Lilienfeld as a preeminent scholar imbued with exceptional intellect and integrity, a long list of human qualities, and a mission to educate a wide audience, within and outside his profession, on the virtues of a scientific mindset.

The book is an anthology. Structured in five sections, it is comprised of a total of twenty-one chapters, most of which are co-authored by three or more people. So, naturally, there is no uniform flow. The writing styles range from the informal and personal to the academic and topic-focused. It is not an easy read, nor is it an easy book to review.

On my first read-through, I was inclined to skim chapters that seemed too dense. When I reached the end, I wasn't sure of my overall reaction. But, based on the number of post-its I'd stuck onto pages, it was obvious that I'd gained something from reading it.

So, I set myself the task of reading the book again, this time looking more closely at those chapters I had initially skimmed, reflecting on each section and identifying in each a single chapter that had evoked a particularly strong reaction and, then, asking myself what makes this book a worthwhile read.

**Section 1, *Personal Reflections***, is comprised of three chapters, each written by someone whose relationship, both personal and professional, with Scott Lilienfeld was

particularly close. In each, he comes across as a beloved, prolific “workaholic” for whom no boundary existed between life and work - or work and play. Choosing only one chapter to comment on wasn’t easy; however, the one that kept drawing me back was the chapter written by his wife, Candice Basterfield. She affectionately describes him as a generalist in a climate of specialists who, while in love with psychology, was concerned about trends toward ideological uniformity and orthodoxy. In paying homage to him, she provides a sweeping review of his education, academic career, research, teaching, mentoring, writing, and courageous forays into ideological battlefields. Toward the end of the chapter, she draws attention to something he had said in an address to a Division of the American Psychological Association (APA) back in 1998:

...as academic clinical psychologists we have not done enough to popularize our findings and to communicate the scientific side of our discipline to the general public...we have done little to assist the public with distinguishing those practices within popular psychology that are scientific from those that are not. (p.14)

This quote stuck with me. As I was reading, it would often pop into my head, alerting me to a theme that runs through this book.

**Section II, *Science and Pseudoscience in Clinical Psychology*** is comprised of four chapters that might well be considered “the meat” of this book. Selecting just one to comment on proved impossible, so, ultimately, I had to limit myself to commenting briefly on the first chapter and then focusing on the third.

The first chapter gets across the importance of understanding science, its limitations, the dangers of *scientism* - an all-too-prevalent, irrationally positive view of science that turns it into something akin to a faith, and the importance of rationalism (a major component of which is criticism) in addressing questions and examining beliefs. The authors state that “a good part of Lilienfeld’s work can be construed as an attempt to understand science and what might interfere with good science, as well as to apply this understanding to real-world problems.” (p.51) And they identify as major influences on his work the thinking of meta-scientists Carl Sagan and Karl Popper and the body of work directed at countering cognitive limitations such as “confirmation bias”.

The third chapter, *Intellectual Humility: Definitions, Questions, and Scott Lilienfeld as a Case Example*, begins by pointing out that humans are notoriously unaware of the pervasiveness of our own cognitive biases. It, then, introduces intellectual humility (IH) as one potential remedy

for this blind spot, summarizes efforts to conceptualize and measure it, and considers the implications training in IH could have for psychological science - academia generally - and for the future of society. Acknowledging Scott Lilienfeld’s contribution it presents him as someone who not only studied IH but took it so seriously that he came to embody it. This quote from the chapter captures something of what this means:

Lilienfeld strove to advance psychological science with an open mind and respectful voice. His writings and efforts reflect the imperative to question ‘conventional wisdom’ and maintain a stance of being open to findings that falsify our own cherished beliefs. (p.118)

**Section III, *Assessment and Psychopathology***, is comprised of five chapters which, taken together, get across how data doesn’t speak for itself, numbers can mislead, measurement doesn’t necessarily make *it* real, and exploring what diagnostic labels mean (and whether they mean what we think they do) can be very, very tricky.

Because Scott Lilienfeld was an expert in the psychometric assessment of *psychopathy* - a familiar term that most everyone thinks they understand, I chose to focus on the chapter titled *The Nomological Net of Scott Lilienfeld’s Psychopathic Personality Inventory Scales*. The seven co-authors state upfront that it “reads more like an empirical-research journal publication than a ‘traditional’ chapter.” (p.253) Reporting on three research studies conducted by them, it definitely does read like an academic paper. But, as eventually I came to realize, that is not necessarily a bad thing. What this chapter manages to do, in a somewhat novel way, is introduce a research area to which Lilienfeld was a major contributor and demonstrate how this scholarly research is conducted and the thinking that goes into interpreting the data. It provides, also a glimpse into a broader area of scientific psychology - one that, in addition to taking a less slanted (good/bad) look at *psychopathy*, is exploring an alternative to the psychiatric (diagnostic) approach to personality disorders - and to psychopathology generally.

**Section IV, *Psychotherapy: Critical Issues and New Directions***, is comprised of four chapters. The first provides an overview of how the APA has been developing clinical practice guidelines and identifying what are now termed “empirically supported treatments” (ESTs). It credits Scott Lilienfeld for his role in getting this to happen and for persuasively arguing that theoretical plausibility, along with effectiveness, needs to be shown. The next two focus on cognitive therapy (or cognitive behavior therapy), which is based on a theory developed within scientific psycholo-

gy and whose effectiveness is arguably well supported by research. The fourth chapter got my attention because of the pithy title, *When Psychotherapy Fails*. Scott Lilienfeld was well known for his “first do no harm” stance and for his tireless involvement in exposing the dark side of interventions such as recovered memory therapy and critical incident stress debriefing. This chapter begins with a reference to his 2007 landmark paper in which he argues that the field of psychology should prioritize efforts to identify harmful therapies. It then goes on to discuss some initiatives that have been taken and others that will need to be taken to ensure that all psychological interventions, including mainstream therapies, are examined for possible negative side effects.

**Section V, *Controversies, Issues, and Future Directions***, is comprised of five chapters on diverse topics extending far beyond the clinical issues of the previous two sections. These chapters serve to highlight the astonishing breadth (and depth) of Scott Lilienfeld’s works and to draw attention to ongoing efforts to bolster the scientific side of psychology.

After reflecting on the scope of this closing section and accepting that it was impossible to summarize, I gave myself permission to comment briefly on one chapter

that I found particularly powerful. It puts the spotlight on the highly contentious, anger-laden, real-world topic of multiculturalism. And, in so doing, it gets across with exceptional clarity the essence of what Scott Lilienfeld was striving for and the magnitude of what he was up against. The chapter relays how, without pausing to consider what the word means or to subject this questionable sociopolitical framework to scientific scrutiny, the APA formally endorsed, then institutionalized, this ideology, thereby involving the profession in actively promoting it and turning psychologists into pseudo-experts and advocates. It then discusses the drastically simplistic understanding of multiculturalism that permeates every area of psychology and identifies dangerous pitfalls and major issues that even now receive little attention. Toward the end, it states clearly that “if the field of applied psychology wishes to establish itself as a credible scientific discipline it must begin to grapple seriously with the many concerns raised by critics of multiculturalism and not reflexively dismiss them as illegitimate or racist.” (p.338)

In a nutshell, what I gained from reading this book was the opportunity to become acquainted (finally) with Scott O. Lilienfeld. I consider that to have been a privilege.



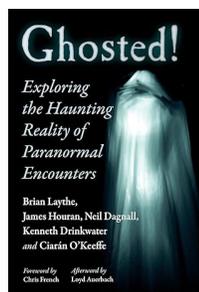
**BOOK AND  
MULTIMEDIA  
REVIEW**

# Ghosted! Exploring the Haunting Reality of Paranormal Encounters

**Christine  
Simmonds-Moore**

[orcid.org/0000-0002-4553-2575](https://orcid.org/0000-0002-4553-2575)

[csimmond@westga.edu](mailto:csimmond@westga.edu)  
Psychology Program,  
University of West Georgia



ISBN 13: 978-1476685779

<https://doi.org/10.31275/20233259>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

It is with a sense of adventure, genuine curiosity, and true skepticism (in the spirit of William James) that the authors of the text (“the Ghost Gang”) investigate the deeply human experience of ghosts. Throughout the text, the authors portray a refreshing approach of “adversarial collaboration” toward the study of ghosts. This particular collaboration dates back to 2017 and culminates in this publication. Here, they seek to bracket their individual beliefs and positioning regarding paranormal phenomena, in order to systematically and more deeply explore ghost experiences. As Professor Chris French points out in his foreword to the text, it is all too easy to be swayed by one’s pre-existing beliefs and disbeliefs, and that “to be human is to be biased”. He admires the fresh perspective adopted in this text as it is both effortful and rewarding to challenge oneself and embrace one’s blind-spots. This collaborative approach makes space to facilitate new insights into a very human experience. In addition, the authors advocate a participatory approach toward research that simultaneously seeks to educate and *work with* a range of individuals and groups with interests in ghosts. Participatory research approaches are at the heart of transpersonal and community-based research. They are aligned with postmodern and postcolonial approaches that seek to equalize the research playing field (there are valuable contributions from all members of a team, including the researcher him or herself) and can remove stale academic hierarchies. Adversarial collaboration has the potential to stimulate new, well-designed studies, drawing from different perspectives and expertise and assembling good-quality data and knowledge.

The introductory chapter highlights the global nature of the “Ghost gang” collaboration, which seeks to explore all aspects of ghost experiences without falling into pitfalls of “dogmatic perspectives that these experiences either are “entirely or never” paranormal. It is simply more productive to acknowledge what we confidently know about these occurrences versus not” (p. 7). This is in stark contrast to many academic explorations of these phenomena and succeeds in going back to the experiences themselves. The introductory chapter leads us into an accessible, conversational, yet academic discussion that rests on a *systems* perspective toward understanding ghosts. The authors present their theory of Haunted People Syndrome (HP-S) that understands ghost phenomena from psychological, social, and environmental perspectives. The general stance is critical yet open-minded; of ruling out the plethora of normal explanations before considering parapsychological ones. This is the ideal approach for science as it is clear that the authors seek to keep the door open for explanations that are more anomalous in their balanced and nuanced perspective (that is deeply refreshing).

The book is organized into a series of chapters that break down the concept of HP-S into its constituent parts. We begin with a chapter titled “*Spectral Signs or Symptoms*”, in which the authors explore the concept of a ghost by introducing the idea of a Haunt



Hierarchy. They articulate how a “ghost” is inferred via various anomalous phenomena that includes a collection of increasingly anomalous objective (O) and subjective (S) anomalies. Objective anomalies refer to events that occur externally that can often be measured (for example, cold areas and the strange behavior of mechanical equipment, among others). Subjective anomalies refer to psychological events that a person might report (for example, negative feelings, perceiving an invisible presence, anomalous sensations in the body, among others). Intriguingly, subjective and objective anomalies tend to co-occur, are fundamentally intertwined, and are not statistically separate. As such, ghost experiences emerge as psychological interactions *with* the physical environment. Intriguingly, the haunt hierarchy reflects one statistical factor that plays out as a *thermometer* of gradually increasing haunting intensity. Anomalous phenomena that are more common and probable are depicted at the bottom of the thermometer (low intensity), while anomalous phenomena that are less likely and more anomalous are depicted at the top of the thermometer (high intensity). In turn, the authors describe how a haunting experience can increase in intensity as it develops and that ghost phenomena reflect an intriguing recipe of interacting components. The haunt hierarchy plays out differently for spontaneous experiences in comparison to those emerging in other scenarios. For example, for groups who are primed toward paranormal explanations, expectations, and prior schemata interact with the ways in which these interactions play out and are interpreted (the framework plays a key role). The authors unpack this more systematically later in the book as they elaborate on their model.

As the first chapter progresses, the authors challenge the oft-cited difference between hauntings and poltergeists via statistical modeling. Their research suggests that these phenomena can both be understood according to the haunt hierarchy but that the order in which anomalies occur are a little different. They move to fuse these superficially distinct phenomena into one category reflective of “ghostly episodes”. This makes a lot of sense, given that many haunting experiences include physical phenomena but do not always include apparitions (Alvarado & Zingrone, 1995). In addition, there are a subset of poltergeist cases that break the usual mold of a living-agent induced RSPK explanation (Roll, 1977). Ghostly episodes actually seem to comprise a family tree of anomalies that shift according to social, religious, cultural, and situational contexts in which these phenomena play out.

The psychological ingredients (symptoms) of a ghost are further unpacked by linking ghost experiences to other human experiences. Related experiences include mass psychogenic illness, imaginary friends that seem to come

alive, and group stalking. Although these seem to be superficially distinct, they actually share common features with ghost phenomena and can be successfully mapped according to the haunt hierarchy. As such, the “syndrome model” may not always be associated with a paranormal interpretation and may sometimes occur “incognito”. Traits common across these related experiences include increased sensitivity to environmental factors, tendencies to focus on body-based symptoms, attributions of events to an external agent (psychogenic illness); very strong imaginary tendencies such that imagined others take on life-like qualities, perceived agency (imaginary friends), and feelings of surveillance and persecution by an unseen other (group stalking). The syndrome model, therefore reflects a set of predictable “symptoms” that work together as a core phenomenon that causes observable symptoms. The authors are careful to point out that they are not seeking to pathologize ghost experiences, but given the connotations of the term “symptoms”, I wonder if a different term might be adopted that can allow for the same set of interweaving S and O phenomena.

In Chapter 2, we take a deep dive into the individual differences and correlates of ghost experiences with a particular focus on the transliminality variable, which is at the core of HP-S. These “liminal dwellers” exhibit an enhanced sensitivity toward subliminal aspects of the mind and subtle information that is present in the physical environment. The current definition for transliminality is a “hypersensitivity to psychological material originating in (a) the unconscious, and/or (b), the external environment”. This is understood to reflect neuroplasticity, or the tendency to make physiological and psychological connections. Transliminal individuals are hard-wired to be sensitive and for different sources of information to mesh together in syncretic forms, including eidetic imagery, physiognomic perception, and synesthesia (stronger imagery for memories, perceptions, and fusions between senses and concepts). Transliminal individuals exhibit a number of tendencies that render them more likely to experience anomalous phenomena, including sensitivity, creativity, hallucination proneness, and the perception of stimuli amid randomness (among others). They also have a number of more negative tendencies, including stress, depression, somatic focus, substance use, hostility in relationships, memory aberrations, mood swings, poor attention to rules, and sensation seeking.

Transliminal people have been consistently found to have a greater likelihood of experiencing ghost and poltergeist phenomena and are, therefore those who are more likely to exhibit HP-S. These individuals are active participants in the construction of ghost experiences rather than being passive witnesses. The transliminal

model can predict who has haunt-type experiences generally (macro phenomenology) in addition to the general patterns within these experiences (always a mixture of S and O events). Other factors outside of transliminality contribute to the microphenomenology (or the specific *flavor*) of a given haunt experience. These allow for the meaning-making components which are inspired by one's beliefs in the paranormal, one's religious ideology, one's ideological practices, social desirability, and setting. Essentially, the way in which one believes (or disbelieves) in the paranormal or the extent to which one identifies with a particular ideology about haunt phenomena can influence which factors one attends to or does not attend to in the context of a haunting experience. Beliefs and ideologies can also drive how one makes sense of anomalous experiences that arise in the context of a haunting.

The authors also remind us of the social context of the haunting experience and that people are often aware of the social acceptability (or lack thereof) of certain explanations in the context of a haunting (with regard to who else is present). The set and setting of the haunting experience also contribute to the overall experience, as *liminal people* may be more likely to experience haunt-type phenomena in *liminal settings*. Such settings are those which may be more likely to create feelings of *dis-ease*, which takes a central role in the HP-S model and rests on states of dissonance. In essence, the authors propose that haunted locations are particularly likely to elicit S and O events. There is then an active construction of the ghost by recourse to personal beliefs and world-views and existing cultural narratives concerning ghosts.

Although transliminality plays a central role in ghost experiences, the authors are careful to note that under the right circumstances, people who are not transliminal can also experience haunt-type phenomena. This occurs in the context of rituals, contexts, and practices that result in *dissociative* experiences. In addition, anyone who walks into a dark and spooky haunted house might experience states of *dis-ease*, which are implicated in the etiology of anomalous experiences.

Chapter 3 explores the role that social influences and social facts (propagated culturally) take in the etiology of ghost experiences. For example, there are certain social facts concerning paranormal phenomena that can have strong effects in terms of how people behave. The chapter outlines the VAPUS model that essentially argues that ghost narratives are versatile (spanning diverse genres), adaptable (shift according to social changes), participatory (invite interaction), universal (applying to many contexts), and scalable (engage people at the individual level and at different social levels, including propagation via media and social media). Breaking this down, the authors

convincingly argue that ghost narratives are a cultural construct that acts as memes that are strongly prevalent, pervasive, contagious, and subject to mutations as they evolve (like their biological counterpart, the gene). The model argues that narratives regarding hauntings are highly intriguing and apply to lots of areas of human concern. In addition, ghost narratives are something that humans participate in (e.g., via paranormal tourism or investigation). Ghost narratives also *evolve* in response to people's direct experiences, which can alter the nature of a given haunting story.

Ghost narratives are also discussed as *Trickster*-like since they are fundamentally liminal, and often occur at the intersection between reality and imagination and between darkness and light. The authors also discuss how ghost experiences can be understood in terms of gaslighting, where people might begin to second guess themselves about what actually happened and revise their interpretation post hoc. Such gaslighting can occur negatively or positively. Negative occurrences occur where a paranormal experience is questioned, undone, and subjected to a more skeptical reinterpretation, while positive occurrences occur when a paranormal interpretation is pushed towards a more definite or extreme version of that interpretation.

Ultimately, we learn that ghost experiences should not be taken at face value, but rather must be understood as stories that are told with S and O anomalies as ingredients that are then meaningfully interpreted and pulled into a narrative. This is at the heart of narrative psychology, where it is clear that experiences are often told in a *storied* format. The authors compare the process of meaning-making inherent in ghost narratives to the Rorschach projective test, whereby people observe a set of ink blots and draw from the dots to create a story that derives from their own social backgrounds, beliefs, contexts, and individual differences in sensitivity and attention to different elements.

The authors also remind the reader that researchers play a significant role within the construction of ghost narratives, and that everyone has biases regarding the best ways to approach and make sense of the evidence. The authors discuss three social groups: parapsychologists, debunkers, and ghost hunters, who each have different "competing voices" regarding the investigation and interpretation of ghost phenomena. Each group certainly has its own blind-spots that might be ameliorated by collaboration. Unfortunately, the authors hold some assumptions that "parapsychologists" may be more prone to believing claims of the paranormal. This is a misunderstanding regarding parapsychology, which is about studying subjective paranormal experiences from a crit-

ical, yet balanced perspective, rather than setting out to prove the existence of psi phenomena (in alignment with the perspective articulated in *Ghosted*). Of course, the key intention of the authors is to check one's blind-spots, which is a valuable reminder for any research endeavor. The take-home message is that there is "a solid foundation for productive research collaborations", which is both exciting and timely and a call to arms for "citizen science". In order to stimulate good quality research across different approaches, the authors note that research methods might also display qualities of the VAPUS model - they need to be versatile, adaptable, participatory, universal, and scalable. As noted earlier, the participatory turn is at the heart of transpersonal and community research approaches in psychology. I think that this is a valuable and potentially highly fruitful way forward for research into these multifaceted experiences.

Chapter 4 dives into "spooky settings and structures" or *liminal settings* and unpacks six ambient factors that contribute to the recipe for ghost experiences. These factors that are often found at "haunted houses" include embedded cues (that prime certain types of experiences), lighting levels (shadows), air quality (causing location-based illness or perceptual anomalies), temperature (cold and warm spots), infrasound (very low-frequency sound that is not consciously perceived) and electromagnetic fields (that may inspire hallucinatory phenomena). The authors propose that some of these features contribute to the liminal nature of haunted sites and interact with transliminality in terms of both S and O events and, in turn, to the construction of a ghost or poltergeist narrative. This chapter digs more deeply into the syndrome model with regards to why some places may be haunted (whilst others are not).

The chapter includes some discussion of technical equipment (in particular EMF meters) that investigators often bring with them to a purportedly haunted location (to explore O events). Indeed, ghost investigations have become synonymous with such equipment in the eyes of the media. Technical equipment has come to symbolize scientific study as it allows for objective measurement of anomalies. However, in ghost hunting, there is often a conflation of correlation with causality; anomalous behavior of technical equipment is taken to indicate the presence of a "ghost". With that said, the authors note that there have been several examples of anomalous behavior of EMF meters, which needs to be systematically researched. In general, the authors argue for the simultaneous use of various objective measures, the importance of ascertaining the extent to which there are naturally occurring physical variables, and good quality hypothesis-testing research.

The chapter also describes the role of Gestalt influences which serve to integrate various environmental elements into an overarching holistic *impression* of a given location. Such influences include a combination of factors that people interact with. Sometimes, the interpretation of various aspects of a place may stimulate a type of threat-scanning exercise when people enter a purportedly haunted location. This may result in feelings of dis-ease, while at other times, there may be feelings of ease or comfort. When a person experiences dis-ease, this may induce feelings of creepiness, and in turn, this may influence the way in which one attends to and interprets the environment. Thus, when one is on edge, a breeze is no longer just a breeze, but rather a ghostly draft, and ghostly inferences have thus begun. Here, the authors discuss ambiguity tolerance and how some people are less able to sit with ambiguities or uncertainties than others. For some ghost experiencers, a lack of tolerance of ambiguity can lead to heightened feelings of *threat*, which leads to increases in paranormal beliefs and attributions (like a cycle). If one is essentially on high alert, one may be more likely to notice anything anomalous (e.g., body sensations) as being due to the presence of a ghost. This is proposed to occur via processes of cognitive dissonance, an uncomfortable experience that arises when there are conflicting aspects to one's reality - e.g., something is real and not real or pleasant and not pleasant *at the same time*. One way to resolve these conflicts is the inference of *agency* beyond the self (a ghost). Sometimes, the cycle can be more affirming, and associated with positive and even transformative experiences (which the authors unpack as *enchantment*). Enchantment may emerge in a 5-stage process (detection, absorption, consternation, impression formation, affirmation), contributing to the experience being labeled as a "pleasant surprise".

The way in which a ghost experience develops is understood to be similar to the temperature increases in the haunt hierarchy; in other words, *experiences influence and build on prior experiences*. The discussion on enchantment is truly fascinating and is a connection point to other literatures, including research in humanistic psychology, transpersonal psychology, and in the context of psychedelic experiences where experiences have the potential to be appraised negatively or positively. Ghost experiences ultimately emerge as interactions between liminal settings and those who visit them. Liminal people will experience more intense phenomena, but settings may foster anomalous experiences in those who are not transliminal.

Chapter 5 further fleshes out the theory of *haunted people syndrome (HP-S)*, integrating much of the prior discussion regarding transliminality, social factors, and environmental factors into an intriguing interactionist sys-

tems model that is highly persuasive. The model proposes a bidirectional interaction between people who are more transliminal and environmental settings (that include a range of stimuli as articulated in Chapter 4). The ensuing experiences are then constructed into a meaningful ghost narrative. The authors present a synopsis of the key features of systems theory, which proposes that the best way to understand a given phenomenon is via a set of interacting factors. In terms of ghost experiences, anomalous phenomena occur (that are often ambiguous in their nature), are perceived, interpreted, and may then lead to other actions and experiences that also have the potential to influence individual and social experiences within a given social and cultural context. Over time, these loops contribute to the development of a narrative concerning ghosts. The loop of interacting components can play out very differently for people with differing belief systems about ghost phenomena.

This chapter discusses two competing perspectives concerning whether experiences lead to beliefs (Experiential Source Theory, or EST) or whether beliefs lead to experiences (Cultural Source Hypothesis or CSH). Given the interactionist nature of ghost narratives, the authors propose that both EST and CSH are *both correct* and are working in tandem! This makes a lot of sense. The argument rests on the way in which one believes in paranormal phenomena, given that there are two different subscales of the paranormal beliefs scale; one pertains more toward cultural ideas regarding paranormal phenomena, while the other pertains to anomalous experiences. In addition, the authors propose that ESH may be applied to O events, while CHS might play a stronger role for S events, including the feeling of being watched.

Essentially, liminal people are more likely to experience anomalous phenomena that are interpreted according to certain attentional and perceptual biases. These are further bolstered by liminal settings, and in turn, phenomena are explained and reinforced by understanding them to be caused by an external agency that is paranormal. The attribution of the phenomena as a ghost can serve as an anxiety-reducing coping mechanism when faced with stressful or ambiguous situations. In other words, for many people, deciding that something anomalous is a ghost can lend a sense of relief and reduce anxiety. However, when a person is already highly anxious, the feedback loop may go awry and spin the anxiety out of control. For those who are higher in transliminality, the enhanced sensitivity to internal and external stimuli and other cognitive and perceptual biases and tendencies to focus on emotional rather than rational reasoning further contributes to the ghost narrative. As such, transliminal people essentially create more anomalous experiences

from existing ones - the haunt hierarchy builds upon itself and becomes more intense. Once the attribution is made, confirmation bias may come into play in terms of the best explanation for anomalous phenomena. Outside of the individual, ideas and experiences can spread like germs (contagion) among others present at the scene. Indeed, the authors discuss research findings that provide support for the idea that anomalous experiences spread via social contagion in the context of haunted locations and experiences. Given differences in the different roles of culturally held beliefs on experiences, the authors note that it is possible to reduce the distress associated with HP-S by working with people's belief systems. For example, an exorcism might work well for those with religious beliefs who are distressed by their anomalous experiences. Another way could be to seek to work with clients to alter the cognitive, perceptual biases that oftentimes accompany transliminality.

Although the authors discuss some of the different ways in which one might believe in paranormal phenomena, I would like to have seen more discussion on possible differences between healthy versus less healthy transliminality. Research with the related construct of positive schizotypy indicates that there is strong evidence for healthy and less healthy forms that exhibit different responses to stress (e.g., Grant & Hennig, 2020). The authors do discuss different ways in which one can be a highly sensitive person (HSP) and that there are certain highly sensitive people who are more prone to flourishing (Orchids) than others (Dandelions). A key ingredient in terms of whether experiences will be associated with distress is the activation of the threat detection system, which may be more likely when anomalous phenomena occur spontaneously, are physical, and occur in close proximity to the experiencer. This is fleshed out in more detail in a later chapter in which the authors map out an "encounter matrix".

Chapter 6 explores various parapsychological explanations for ghost-type experiences. The chapter begins with a discussion of the loaded term "paranormal". The authors explore several definitions and note that the term "paranormal" is rather problematic and often refers to phenomena that are negatively defined, rather than defined in their own right. They go on to suggest that a position of "I don't know" is better than "paranormal" or "supernatural". They note that some members of the ghost gang are persuaded by laboratory evidence for psi phenomena (implying, of course that some do not). This again reminds the reader that this is an interesting and innovative collaboration that is genuinely seeking to understand the phenomena at hand.

In the book, the authors note that there is currently

limited information about how psi might work, regardless of whether it comes from a living or a discarnate source. This is a valid but contentious point, as there are actually several intriguing models for psi phenomena in existence, despite the absence of one unifying model. They also suggest that competing explanatory models (the living agent psi (LAP) versus discarnate source debate) might relate more to ideological preferences. Next, they criticize the idea that paranormal phenomena fall outside of what is normal, given that many people regularly experience these phenomena, and for them, they are perfectly normal. In addition, they criticize the term “parapsychological” and note that it is not possible to label something as parapsychological if we do not know how psi works. Although I agree with the importance of separating a particular event or experience from the way it is interpreted, I am not sure “parapsychological” implies a particular interpretation, although the term may well suggest an explanation that falls outside of psychology.

Despite the difficulties in determining the source of psi (LAP versus survival), the authors propose an extremely useful rating system for ascertaining the extent to which ghost-type experiences might be indicative of a more *genuine* anomaly, which is a really important element in the book, and which would certainly benefit from more public dissemination. The system was developed by Brian Laythe’s organization, ISRAE (Institute for the Study of Religious and Anomalous Experience). The system classifies anomalous phenomena into one of three tiers or classes of anomalous phenomena. The first reflects phenomena that are generally less likely to indicate genuinely anomalous processes and include vague noises, movements occurring in the corner of one’s eye, and many personal subjective experiences. The second includes more complex subjective experiences according to the haunt hierarchy, including experiences in which a person sees an apparition or is pushed or hears voices (but without an objective recording to support this). Sometimes, these phenomena may have more than one witness, but there is no objective data to complement these experiences. The third class includes only O events on the SSE questionnaire, which are more likely to be genuinely anomalous. Here, there is corroboration with instruments such as video or audio recordings, and some anomalies can include Psychokinetic effects, visual apparitions or light effects, and high-quality EVPs. Phenomena might be classed into this third category when it is clear that the anomalies are not caused by a hoax or other more normal explanations (this can be done using multiple recording devices). I would like to have seen the SSE questionnaire included as part of this text to help the reader make further sense of this discussion.

The final part of the chapter further unpacks the different ways in which one might understand anomalies that do suggest a more anomalous process. The authors discuss the strengths and limitations of a survivalist position in comparison to other parapsychological perspectives. This is a balanced and very grounded discussion, which seeks to explore all possibilities regarding anomalous phenomena. They also remind the reader that quantum aspects of reality might allow for some kind of continuation of consciousness following death, but that the jury is currently undecided in terms of how to understand the nature of consciousness. In addition, anomalous physical phenomena that occur in the context of hauntings can potentially be (better) explained by the psychic ability of the living, e.g., Roll’s RSPK understanding of poltergeist phenomena. Thus, even if it seems that there is an external agency, the cause may well be associated with the living (albeit unconsciously). Other ways to take ghost phenomena up from a psi of the living perspective is the idea that some experiences are influenced telepathically, and not via discarnate entities. For example, a person’s memories of a loved one could psychically influence the experiences of others present in a given location. Another explanation is that people access a shared field where memories associated with a given location might be located. These experiences may be externalized due to psychological traits associated with transliminality, including eidetic imagery. Throughout the discussion, it is clear that the authors consider that a psi explanation is a viable explanation when all normal explanations are ruled out, but that it is not clear exactly *what* this might suggest about reality.

To balance things out, the authors also discuss the idea that information might sometimes become connected to certain places and objects (as noted in the Stone Tape theory and the related idea of “place memories”). The discussion also considers the simulation hypothesis, which asserts that we are living in a computerized simulation of reality and that ghost-type phenomena are coded aspects of this simulation. This is a very intriguing idea, but it is not possible to falsify.

Chapter 6 concludes with the discussion of some neurological features that would influence a greater likelihood of perceiving anomalous phenomena that may or may not include psi. Discussion includes enhanced sensitivity to weak stimuli, dissociative tendencies, and temporal lobe lability. Their closing position statement notes that some genuine anomalies do exist, but more research is needed to fully explore different explanations. Intriguingly, the authors reiterate that the HP-S model can be applied to ghost experiences with mundane or more anomalous explanations.

Chapter 7 is a pivotal moment in the text, where the authors introduce some practical concepts with a view toward motivating new “citizen scientists” and undergraduate psychology students to think about how to approach a systematic investigation. Citizen scientists are defined as those who are ordinary people without specific training who collect and analyze data, often as part of a research team. The authors distinguish between those who want to have an intriguing experience and those who want to study ghost phenomena and that it is possible to combine both approaches in a meaningful investigation. In this chapter, the authors highlight the need for systematic investigation that includes controls and a need to evaluate S and O events in a critical and balanced way. It is important to be clear on what hypotheses are being explored in a given investigation and do some planning for such an investigation rather than diving into an open exploration of S and O anomalies. In fact, they argue that 50% of any investigation is about planning.

The authors remind the reader of the importance of being mindful of one’s pre-existing belief systems and carefully documenting S and O events without jumping to interpretations about what the events imply; in other words, collecting good data. They note that people should be aware that unusual experiences often happen (regardless of their explanation). In addition, there are many features of a haunting investigation that are creepy and can be associated with anxiety and sometimes distress. In turn, given HP-S, this can contribute to more anomalous experiences. ISRAE has developed a good protocol for running an investigation. They dub the general approach the “Judge and jury” approach, which reflects a systematic approach that rules out various normal explanations that might explain a given anomaly. A three-stage process is then proposed by the authors. This includes case documentation in which the physical and environmental attributes of the location are documented, the psychological attributes of the recipients are documented, and a list of S/O anomalies that have previously been reported is assembled. The second is exploratory inspections, which include a site survey that documents S/O anomalies in real-time. The third is hypothesis testing, in which site visits might specifically test one or more possible causes or correlates with the S/O events. The authors advocate once again for different research groups to work together and to include academics on the team who are trained in research methodologies. The book also provides some simple research designs that can be applied to some haunting investigations (developed by ISRAE).

Chapter 8 goes into further details in terms of the three-part approach (case documentation, exploratory inspections, and hypothesis testing) that was introduced

in Chapter 7. The ghost gang essentially provides a sample *step-by-step* guide, which is incredibly useful for all budding ghost hunters or academics seriously interested in ghost phenomena. Detailed and practical suggestions are given for case documentation, exploratory inspections, and hypothesis testing. The authors discuss various aspects of engaging in the investigation, including how to work with and interview witnesses, awareness of clinical issues, ethical practices, doing some initial walkthroughs and planning, and detailed advice regarding the investigation itself. The “hotspot method” is presented, which is essentially where investigations are limited to smaller areas (which are named) in which anomalous phenomena have been reported in the past. The authors note that focusing on hotspots can allow for a more practical and time-efficient investigation (rather than investigating an entire building). Readers are also reminded of the importance of timestamping and good record keeping when conducting a systematic investigation of a haunted location in addition to systematically testing for normal explanations, including how the equipment being used might interact.

In terms of hypothesis testing, the authors advise citizen scientists to work with existing scientists to develop good testable hypotheses that can lead toward model building or theory formation. The authors go on to describe some excellent resources for investigative tactics that can be applied to ghosts, breaking the investigations down into stages as they did in this chapter.

This chapter would be complemented by a discussion and integration of Schmeidler’s systematic floor plan approach (e.g., Maher, 1999). This may be part of the hotspot method, as the authors note that a floorplan should be used. Essentially, Schmeidler’s approach divides the floorplan up into named sub-sections such that systematic exploration of S and O phenomena can be ascertained (and anomalies marked according to specific sub-locations).

Throughout the text, there is a lot of emphasis on O measurements as the better form of evidence (which also fits into the third tier of the proposed classification system). Although it makes sense that S events in isolation are less convincing in terms of a genuine anomaly, consideration of the *co-occurrence* of S and O events (factoring in whether S events are collective or individual and other attributes, including temporal and spatial considerations) might also provide intriguing evidence. This might provide additional evidence for HP-S, and allow for further understanding of the way(s) in which the O phenomena play out.

In addition, where there are demonstrable O events, it is not clear exactly what is being measured. This is in

alignment with the emphasis on exploring the ingredients of ghost experiences in and of themselves, but it is possible that an emphasis on what is *physically* measurable is limited. Here, some discussion on the use of random number generators in haunting investigations might add to the discussion and strength of investigations, given that these are intriguing correlates of consciousness in which there is evidence for increased order in randomness (Duggan, 2017). It is also the case that existing models for psi phenomena (including ghosts) have included *quasi*-physical components that would be difficult to measure with equipment that measures actual physical phenomena (e.g., Frederic Myers; see Hamilton, 2017). All of this echoes the authors' own standpoint that there is still a lot of work to be done in this area.

Chapter 9 instigates a call to action for people to take up the gauntlet and engage in systematic research on the syndrome model advocated in the *Ghosted* book. The chapter outlines some "unsettled questions" regarding the model and how they might be tested via systematic research. The authors invite others to systematically explore some of the core concepts within the syndrome model. They also articulate the need for further research in clinical support for experiencers. This is a really important component of this text, as ghost experiences can often be associated with distress (as well as enchantment). The authors note that the main reasons people reach out to other people for support relates to; 1. a need to understand S/O anomalies in terms of their reality status, 2. a need for emotional stability following experiences and 3., bigger existential questions regarding the meaning of S/O anomalies and the possible existence of "ghosts". These questions can often be connected with significant struggles and sometimes some more clinical ramifications.

The authors then present a very useful map of different types of encounter experiences arising in the context of hauntings as an "encounter matrix". This maps the ingredients for the recipes for positive and negatively appraised experiences. Essentially, there are different levels of perceived threat or benevolence that emerge according to differences in the setting and the proximity of a given encounter and how anomalous experiences interact with translimentality. Negative experiences tend to occur more spontaneously (outside of expectations) and in very close proximity to the experiencer. On the other hand, positive experiences are more likely to emerge in circumstances in which there is expectation or priming, and/or the phenomena occur further away from the experiencer (for example, in the context of mirror gazing). Other factors, including social and other variables, can also contribute to the overall experience in terms of appraisal.

At the end of the chapter, several potential projects

are outlined, including various interesting ways for citizen scientists to get involved in research. As with the rest of the book, the authors succeed in adopting a strong yet balanced skeptical perspective that advocates for methodological excellence. This leaves the door open to the possibility of genuinely paranormal phenomena as they seek to sort out the "signal from the noise".

Chapter 10 provides a plethora of rich information for further study, including some resource materials. It is also a reminder that science is alive, and constantly evolving and that it is important to stay humble, keep an open mind, and be open to new educational experiences regarding the subject matter. The authors remind the reader that the systematic study of ghost experiences draws from various academic disciplines. They go on to describe a number of journals, books, podcasts, and introductory courses available to budding ghost researchers, with the caveat that journals can often be laden with jargon and are not accessible to the public (both in terms of technical language and actually having practical access to these journals). They provide some excellent suggestions for how to get access to journals without working at a university. A list of the key publications that contain parapsychological articles, including skeptical publications, are then presented. The authors reiterate their dedication to "proper skepticism" over debunking and advocate a critical reading of certain publications that express a more dogmatic perspective. Next, the authors list several must-have texts, followed by other resources for general education, including podcasts, general science resources, apps, courses on parapsychology, and how to conduct ghost investigations. In the latter section, they note the pitfalls and benefits of ghost-hunting organizations. Of particular relevance in this chapter is the inclusion of a range of useful resources from ISRAE. Throughout my reading of this book, I find myself continually impressed with the ghost gang's intentions to stimulate innovative and high-quality research and to truly facilitate collaborations among and between different groups with similar interests.

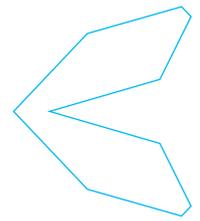
At the end of the text is an afterword by Lloyd Auerbach, who notes his position as a believer in a more paranormal interpretation of the phenomena. He unpacks this by describing himself as a situational skeptic, as he is fully aware that there are many plausible normal explanations at play in many haunting situations. With that said, he has experienced some interesting phenomena that have pushed him to accept that anomalous phenomena do happen that cannot be explained easily. Ghosts fascinate humans, and there are different types of paranormal groups out there that he defines as thrill seekers, hobbyists, amateurs, and citizen scientists. Citizen science

is strongly encouraged by Auerbach and the *Ghosted* authors as it involves more than simply exploring or measuring anomalies with technical equipment. I find myself agreeing strongly with this criticism and bias toward using technology. It often seems to be used pseudo-scientifically. All too often, a measurement anomaly is labeled as a “ghost” when this is a clear example of a conflation between correlation and causality. Auerbach strongly appreciates the focus in *Ghosted* on haunted *people* and agrees with the authors on the psychosocial nature of ghosts, bracketing whether there is any paranormality associated with them. This is an interesting bookend for this book as it seeks to move beyond traditional binaries in terms of one’s position on “the paranormal” and instead engage in adversarial collaboration that seeks to inspire systematic research.

At the very end of the text is a rather useful glossary of terms such that citizen scientists and university students will find useful for the various terminologies that are employed throughout the book. This book is a useful academic resource, a practical handbook, and list of inspiring unresolved questions that certainly whets the appetite for researchers to dig deeper into the study of ghost experiences. Its interdisciplinary nature and systems approach allow for different ways to understand these phenomena. I look forward to seeing how our understanding of ghost experiences and the extent to which HP-S can illuminate these experiences evolves.

## REFERENCES

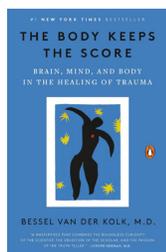
- Alvarado, C. S., & Zingrone, N. L. (1995). Characteristics of hauntings with and without apparitions: An analysis of published cases. *Journal of the Society for Psychical Research*, 60(841), 385–397.
- Duggan, M. (2017). ‘Psychokinesis Research’. *Psi Encyclopedia*. London: The Society for Psychical Research. <<https://psi-encyclopedia.spr.ac.uk/articles/psychokinesis-research>>. Retrieved 17 November 2023.
- Grant, P., & Hennig, J. (2020). Schizotypy, social stress and the emergence of psychotic-like states - A case for benign schizotypy? *Schizophrenia Research*, 216, 435-442. <https://doi.org/10.1016/j.schres.2019.10.052>
- Hamilton, T. (2017). ‘Frederic WH Myers’. *Psi Encyclopedia*. London: The Society for Psychical Research. <<https://psi-encyclopedia.spr.ac.uk/articles/frederic-wh-myers>>. Retrieved 16 November 2023.
- Maher, M. C. (1999). Riding the waves in search of the particles: A modern study of ghosts and apparitions. *Journal of Parapsychology*, 63, 47-80.
- Roll, W. G. (1977). Poltergeists. In B. B. Wolman, (Ed.). *Handbook of parapsychology* (pp. 382-413). Van Nostrand Reinhold.



**BOOK AND  
MULTIMEDIA  
REVIEW**

# Traumas of the Mind-Brain- Body: PTSD: Lonely Pioneers

**Henry Bauer**  
hhbauer@vt.edu



ISBN-13 978-0143127741

<https://doi.org/10.31275/20233067>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

Why review a book published a decade ago, a best-seller so successful as to be in its 49<sup>th</sup> printing in 2023?

For one thing, because the book's author was somehow fired from the Center that he had founded and developed, to global admiration, for outstandingly successful treatment of trauma and PTSD. These circumstances illustrate a great deal about contemporary corruption of the intellectual public square.

For another thing, I came upon this book only quite recently, even though it is very close to several of my interests; which in itself illustrates some of the flaws in contemporary intellectual punditry, discussed in the section on lonely pioneers.

And for yet another thing, this book has been personally significant because my family experienced considerable trauma when Germany took over Austria in 1938 and made us into refugees. The concept of PTSD was formulated only several decades later than that, and learning about it now has allowed me to understand a great deal about quite specific matters in the lives of my parents, my sister, and myself. For instance, I have learned that trauma can produce a relatively *permanent* sensitization of the body's alarm system, bringing chronic anxiety and pessimism, an *expectation* of unpleasantness. In addition but separately, strong emotions can be triggered by things that remind of specifics of the traumatic experiences, for instance, encountering in some way contemporary refugees — I had been surprised recently to find myself literally *speechless* on such an occasion, unable to articulate what I wanted to say.

So, this reviewer is predisposed to emphasize the book's many virtues, a bias that may well be detectable in the following.

## CONTENT OVERVIEW

That mind and body are interrelated in a vitally important way is pointed out in a well-known quote from two millennia ago; and the fact was doubtless known to humankind for many millennia before that. Yet a couple of thousand years later, our understanding of the interrelationship remains unsatisfactory and incomplete.

The Roman poet Juvenal coined the famous phrase when he wrote, 'Orandum est ut sit mens sana in corpore sano' — You should pray for a healthy mind in a healthy body — around the end of the first century AD. Nearly 2000 years later, we are still wrestling with dualism, struggling to understand the components of the biopsychosocial model of illness, and striving for parity of esteem between the sciences of the mind and biomedicine, slowly uncovering the immensely complicated relationships between mental and physical health and illness (Jones, 2017).



The indivisible self has become divided. Divided by the structures of medical specialism, which themselves reflect the understanding of a wider society. Divided too by a mind and body philosophy that prefers reductionism to holism. . . . In spite of forces that divide the self, recent years have seen some convergence in physical and mental health care. In psychiatry, there has been an increasing awareness of the need to address the physical health issues of patients (Ashworth, 2017).

*The Body Keeps the Score* offers an astonishingly detailed, empirically based understanding of how the mind, brain, and body relate to one another. Considerable evidence from anatomy, physiology, and neuroscience, including activity maps of the brain obtained in trials using brain scans, demonstrates that what we experience leaves its mark not only in memories in the mind but also in the form of learned or enhanced sensations, *physiological* memories. An important demonstration of the interconnections of mind, emotions, and physical functions is embodied in the vagus nerve (p. 83).

Successful therapy of “mental” or “emotional” illness cannot ignore this interconnectedness (pp. 88, 91). A ready way to appreciate the interconnections is what everyone has surely experienced, if not noted: anger or fear are accompanied by *muscular tension*; if that is *constant*, chronic pain can follow: spasms, back pains, migraine, fibromyalgia (p. 268).

If the interrelationship between mind and body does not function properly, as with PTSD or also with physical damage to the brain as in strokes (p. 43), then one might experience apparently inexplicable emotions — anger, fear, sorrow, etc. — without the brain/mind memory recalling the past experience to which those emotions had been appropriate.

Brain scans show that there is indeed an important distinction between largely emotional right-brain activity and largely rational, factual, realistic left-brain activity (pp. 44-5).

Instincts, reflex emotions, originate in the most primitive part of the brain, on the stem, the “reptilian” brain that controls “all the things newborn babies can do: eat, sleep, wake, cry; breathe, feel temperature hunger, weakness, and pain; and rid the body of toxins by urinating and defecating” (p. 56).

Above the reptilian is the mammalian brain or limbic system. It is where emotions are seated, and danger is monitored. It begins to develop very rapidly after a baby is born, and it is shaped in response to experience. How infants are cared for and parented, especially in their early years (pp. 86, 114-5, 154, 306) leaves indelible marks and

corresponding habits.

On top of the limbic system is the neocortex, much thicker in humans than in other mammals. Here are the capacities for conscious and abstract thought and language. Kolk cites a textbook example, leaping back in terror at the sight of a snake, as commanded by the limbic system — only to realize shortly afterwards that the frontal lobes of the neocortex recognize the supposed snake to be just a coil of rope (p. 57).

In 1994, *mirror neurons* were discovered: cells in the cortex specialized to enable imitation and synchrony with others. Mirror neurons give us the capacity for empathy, a marvelously desirable social trait that, however, also makes us prone to negative effects: feeling “down” when others we care about are depressed or in a bad mood, or angry (pp. 58-9).

The book’s thematic focus is how trauma interferes with these interrelationships, resulting in PTSD — Post-Traumatic Stress Disorder. The book’s Prologue introduces the main points: long after a traumatic experience, strong and apparently unwarranted, incomprehensible emotions may surface because our physiology had actually been altered by the trauma, making us hypersensitive to apparent danger: the brain’s alarm system had been recalibrated. Stress hormones released by some stimulus take much longer to return to baseline in traumatized people (p. 46). Treatment and full recovery may require *physiological* as well as “mental” re-recalibration. Talk therapy alone is not enough, nor are drugs alone.

Part One of the book is about Vietnam veterans and evidence from neuroscience. Part Two deals with what trauma does to the mind and body. Part Three deals with normal and abnormal child development. Part Four deals with memory problems produced by trauma: memories of normal happenings tend to be self-contained narratives, whereas memories of traumatic events are typically unorganized, isolated images or sensations.

The eight chapters of Part Five describe several approaches that have proved to be successful in treating people suffering the after-effects of trauma. Such physical activities as dancing, chanting, singing, and deep breathing are effective ways of relaxing and lessening the hyper-arousal characteristic of trauma. Kolk points out that Chinese, Indian, and other cultures, and some religions, have made such practices (for instance, yoga, tai chi, qi-gong, martial arts) commonly used rituals; unfortunately, our own mainstream culture regards these as “alternative” (p. 209 ff.). Talk therapy, writing, and introspection all have their potential use in recovery from PTSD, but Kolk believes physical treatment to be an *essential* component, and he has used quite controversial approaches: EMDR (eye movement desensitization and reprogramming, ch.

15), internal family systems theory, neurofeedback<sup>1</sup>, PBSP psychomotor therapy; and he has lectured at the “alternative” Esalen Institute.

An Epilogue outlines the author’s suggestions for how society might best apply the insights detailed in the book. Much of the Epilogue, as well as a number of points in the other chapters, are sufficiently controversial to be appropriately discussed in the following Section of this review. Here, I will focus on what seems the soundest findings and assertions.

The book carries much conviction because its interpretations are so directly and closely linked to tangible evidence. Van der Kolk has spent much time listening and observing, and he shares many individual stories throughout; he knows what he is talking about.

The direction of his career was set when he took time between first- and second-year medical school to work as an attendant at Massachusetts Mental Health Center. At night, the patients talked with him very freely, and he learned far more from them than the supervising doctors appeared to know, revealed as they did the rounds with their resident interns (pp. 23-4)<sup>2</sup>. Taking patients on outings enabled him also to recognize that *physical* clumsiness often accompanied mental distress (p. 26). Later, Kolk was a research assistant in the work that brought the condition of PTSD to be recognized and included in the 1980 edition (DSM III) of psychiatry’s “Bible,” the *Diagnostic and Statistical Manual of Mental Disorders*.

Although Kolk first came to recognize PTSD among Vietnam War veterans, his work came to focus largely on trauma experienced by children. Recognition of the prevalence of traumatized children has come only in recent decades; a vital insight is that “childhood trauma is radically different from traumatic stress in fully formed adults” (p. 157). For example, sexual abuse speeds up biology and increases the secretion of sex hormones (p. 165).

The salient point of interest to **everyone** is that if or when one’s reflexive emotional reactions, at any age, seem inappropriate to the circumstances, that may be because they were instilled and learned by traumatic experiences in childhood or adolescence, even if the reflexive reactions are not accompanied by conscious memories of that initial experience. Such reflexive emotions may also include *lack* of emotion, numbness — not *feeling* situation-appropriate love, say.

A significant feature of trauma is that it creates memories that are not coherent stories but rather isolated imprints of images, sounds, and physical sensations accompanied by intense emotions (p. 70). That theme pervades the book, as does the insight that humans are quintessentially *social* animals (pp. 117, 169, 212); our interactions with others can produce trauma, and the recovery from trauma

requires becoming able to engage socially *with comfort*.

## PROS, CONS, AND THE BOOK’S CONTRIBUTIONS TO THE LITERATURE

### Pros:

I had encountered the term “mindfulness” on many occasions, but this book gave me for the first time a genuinely helpful definition: A state in which mind, brain, and body are so well integrated that one is *conscious* of one’s bodily sensations in their entirety. That also offers a very practical way of learning to be “mindful”: paying attention consciously and steadily to one’s physical sensations. That makes for the desirable ability “to hover calmly and objectively over our thoughts, feelings, and emotions . . . and then take our time to respond [which] allows the executive brain to inhibit, organize, and modulate the hardwired automatic reactions preprogrammed into the emotional brain” (p. 62).

At the same time, Kolk points out that emotion is not *opposed* to reason; our emotions assign positive or negative *value* to experiences and thereby serve as a foundation for reasoning (p. 64). That point deserves to be made vigorously whenever nonsense is spouted about the dangers of artificial intelligence taking us over; the only real danger of artificial intelligence (the phrase is an oxymoron) is the abuse of its capabilities by careless or evil human beings.

Like many others (Frances, 2013; Greenberg, 2013)<sup>3</sup>, Kolk regards the current (5<sup>th</sup>) edition of the DSM as disastrous (ch. 9 & pp. 166-70). As one particular, he notes that traumatized children and veterans are typically diagnosed with *several* “disorders”, all of them merely symptoms of PTSD (pp. 111, 161, 166-170).

A number of book-length treatments discuss the many failings of contemporary mainstream standard psychological and psychiatric treatment<sup>4</sup>. Kolk had begun to glimpse this four decades ago when he had been confronted by cumulatively 47 women traumatized by incest, although the standard textbook asserted incest to be a one-in-a-million phenomenon (p. 20); and later, he met a number of women consigned to electroshock treatment for depression but who had never been given the opportunity just to talk off their depressions (p. 24).

Kolk shared the initial enthusiasm (p. 27) for drug-medicating mental illness but now recognizes its deficiencies and enormously expensive over-use (pp. 36-8). He notes what remains puzzling to him: Prozac was very effective for the patients coming to his Boston clinic, yet it did not help combat veterans at the Veterans Administration hospital (p. 35).

Shame over not having acted differently in traumatic circumstances seems a common feature not only with mili-

tary veterans but also with people sexually abused in childhood (p. 13). The victims come to think that what happened was in some way their own fault, and they seek to placate the abusers, even to maintain a connection with them. These generalizations seem plausible explanations for why abused women so often do not bring formal complaints or do so only a very long time afterward<sup>5</sup>.

Childish attempts to placate an abuser are a natural reaction, and role-playing exercises with troubled youths from high-crime areas found them always siding with the aggressors (p. 341); reminiscent of the attempt by victims to “identify with the aggressor”, discussed by (among others) Anna Freud and Sándor Ferenczi<sup>6</sup>.

### Cons:

I was a little surprised to find no mention at all of Wilhelm Reich, an early apostate from Freud’s acolytes who had insisted that talk therapy needed to be combined with some form of body work.

I would have liked an extended discussion of how the common concept of an “unconscious” or “subconscious” mind relates to the mechanisms and pathways described in this book; and to what degree the triune brain (reptilian/mammalian/neocortex) corresponds to the Freudian id/ego/superego.

I wondered whether Kolk was rather overreaching in attributing to trauma such possible consequences as fibromyalgia, chronic fatigue, and other autoimmune diseases (pp. 53, 293); though the book does offer supporting data from actual measures of immune-system cells (p. 129).

Some of the estimates caused me to doubt whether the data and interpretation are always quantitatively impeccable. The book appears to accept that “the gravest and most costly public health issue in the United States . . . [is] child abuse” and that eradicating it “would reduce the overall rate of depression by more than half, alcoholism by two-thirds, and suicide, IV drug use, and domestic violence by three-quarters” as well as affecting dramatically workplace performance and the need for incarceration (p. 150). I was also skeptical of the estimates cited from the Centers for Disease Control & Prevention (CDC) that one in five Americans have been sexually molested as a child; one in four beaten by a parent so severely has to leave marks on the body; one in three couples engaging in physical violence; a quarter of us growing up with alcoholic relatives; one out of eight having witnessed their mother being beaten or hit (p. 1).

The discussion about epigenetics (p. 154) lacks detail about how methylation patterns are or can be passed on to offspring; but that can be blamed on the state of lack of knowledge more than on the book’s mention of it.

## POLITICAL

Kolk regards trauma as arguably the greatest threat to our national well-being. Violence against women is twice as prevalent as breast cancer. One’s health and safety are predicted better by the ZIP code where one resides than by heredity. Eliminating its causes calls for measures that seem politically impossible, however, for example, universal health care.

## RECOMMENDATION

Everyone can surely benefit in some way from this book. Lightly scanning or skimming over some of the lengthy individual case-studies or some of the technical details of anatomy and brain-scans will still allow the chief messages to be absorbed: the inescapable interactions of mind, brain, and body; and the Pavlovian influence of environmental factors immediately after birth, in particular, parenting; influences that determine reflexive reactions and emotions throughout later life (pp. 114-5).

This book is also relevant to the frequent discourse about the desirability of holistic thinking and practices. The emphasis on necessary harmony among mind, brain, and body is fairly central to the differences between “East” and “West”: some strong Western cultural influences even picture the body as somehow *inimical* to the “self”, as in religions that make a virtue of celibacy and regard the intangible “soul” as more important than the physical body.

## LONELY PIONEERS: “IN” BUT NOT “OF” THE MAINSTREAM

A Google search as I prepared to write this review startled me with the information that Kolk had been fired in 2018 from the Center that he himself had founded decades earlier and had later brought under the aegis of the Justice Resource Institute (JRI)<sup>7</sup>.

“Van der Kolk’s firing, according to JRI president Andy Pond, was based on allegations by staffers that the psychiatrist had ‘created a hostile work environment’ and behaved in a way that ‘could be characterized as bullying.’ Pond . . . was unable to share specifics of the allegations because the accusers had asked that the details be kept private”<sup>8</sup>. “His behavior could be characterized as . . . making employees feel denigrated and uncomfortable”<sup>9</sup>.

Readers interested in following up on this should also read Kolk’s side of the story and the many supporting letters<sup>10</sup> that directly contradict Pond’s allegations.

For my part, I am reminded sadly of much that political correctness and similar ideologies have wrought on contemporary society: Publicly made allegations are so non-specific that they cannot be disproved. There is no

opportunity to identify or question the actual accusers, and derogatory speculation inevitably suggests that the asserted transgressions must have been even worse. This goes against the most elementary understanding of what constitutes fairness, impartiality, “blind justice”, “innocent until proven guilty”. We have kangaroo courts and Star Chambers, not courts of law.

There is no objective definition of what constitutes a “hostile work environment,” or “bullying” or “denigration”. All those are subjectively made judgments, which means that outsiders cannot reach informed opinions without knowing who made those initial judgments and what specific actions were involved. I note that JRI’s CEO and COO have no careers outside management, which predisposes me to place more weight on what is said by the world-renowned founder of the Trauma Center and his supporters<sup>10</sup>.

I sense a similarity with the ouster of Peter Gøtzsche (Gøtzsche, 2019) from the Nordic Cochrane Center that he had founded, having also co-founded the international Cochrane Collaboration (European Ombudsman, 2013): Gøtzsche was fired by a journalist who had become Director of the Center and was concerned that fund-raising, especially from pharmaceutical companies, might be negatively influenced by Gøtzsche’s demonstration of harmful side-effects of HPV vaccines (Jørgensen et al., 2020; Gøtzsche & Jørgensen, 2022).

I find it quite plausible that junior staff, as well as senior management, can feel somewhat jealous of leaders who are widely acknowledged high achievers and also feel intimidated because they are less knowledgeable, less competent, less experienced, and may have relatively fragile self-esteem, possibly even an inferiority complex<sup>11</sup>.

The contemporary cultural climate instructs all sorts of under-dog groups to interpret feelings of inferiority, of being denigrated or bullied, as being caused by other people rather than by their own inadequacies. Nevertheless, such interpretations remain inescapably subjective. As the late Maxie Maultsby (Pennsylvania Psychiatric Institute, n.d.; Wirga et al., 2019) and other exponents of cognitive-behavioral approaches have long pointed out, no one can make another person feel any particular emotion: we all ourselves choose what emotion to feel, albeit sometimes by reflex and subconsciously, on the basis of our own prejudices, biases, expectations, presumptions. One task of psychotherapy is to change reflexive emotions from dysfunctional to properly consonant with external events.

Van der Kolk exemplifies the ilk of pioneers who are so much ahead of their time that their profession doesn’t know how to deal with them. Their work fits Gunther Stent’s (1972) concept of “premature discovery”: recognized as possibly important but not really accepted be-

cause the profession as a whole doesn’t know what to do about it, and isn’t ready to exploit it. Kolk showed that successful treatment of PTSD required more than medication at a time when drug treatment had become the universal standard in psychiatry, heavily reinforced by medical insurance companies and drug manufacturers. Kolk was rocking the boat, not bowing to Groupthink, and too many of his professional colleagues were not prepared to stick out their own necks for what they privately knew to be right. The profession’s ambivalence about Kolk was shown when his firing from his own Center did not lead to a full-fledged public, national protest.

Other pioneers of this ilk, too much ahead of their time for the mainstream’s comfort, include (as well as Gøtzsche) Peter Duesberg, whose work on cancer causation is so undeniably important that *Scientific American* could not ignore it, albeit apologizing<sup>12</sup> that their publication about it should not be construed as endorsement of his views on HIV/AIDS! Duesberg’s own colleagues at Berkeley did not try to help resolve the substantive, scientific questions. Instead, Duesberg was treated as a renegade: his own Department persuaded graduate students not to work with him, his only committee assignments were the least sought-after, his laboratory was moved into a building without air-conditioning, and he was persistently refused merit-pay increases (Farber, 2006).

Mainstream scientists have become excluded for their minority views also about Big-Bang cosmology, climate change, IQ, and other heresies<sup>13</sup>. Further examples include Linus Pauling (benefits of vitamin C), Martin Fleischmann and John Bockris (“cold fusion”), Hannes Alfvén (space plasma), Jacques Benveniste (water memory), Harold Hillman (fired for pointing to artifacts in electron microscopy), Paul McLean (triune brain), Charles Townes (1999): masers and lasers could have been built years earlier than they were, had his ideas not been dismissed.

In 1980, shortly after the American Psychiatric Association had created the new diagnostic category of PTSD, Kolk’s proposal to the Veterans Administration for a grant to study the biology of traumatic memories had been declined because “It has never been shown that PTSD is relevant to the mission of the Veterans Administration” (p. 19). This exemplifies how mainstream peer review and institutional bureaucracies hinder progress. Pioneers rock the boat and do not participate in the Groupthink of the mainstream.

It is not often emphasized enough that “mainstream” also means the *lowest common denominator*, which all too often means mediocrity (Klein, 1985), in these days when “researchers” are as dime-a-dozen as teachers, engineers, and other “white-collar” professionals.

Bureaucracies are inevitably self-serving, and they can

also be vindictive. Kolk mentions without detail the firing of Frank Putnam from NIH (p. 253); Putnam suspects<sup>14</sup> that it came because he exposed the pedophilic activities of Carleton Gajdusek, who was then a laboratory head at NIH as well as Nobel-Prize winner.

## END NOTES

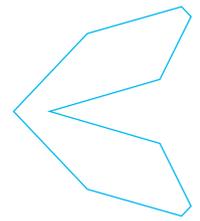
1. The book states (p. 317) that there are 10,000 practitioners of neurofeedback in the USA, but that widespread acceptance is hindered by lack of research funding.
2. Those of us who have spent significant time as patients in hospitals may have observed, similarly, that experienced nurses often have specifically relevant, empirical understanding not shared by the attending doctors.
3. The main criticisms are usefully summarized by the Psychological Care & Healing Center: <https://www.pchtreatment.com/dsm-5-issues>
4. See the two dozen books cited under "Psychiatry" in the bibliography, *What's Wrong with Modern Medicine*; <https://mega.nz/file/gWoCWtGK#1gwxo995AyYAcMTuwpvP40aaB3DuA5cvYjK11k3KKSU>
5. An iconic illustration: If Anita Hill had felt harassed by Clarence Thomas, why had she followed him to his next position?
6. Peter Gay, in *My German Question* (Yale University Press, 1998), describes the notion as "obscene"; but what other psychological recourses are available to children?
7. <https://jri.org>
8. <https://www.yahoo.com/news/famed-trauma-therapist-responds-allegations-bullying-outrageous-story-213600039.html>
9. <https://www.bostonglobe.com/metro/2018/03/07/allegations-employee-mistreatment-roil-re-nowned-trauma-center/sWW13agQDY9B9A1rt9eqnK/story.html>
10. <https://web.archive.org/web/20200408182345/https://www.besselvanderkolk.com/about/behind-the-globe>
11. I am indebted to my late friend, distinguished chemist Sever Sternhell, for this useful phrase. Inferiority *complex* describes unwarranted feelings of inferiority; the **simplex** describes fully realistic feelings of actual inferiority
12. Editor's note at p. 54 in Peter Duesberg, "Chromosomal chaos and cancer", *Scientific American*, May 2007, 53-9
13. "Exclusion of Dissident Scientists", pp. 32-8 in Henry H. Bauer, *Dogmatism in Science and Medicine: How Dominant Theories Monopolize Research and Stifle the Search for Truth*, McFarland, 2012
14. An interview with Frank Putnam, Part I, *ISSTD News*, 23

May 2019; <https://news.isst-d.org/an-interview-with-frank-putnam-part-i/>

## REFERENCES

- Ashworth, M., Schofield, P., & Jayati Das-Munshi, J. (2017). Physical health in severe mental illness. *British Journal of General Practice*, 67, 436-437. <https://doi.org/10.3399/bjgp17X692621>
- European Ombudsman (2013). Biography — Peter C Gøtzsche, The Nordic Cochrane Centre; <https://www.ombudsman.europa.eu/en/event-document/en/49713>
- Farber, C. (2006). *Serious Adverse Events*. Melville House.
- Frances, A. (2013). *Saving normal: An insider's revolt against out-of-control psychiatric diagnosis, DSM-5, big pharma, and the medicalization of ordinary life*. William Morrow.
- Gøtzsche, P. C. (2019, 2 June). Death of a whistleblower and Cochrane's moral collapse. [https://s3.amazonaws.com/crossfitpubliccontent/Gotzsche\\_DDC\\_Lecture.pdf](https://s3.amazonaws.com/crossfitpubliccontent/Gotzsche_DDC_Lecture.pdf)
- Greenberg, G. (2013). *The book of woe: The DSM and the un-making of psychiatry*. Blue Rider Press (Penguin).
- Jones, R. (2017). Mens Sana. *British Journal of General Practice*, 67, 435. <https://doi.org/10.3399/bjgp17X692609>
- Klein, J. (1985). Hegemony of mediocrity in contemporary sciences, particularly in immunology. *Lymphology*, 18, 122-131.
- Pennsylvania Psychiatric Institute (n.d.). A Black pioneer for mental health therapy. <https://ppimhs.org/news-post/a-black-pioneer-for-mental-health-therapy>.
- Stent, G. (1972). Prematurity and uniqueness in scientific discovery. *Scientific American*, December, pp. 84-93. <https://doi.org/10.1038/scientificamerican1272-84>
- Townes, C. (1999). *How the laser happened: Adventures of a scientist*. Oxford University Press. <https://doi.org/10.1093/oso/9780195122688.001.0001>
- Wirga, M., DeBernardi, M., & Wirga, A. (2019). Our memories of Maxie C. Maultsby Jr. 1932-2016. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 37, 316-324. <https://doi.org/10.1007/s10942-018-0309-3>



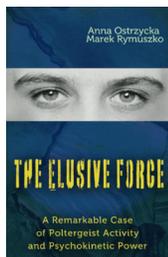


**BOOK AND  
MULTIMEDIA  
REVIEW**

# The Elusive Force: A Remarkable Case of Poltergeist Activity and Psychokinetic Power

**Rosemarie Pilkington**

Seancescience.com



ISBN 13: 978-1949501261

<https://doi.org/10.31275/20233273>

PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

This case is one of the most important I have seen in a long time. It is one of the best-documented and well-investigated examples of Recurrent Spontaneous Psychokinesis (RSPK), also known popularly as “poltergeist” activity that has emerged to date. It adds to and reinforces what we already know, and I hope it will inspire more interest in the study of large-scale physical phenomena.

The book was originally published in Poland in 1989, so it comes about 34 years late to those of us who don’t read Polish, but thanks to Joel Stern’s efforts, we English speakers are finally able to explore and perhaps come closer to understanding the enigma of psi phenomena.

At the center of the activity was a thirteen-year-old Polish girl named Joasia (pronounced Yo-ASH-ia) Gajewski, around whom, following the death of her grandmother in 1982, all manner of disturbances took place.

Like her famous countryman, Franek Kluski, some of these effects were electrical in nature. “Crackling” sounds were often heard around her, and she would become electrically charged—think of shuffling your feet on a fuzzy carpet in dry weather. But although anyone shaking her hand would get a “jolt,” she could not be grounded by touching someone or something.

In an early outbreak, while Joasia was sleeping, plates and glasses hurtled through the air at tremendous speeds, smashing into walls and furniture. When her parents turned the lights on, shards of glass, as if pulled by some strange force, flew at her, some cutting her. Her blanket, charged with electricity, gave off sparks.

As has happened with many other psychokinetic subjects, electrical systems and devices broke down around her, watch batteries and tape recorders malfunctioned, and film taken of her remained unexposed.

Her parents called in help because of the havoc wreaked in their apartment. Cabinets full of glassware and crockery would fly at tremendous speeds, so fast they often could not be seen, crashing against furniture, walls, and people, their shards flying dangerously. Joasia herself, as noted, was often attacked and cut by glass or hit by other flying objects. (Other central figures in RSPK cases, including the Ohio teen Tina Resch, and a young Gilbert Roller, were also “attacked” in this way.) Like Tina, Joasia caused eggs to fly out of the refrigerator through its closed door (Roll & Storey, 2004; Pilkington, 2006).

This remarkable feat of objects passing through solid walls occurred more spectacularly when Dr. Gadula, her physician and the director of a student sanatorium, invited Joasia to spend her vacation there, where she could be cared for and studied.

Before going there, Joasia had had a disappointing appearance on a television show, a humiliating fiasco. She still had not recovered from her embarrassment when she learned of a “rival,” an 11-year old metal-bender who now had the public’s attention. She also heard that people were saying that even if she had possessed some powers, they were now obviously gone. Finally, a government official derided her on the radio as



one who “imagines something is flying around her.”(p.67) She’s described as acting “peevish” as a result. She must have been seething.

Shortly afterward, the sanatorium’s head nurse and the ward attendant were standing in the hall outside the closed double doors of room 309, Joasia’s room. The attendant had been cleaning the lavatory across the hall from 309, and the nurse asked her to wash the mirror there when suddenly they heard a crash and the sound of breaking glass from Joasia’s room. The nurse ran inside and saw glass fragments whirling in the air, then pulled, as though by a magnet, toward her. Her apron was showered with glass. Joasia was seated in a chair.

Although the floor was strewn with glass, the nurse was puzzled to see that the mirror over the sink was intact. At the same time, the attendant in the lavatory saw that the mirror she was to wash had disappeared. It had vanished and ended up almost instantly, shattered on the floor of Joasia’s room, whose door had been closed at the time. Furthermore, the thick fiberboard sheet on which the mirror was mounted, which had been fastened with hooks to the lavatory wall, lay on the floor in 309 among shards of glass.

Two days later, the sound of an explosion came from Joasia’s room. Doctors, nurses, and students rushed there and found the sink on the floor, smashed to pieces, one of its metal supports ripped off the wall, the other buckled, the drainage pipe severed, the thick metal faucet broken and strangely twisted as though hit by a sledgehammer.

I guess she showed them!

Joasia’s case is so rich because not only did she unleash such extremely powerful forces, but also such a variety of phenomena, too numerous to mention here, from spontaneous water appearing on walls to unexplained fires and shattering light bulbs whose filaments glowed long afterwards, to flying objects making right turns in mid-air.

Just about all the men and women we know of who produced physical phenomena reported experiencing such symptoms as fatigue, headaches, and disorientation. Some became severely debilitated with temporary blindness or coughing up blood. Joasia, too, especially after a major outbreak, suffered headaches and a sapping of her energy. Her nurse reported that Joasia felt ill for several hours after every incident, appeared to be drowsy and listless, and had a poor appetite.

What makes Joasia’s case even more important is that Dr. Gadula did what, unfortunately, few researchers have done in other countries: He brought in other physicians, scientists, and researchers for a multi-disciplined study of the teenager. How refreshing it is to know of this very intelligent, enlightened approach by these Polish professionals! They not only verified the reality of the phenomena but also identified physical anomalies as well as psychological factors that might contribute to producing them. For instance, they found Joasia had low levels

of dopamine, which is sometimes found in epileptic seizures. In addition, the examination of her retinal afterimages showed interesting anomalies, some of which are associated with a malfunctioning thyroid gland, although Joasia’s thyroid was normal.

Joasia could consciously control her PK ability to an extent, bending metal, for instance. And like most other psychokinetically gifted people, she demonstrated other psi gifts: she excelled at telepathic tests, and there is a hint about her precognitive abilities when she stated that she usually forgot her dreams upon waking, but “If I do remember one, it means something is about to happen.” (p.109)

The authors report that as Joasia neared the end of her adolescence, the phenomena tapered off. She married and had two children. Regrettably, they have lost contact with her, and her whereabouts are unknown. This is unfortunate: At the time of this writing, Joasia would be 53. It would be beneficial to follow up to find whether some of this force remained and, if so, if she was able to channel it in some way, as e.g., Matthew Manning (see <https://psi-encyclopedia.spr.ac.uk/articles/matthew-manning>) has used it to become a healer. In fact, in an interview with her in October 1989, Joasia expressed a desire to become a healing professional saying, “Contact with sick people suits me. I want to help them.” (p.109)

Joasia’s desire for anonymity is understandable: This was an extremely traumatic period in her life in which she felt like a freak. She wanted to live a normal life. It is a great loss to our knowledge, but who can blame her?

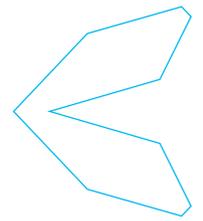
The authors also added an extensive appendix featuring their interviews with a variety of scientists involved in this case, discussing various hypotheses that might help us to understand psychokinetic forces and the people who can unleash them. A second, shorter appendix contains the report of an experiment by a nuclear physicist. It is followed by a list of Suggested Readings and an Index.

Kudos to Anna Ostrzycka and Marek Rymuszko for bringing the details of this remarkable and important case to the Polish-speaking public and to Joel Stern for his excellent translation, which is an important addition to the English language literature. Whether you are new to RSPK phenomena or an experienced researcher, you will find much to ponder in these pages.

## REFERENCES

- Pilkington, R. (2006). *The spirit of Dr. Bindelof: The enigma of séance phenomena*. Anomalist Books.
- Roll, W. & Storey, V. (2004). *Unleashed: of poltergeists and murder: The curious story of Tina Resch*. Paraview Pocket Books.





**SPECIAL  
SUBSECTION  
PREFACE**

## Editor-In-Chief's Preface to the Target Article Section

**James Houran**  
editor@scientificexploration.org  
orcid.org/0000-0003-1725-582X

This Special Issue features a set of invited Commentaries on a provocative Target Article that raises tantalizing questions pertinent to frontier science. Note that it was peer-reviewed only with the focus of improving its theoretical and methodological clarity. Some scholarly journals are devoted entirely to the basic format of academic exchanges (e.g., *Psychological Inquiry*), whereas the *JSE* only occasionally publishes such content. To clarify, academic Commentaries can either support or challenge the underlying rationale or premise of the article in question. The fundamental goal of all reaction essays, however, is to address important or novel conceptual issues, methodological features, results, or conclusions. The *Journal* especially values and encourages Commentaries that transcend mere critiques by offering solution-oriented perspectives on new methods, hypotheses, or research designs per the editorial team's call for constructive bridge-building or "exchange and cooperation" efforts (Houran, 2022; Houran & Schofield, 2023).

The Target article by Nancy Smoot Tramont summarizes her late husband's (Charles Tramont) work with hypnotherapy (e.g., Tramont, 2008), which was used to deal with clinical cases he thought involved discarnate agency that was possibly "demonic or diabolical" in nature. Aside from controversies about the nature or efficacy of medical hypnosis (Cowen, 2016; Häuser et al., 2016; Williamson, 2019), her paper offers a timely case study of the "darker side" of spirituality explored in this issue. Managing Editor Brian Laythe assisted in the selection of authors who provided a set of cross-disciplinary Commentaries. Our deepest appreciation to these analysts who received no compensation for their evaluations: (a) *Peter Brugger*—neurology (e.g., Brugger & Mohr, 2008), (b) *Madeleine Castro*—interdisciplinary social science (Castro et al., 2014), (c) *Jack Hunter*—cultural anthropology (e.g., Hunter, 2017), (d) *Robert Klauber*—physics (e.g., Klauber, 2000). and (d) *Everton Maraldi*—transpersonal psychology and religious studies (e.g., Maraldi, 2014). In addition to a formal Reply by Tramont, Brian Laythe caps these Commentaries with a closing essay that juxtaposes the insights or arguments from these authors against his own expertise in social science and esotericism, or the Western mystery tradition.

In summarizing selected anomalous-altered experiences from Dr. Tramont via a qualitative approach (Creswell & Cresswell, 2022; Merriam, 2009), the Target article presents narratives and their sense-making that can serve as autoethnographic material for an independent review and analysis. *Autoethnography* uses first-person accounts to explore the nuances and complexities of a particular cultural, social, or personal phenomenon that traditional research methods may not be able to access (Ellis et al., 2011; Méndez, 2013; Reed-Danahay, 1997). The value of such information lies in its ability to provide a unique, subjective perspective on the studied topic (Marshall & Rossman, 1999). But note that Tramont's essay is muddled by at least a "double narrative" process (Kyratzis & Green, 1997). That is, it is an amalgam of content stemming from the individuals who orig-

<https://doi.org/10.31275/20233239>

PLATINUM OPEN ACCESS



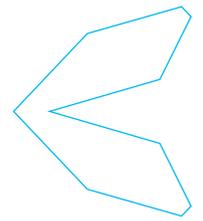
Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.



inally provided the accounts, as well as the author herself, who represents the voice of the “researcher” narrating or re-interpreting those experiences. The *Journal* does not endorse a particular conclusion about the Target Article, but hopefully, readers will appreciate how its claims can spark valuable deliberations about the relationship of narrative reality to physical reality (e.g., Cunningham, 2022).

## REFERENCES

- Brugger, P., & Mohr, C. (2008). The paranormal mind: How the study of anomalous experiences and beliefs may inform cognitive neuroscience. *Cortex*, *44*, 1291–1298. <https://doi.org/10.1016/j.cortex.2008.05.008>
- Castro, M., Burrows, R., & Wooffitt, R. (2014). The paranormal is (still) normal: The sociological implications of a survey of paranormal experiences in Great Britain. *Sociological Research Online*, *19*, 30–44. <https://doi.org/10.5153/sro.3355>
- Cowen, L. W. (2016). Literature review into the effectiveness of hypnotherapy. *Australian Counselling Research Journal*, *10*, 1–55.
- Creswell, J. W., & Creswell, J. D. (2022). *Research design: Qualitative, quantitative and mixed-methods approaches* (6<sup>th</sup> ed.). Sage.
- Cunningham, P. F. (2022). Mythic identities, scientific realities, and search for transpersonal meaning. *Journal of Scientific Exploration*, *36*, 527–539. <https://doi.org/10.31275/20222739>
- Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview. *Forum: Qualitative Social Research*, *12*, Article 10. <https://doi.org/10.17169/fqs-12.1.1589>
- Häuser, W., Hagl, M., Schmierer, A., & Hansen, E. (2016). The efficacy, safety and applications of medical hypnosis. *Deutsches Arzteblatt international*, *113*, 289–296. <https://doi.org/10.3238/arztebl.2016.0289>
- Houran, J. (2022). An introduction and mission of building bridges to reach the unknown. *Journal of Scientific Exploration*, *36*, 3–7. <https://doi.org/10.31275/20222439>
- Houran, J., & Schofield, M. B. (2023). Championing “exchange and cooperation” efforts in frontier science: Epilogue to the special issue. *Journal of Scientific Exploration*, *37*, 776–785.
- Hunter, J. (2017). *Engaging the anomalous: Collected essays on anthropology, the paranormal, mediumship and extraordinary experience*. August Night Press.
- Klauber, R. D., (2000). Modern physics and subtle realms: Not mutually exclusive. *Journal of Scientific Exploration*, *14*, 275–279.
- Kyrtziz, A., & Green, J. (1997). Jointly constructed narratives in classrooms: Co-construction of friendship and community through language. *Teaching and Teacher Education*, *13*, 17–37. [https://doi.org/10.1016/S0742-051X\(96\)00049-2](https://doi.org/10.1016/S0742-051X(96)00049-2)
- Maraldi, E. d. O. (2014). Medium or author? A preliminary model relating dissociation, paranormal belief systems and self-esteem. *Journal of the Society for Psychological Research*, *78*, 1–24.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research*. Sage.
- Méndez, M. (2013). Autoethnography as a research method: Advantages, limitations and criticisms. *Columbian Applied Linguistics Journal*, *15*, 279–287. <https://doi.org/10.14483/udistrital.jour.calj.2013.2.a09>
- Merriam, B. S. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Reed-Danahay, D. E. (Ed.) (1997). *Auto/ethnography: Rewriting the self and the social*. Oxford.
- Tramont, C. V. (2008). *From birth to rebirth: Gnostic healing for the 21st century*. Granite Publishing.
- Williamson A. (2019). What is hypnosis and how might it work? *Palliative Care*, *12*, Article 1178224219826581. <https://doi.org/10.1177/1178224219826581>



**TARGET ARTICLE  
SPECIAL  
SUBSECTION**

# From ‘Baby Doctor’ to ‘Witch Doctor’: A Retrospective of Charles Tramont’s Work with Spirit Releasement Therapy

Nancy Smoot Tramont  
nsmoot2003@yahoo.com

## HIGHLIGHTS

A biographic account outlines how one physician came to believe in the existence of dark-demonic forces due to clinical experiences with patients who sought spirit releasement therapy.

## ABSTRACT

The work of Charles Tramont, M.D. showed that Comprehensive Hypnoregression Therapy can be a powerful healing tool when a hypnotized patient’s subconscious reveals to the conscious mind the cause of suffering. Often perceived to be from past-life events or attached discarnate entities of which the subject was previously unaware, Tramont’s patients reported significant improvement after experiencing techniques related to apparent past-life regression and ‘entity removal.’ Eight such cases are summarized here, and these might suggest that various types of ‘dark forces’ do indeed exist and can disrupt people’s overall development and well-being.

<https://doi.org/10.31275/20232825>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## KEYWORDS

Discarnate agency, entity encounters, healing, hypnoregression, spirit release.

## INTRODUCTION

Fascination with dark entities, demons, and spirits is as old as time. The influence of such forces has been widely discussed in religion, legend, culture, and fables. However, firsthand, discernable indications of such phenomena, as well as methods of dispelling such forces, have been minimal at best. In 2001, Society for Scientific Exploration (SSE) member Charles Tramont, M.D. (1937-2021), a retired OB/GYN, embarked on a journey that would lead him to an abundant collection of such material. In 2014, the present author began working with him in his hypnotherapy practice, which included detecting and removing what were believed to be discarnate dark entities attached to humans.

Using past-life regression and spirit release techniques, board-certified hypnotherapist Tramont guided

his patients in identifying and removing what they perceived to be ‘dark entity attachments,’ taking detailed notes during each session. When requested by patients unable to achieve visualization in the hypnotized state or to attend in person, experienced subjects with strong ‘Spirit Guides’ assisted in that process. This essay, therefore, offers a unique look at these dramatic and often disturbing experiences that unfolded within these structured settings. It will discuss the predominant types of discarnate entities; summarize protocols used to identify and remove them; share session outcomes with feedback from eight representative patients; and provide a general idea of how a conventional medical practitioner transitioned from delivering babies to delivering dark entities from suffering people.

The author is not a scientist or researcher. Moreover, this paper aims neither to convert anyone’s beliefs nor to

prove the reality of discarnate entities. Instead, readers are invited to consider the material documented here with an open mind, focus on the positive patient results, and allow the clinical testimony to speak for itself. Patients whose cases are discussed in detail have granted their permission by text or email to anonymously share details of Tramont's work with them. Readers should note that despite Tramont's medical and hypnotherapy education, he was not trained as a clinical psychologist or psychiatrist. As such, his methods of addressing reported physical and emotional suffering eschews traditional biomedical or psychological practices in favor of a hypnotherapeutic approach in which spiritual forces are utilized for wellness.

### **Background: Charles Tramont, M.D., and Board Certified Hypnotherapist**

A concise biography of Dr. Tramont should help to contextualize the patients' reports presented later. After graduation in 1958 from John Carroll University, Tramont earned his M.D. degree from New York Medical College in New York City in 1962. He then began his medical practice in obstetrics and gynecology, performing surgeries and delivering thousands of babies through the University Hospitals' Health System in Chardon, Ohio. His primary focus was always on healing and promoting good health, whether by conventional means or, later in his life, utilizing alternative, natural healing methods. Tramont continued serving others during his time spent with the Air Force. He graduated from the School of Aerospace Medicine in 1984 and the Air War College Associated Studies Program in 1988. Serving as a Flight Surgeon, he was assigned to Active Duty in 1966 during the Vietnam War and again in 1991 during Desert Storm after attaining the rank of Colonel. In the 1990s, Tramont completed training in medical hypnosis to assuage women's discomfort during labor and delivery. Tramont was not only a man of great compassion but a man of many passions as well. In addition to his enthusiasm evidenced in several vocations, over the years, he also enjoyed tennis, horseback riding and wrangling, martial arts, men's fashion, boating, snorkeling, dancing, music, and metaphysics. To the delight of nearly all those who knew him well was his obsession with knights and chivalry, manifested in his home decor, wardrobe, library, and topics of conversation.

In 2000, Tramont retired from his OB/GYN practice, moved to Las Vegas, Nevada, and became certified in past-life regression by the American Board of Hypnotherapy. Raised Catholic, Tramont was devout throughout his life but questioned some of the orthodox Catholic tenets and came to fully accept reincarnation as part of the soul's life

cycle after reading Brian Weiss' (1988) book, *Many Lives, Many Masters*. Desiring to research the therapeutic value of past-life regression (PLR), Tramont needed subjects to conduct a study, so in November of 2000, when he lectured on this topic to the Consciousness Studies program at the University of Nevada in Las Vegas, he offered free hypnotic regressions to any students who were interested. The present author was one of many who signed up.

News of his work spread through word of mouth, followed by several internet and radio interviews, which generated an increase in clientele. An unexpected interaction with what he felt was a discarnate spirit during a session in 2003 prompted additional research on his part, ultimately expanding his practice to include 'spirit releasement.' This view contends that discarnate entities sometimes connect with persons living on the material plane and become 'attached' to them (Baldwin, 1992). Years after my own hypnosis sessions had ended, Tramont called to discuss the book he had written based on his PLR study. My interest in hypnosis and PLR had not diminished, so I agreed, and we got to know each other well during the process of typing and editing the final manuscript. We married in 2007.

The PLR findings were published in his first book, *From Birth to Rebirth: Gnostic Healing for the 21st Century* (Tramont, 2009), followed by *What's Missing in Medicine: Unleashing the Healing Power of the Subconscious Mind* (Tramont, 2016). In 2009 he lectured at the annual convention for the American Board of Hypnotherapy, presenting his findings regarding PLR and apparent entity attachment after receiving positive feedback from clients who felt relief after 'entity removal.' Tramont was invited to discuss his unusual practice in two 2009 interviews with George Noory on the *Coast-to-Coast* radio program, which further broadened his exposure to the public, and interest in Tramont's services skyrocketed. On February 24, 2010, he spoke at the International UFO Congress convention in Laughlin, Nevada. Tramont was contacted by people from every state in America, and his 20-year hypnotherapy practice ultimately comprised patients from at least 24 countries on five continents, many of whom were specifically seeking spirit releasement. When making their appointments, most clients already knew what to expect, and it was why many chose him rather than seeking hypnosis treatment locally.

Prior to their sessions, Tramont acknowledged that he was not a psychiatrist or a psychologist and would not be diagnosing or treating any mental illness or disease. Patients were asked to sign an Informed Consent Agreement for Hypnosis that stated the treatment was designed to "allow the knowledge of the past to enlighten and illuminate the consenting party as a form of learning

about one's own body, mind, and spirit... providing such enlightenment to the below-named party in the spirit of philosophy and skills of past-life therapy." Addendum-A provides the Consent document, a Patient Questionnaire, and the Hypnotherapist Disclaimer that Tramont used.

### A Note on Hypnosis in the Present Context

Hypnosis is a dual-consciousness experience; it is like watching oneself in a movie and being the lead actor in it at the same time. The lives and insights perceived in a PLR are of one's own actions that elicit emotions felt just as strongly as if one were experiencing them presently in real life. They are all stored in the same mental vault and can dramatically expand the subject's worldview. Content of ostensible prior lives, as well as the presence and identification of foreign energy, always comes from the subject or a surrogate but never from the hypnotherapist.

The secret to successfully being hypnotized is to allow one's conscious mind to temporarily suspend thought, focusing instead on the induction instructions. The term 'going under,' when used to describe being hypnotized, is a misnomer. One is not under a spell or rendered unable to end the session, get up, and leave the room if so desired. When hypnotized, about 10% of the conscious mind is 'on the back burner,' or 'keeping warm and ready to serve,' so to speak, observing and retaining much of what comes forth.

My many PLR sessions with Tramont never involved a need to validate what came to my subconscious mind. What was experienced in those sessions was often more significant to me than what was gleaned from everyday reality, powerfully enriching my life, independent of verification; it was *my* truth, not his or anyone else's. Past lives need not be human lives. In 2001 the author saw one of my past lives as a discarnate entity, a tree fairy, an essence of nature that absorbed humans' suffering.

In conventional hypnotherapy, the practitioner utilizes suggestions, often reading scripts to the patient's subconscious mind to address issues such as addictions, fears, and phobias. Treatment is enhanced with PLR, guided by the therapist so that the patient himself might discover that the cause of addictions, attitudes, illness, and other issues is from a prior life influence. Delving even further into the subconscious mind, Tramont's research corroborated the findings of other practitioners whose patients uncovered the presence and prevalence of foreign energy attachments. Tramont's clients contacted by this author reported that they felt that entity removal had been the primary source of their improvement.

### Protocols for Putative 'Spirit Release'

In 2003, Tramont first encountered what he interpreted to be a discarnate entity that was controlling his patient, 'Jason,' when suddenly a third party addressed Tramont through the patient, saying, "And Jason won't do what I want him to do!" Stunned, this took Tramont by surprise; entity possession and removal had not been mentioned in his hypnotherapy training. A call to the American Board of Hypnotherapy in 2023 confirmed that entity attachment and removal is still not in their curriculum. Tramont found guidance on how to handle this phenomenon in the comprehensive book *Spirit Releasement Therapy* by clinical psychologist William J. Baldwin, D.D.S., Ph. D., which taught that entities might attach to vulnerable people in their aura or chakras (1992, p. 15). Trained by author and clinical psychologist Edith Fiore, Ph. D., Baldwin's 1982 doctoral thesis was titled "Diagnosis and Treatment of the Spirit Possession Syndrome." Tramont used Baldwin's book, whose Foreword was written by Fiore, as a guide in forming his own protocols.

The spirit attachment phenomenon is far more common than is generally understood. Baldwin reported that "between 70% and 100% of the population is influenced by one or more discarnate spirits at some time in their life" (1992, p. 14). Of the patients who sought Tramont's treatment methods, approximately 85 percent were noted to have entities. Fiore was interviewed by psychologist and SSE member Jeffrey Mishlove, Ph.D., in his online *Thinking Allowed* program in a podcast titled "The Unquiet Dead," where she stated her belief that 100% of people have spirit attachments at some point in their lifetimes.<sup>1</sup> Belief in spiritual entities will vary from person to person. The names of all discarnate entities discussed herein were identified by Baldwin (1992) in his book and utilized by Tramont in his practice. While Baldwin dialogued with his patients' Higher Self to accomplish the process of identification and removal of foreign energy, Tramont preferred to work with his patients' Spirit Guides, who were not part of Baldwin's practice. If the patient proved unable to access his or her own Spirit Guide, Tramont often successfully summoned a prior patient's Spirit Guide, aptly named Abel, who had volunteered his services for that very purpose.

Sessions began with an interview in which the patient informed Tramont of the overall concerns to be addressed, such as troubling relationships, undesirable habits, emotional or medical issues, etc. Sometimes people simply wanted to experience a past-life regression or had personal spiritual issues to explore. After signing the consent forms, they proceeded with the hypnotic induction. When the patient was hypnotized, Tramont invoked spiritual protection from the Warrior Angels of Light for all persons present in the room, followed by inquiring of

the Spirit Guide whether there was any foreign energy present in the patient. If the response was affirmative, he proceeded first to rule out the presence of any dark force entities, also known as 'dark forces,' as they can affect everything else in the session.

Baldwin (1992) writes that whether the demonic "is imagination, archetype, collective hallucinations, mass hypnosis, a projection of the therapist or something else again, Dark Forces seem to exist in some form in this reality. Beings of Darkness seem to be present and actively involved... as the eternal opponent of all that is good in the world" (p. 276). Spirit Release hypnotherapist Terry Palmer, Ph.D., in his scholarly book, *The Science of Spirit Possession* (2014), distinguished between Spirit Release Therapy (SRT) and exorcisms, saying that the latter involved religion, but SRT does not (p. 13). By the same token, one might say that the word 'demon' is more common in a religious context, while 'dark force' feels more comfortable in a broader spiritual or ideological context.

If a dark force was identified by a Spirit Guide, Tramont followed Baldwin's (1992) protocol of calling on the Rescue Spirits of Light to encapsulate the dark one(s) in a net of Light. Once success was confirmed by the patient's Spirit Guide, Michael the Archangel and the Legions of Heaven were summoned by Tramont to detach the encapsulated entity or entities and take them to their destination. After the Spirit Guide verified their removal, Tramont thanked the archangel and the other celestial beings for their assistance.

The second type of attachment, named by Baldwin (1992), was the earthbound spirit, aka 'earthbound,' the soul of a deceased person who had chosen to attach to the patient for either malevolent or benevolent purposes instead of going to the Light. If such an entity was discovered, Tramont interrogated it through the Guide to determine its purpose in attaching. Tramont would reason with it to persuade it to move on to the Light so it might continue its own spiritual journey and relieve the patient of its influence. Before going any further, Tramont would confirm that the earthbound had indeed been removed.

A third type of foreign energy Baldwin (1992) identified was the mind fragment, aka 'soul fragment' or simply a 'fragment,' which is said to be created when a part of a living person's mind or soul splits away from its original soul under traumatic circumstances and attaches to someone else with beneficial or detrimental intentions. Fragmentation always affects two people, not only draining energy from the host but also leaving the original owner's soul incomplete. Again, Tramont would interview the fragment to determine its purpose in attaching, convince it to rejoin its original soul, and then confirm its dismissal with the Guide.

The last prevalent attachment type Baldwin (1992) recognized were various races of extraterrestrials (ETs), whose physical appearance he described as humanoid, dolphin, lizard, and other shapes, with some life forms less dense than human bodies. Their intelligence level was reportedly far more advanced than that of human beings, and some were seen to be pure intelligent energy from higher dimensions or planes of existence. (p. 52). These ETs were interviewed through the patients' Spirit Guide to determine their purpose for attaching or hovering nearby. When revealed to cause suffering, Tramont would reason with them to leave his patient and then confirm their removal, but in cases where they were found to be instructive, protective, or helpful, they were left with the patient. These were the only entities who were left in place.

If any attached discarnate entities were uncooperative in departing, they were usually found to have dark forces attached to *them*, forcing Tramont to first utilize the demonic entity release process to expel their attachments before successfully persuading them to leave. After all these entities had been jettisoned, Tramont would confirm that the patient was free of foreign energy, allowing the patient to identify any further types of discarnate entities that might be affecting him beside the four most common ones identified by Baldwin. In Tramont's experience, his patients had also found terminated pregnancies, android ETs, and inter-dimensional ETs, who were described by a patient as part mechanical and part bioengineered living tissue (Tramont, 2016, pp. 33, 212).

Before moving on to the past-life regression (PLR) portion of the session, Tramont inquired whether the patient himself had fragmented, with parts of his own mind attached to someone else. If so, the patient was directed to imagine a silver thread leading to the fragment, re-experience the fragmentation and the emotions that occurred at that time, and forgive those involved, including himself, if necessary. He is then instructed to pull back the thread leading away from his body. "The patient emerges from this course of action feeling immensely better, knowing without reservation and with Spirit Guide confirmation that he is once again a complete soul." (Tramont, 2016, p. 115) All the above spirit release techniques were from Baldwin.

Tramont would then inquire whether a prior life had been the source of any physical or emotional concern that had not already been addressed; clarity comes in the hypnotic state that is not accessible in the conscious state. Bringing a past life to the forefront of the hypnotized patient's mind enables his conscious mind to understand, accept, and deal with the source of the problem, commencing the healing process, which occasionally is imme-

diate and at other times more gradual, as is demonstrated in the case histories which follow.

Tramont used several protocols to address addictions, insomnia, anger, and a host of other issues. For those open to it, he would include chakra-balancing. The final step in Tramont's thorough hypnotic treatment, which he referred to as *Comprehensive Hypnoregression Therapy*, was to encourage the patient to avoid future infestation by daily performing two brief exercises. The first, called "God Light Visualization," effectively involves putting on spiritual armor by envisioning oneself surrounded by a protective shield of powerful God Light. The second, which he learned from UFO artist James Nichols, he called an Affirmation, repeating the words "The Light of God never fails" three times, followed by "I live this day in God Light," also said three times, and "The harmony of my true being is my ultimate protection," said once. Both can be done silently in a few seconds. All of this was a laborious process; Tramont's sessions usually ran between two and three hours and sometimes longer.

### Dual and Remote Sessions

Baldwin (1992) described dual sessions as simultaneously hypnotizing two individuals who are related to each other or know each other intimately, with the therapist questioning each separately but in the presence of the other. Tramont applied this technique when patients had trouble accessing a Spirit Guide. For example one time a young woman and her mother both desired sessions with Tramont. First, he hypnotized the mother, who had a strong Spirit Guide; but when the daughter had difficulty achieving the trance state, Tramont suggested that he hypnotize her mother, lying beside her child, so he could converse with the mother's Spirit Guide on her daughter's behalf to help identify any foreign energy that might be affecting her daughter. Both women agreed, and the process was successful.

Some individuals found it challenging to quiet their busy minds in their first attempt to achieve the hypnotic state. Recalling the favorable mother-daughter outcome, Tramont suggested to those patients that at a second appointment, he could arrange to bring in an assistant who was experienced in hypnosis and had a strong Spirit Guide to conduct a dual session by hypnotizing the assistant (aka 'scanner' or 'surrogate') on their behalf while lying next to them. This option was welcomed by many, and he began conducting such dual sessions (aka 'duals') in 2009. In duals, both client and surrogate were hypnotized, reclining with eyes closed as Tramont interviewed the assistant's Guide. All dialogue was between Tramont and the surrogate; the patient did not speak with Tramont

or the surrogate during the session. At the conclusion of duals, patients often commented to us that they felt "so much lighter!" After a minute or two, this author would then leave the room so that Tramont could discuss the results with his patients privately.

After performing quite a few duals, Tramont began offering remote sessions (aka 'remotes') to those who were unable to come in person at all, and he found there was a great deal of interest in this service. In remotes, Tramont would conduct a session with the surrogate independently, specifically targeting a client who was not present. He would then contact the client and report to him what information was gained by the independent session with the surrogate. When preparing for all remote sessions, Tramont interviewed those patients just as he would with someone in his office, either on the phone or through emails; the questions asked are provided on the Patient Questionnaire in Addendum-A. He would inform the patient what day he would conduct the remote and typically called the patient that evening to report the results. The patient was not listening on the phone during the session; Tramont never hypnotized anyone over the phone. Protocols for a remote were the same as in a dual session, with Tramont conversing entirely with the hypnotized surrogate's Guide, who frequently volunteered advice.

Baldwin (1992) commented that females are more helpful in remote sessions because "women tend to be more right brained and can usually go into an altered state, perceive the thoughts of the entity, and repeat the responses" (p. 365). While acting in the capacity of a surrogate, insights arose in my subconscious mind of how patients might help heal themselves, and those suggestions were shared aloud during the session. A review of my predecessor's dual and remote files revealed she had done the same. In 2013, the author began working as Tramont's assistant. How did this transition occur from being Tramont's PLR subject to serving as a surrogate Spirit Guide? To my knowledge, there is no training for this role, but our backgrounds dovetailed beautifully to prepare us for working together, having had many successful hypnosis sessions myself assured fluency in the process. The entire Consciousness Studies curriculum at UNLV taught by Dr. Raymond Moody had broadened my worldview, and exposure to my interest in ufology raised Tramont's awareness of ETs, who had caused suffering in quite a few of his patients. This transition seemed destined to take place.

In his decades of practicing hypnotherapy, Tramont treated a total of approximately 2,000 patients. Anticipating possible future interest in researching his work, the author began tracking his cases from the beginning

of my work with him in late 2013. One-third of his entire caseload, from January 2014 forward, were male. Beginning in January 2014, of the 410 dual and remote sessions which we conducted, 76% were found to have dark force energy attached, and of those, one percent reported having been attacked by an incubus or succubus in their initial interview with Tramont. 17% of our dual and remote sessions revealed one or more earthbound spirits; 35% had one or more mind fragments attached, and 65% of his patients were fragmented themselves. ETs were found to be attached or hovering to 14%, and roughly half of them were considered benevolent. 1% of his patients either suspected they had or were sensed to have alien implants, all of which were removed. From 2014 forward, the age range of our patients was 18 months to 92 years.

Note that 45% of the remote sessions that we conducted were for people in Eastern Europe or Russia. While most American patients requested past-life regressions, nearly all the Eastern European and Russian patients also sought removal of 'demonic entities' which they believed to be attached to themselves or present in their home or workplace. Such requests denote an unmet need for this type of therapy in their native countries. Of his non-American patients, approximately 13% requested repeat sessions for themselves, and 28% referred Tramont to family members, friends, and business associates. Two clients sought spirit removal for their recently deceased relatives, which was done. A married couple from the Middle East, whose native language was Aramaic, brought their son in to see Tramont, and we conducted four remote sessions for a South American shaman. Tramont's clientele approached him from a wide variety of belief systems, but notably a variety of beliefs that commonly believe in forms of spirit possession, or they were open-minded enough to entertain spirit possession as possible.

When performing in my capacity as a surrogate, some background information on patients was often provided prior to the session. My predecessor specifically asked not to be given any information. When we spoke in 2023 for the first time, it was learned that she herself was a hypnotherapist back in 2008 when she sought Tramont's services and is still active but is not performing spirit releasement. This gifted woman experienced prophetic dreams from the age of five, and favorable patient feedback on her work, seen in notes and emails sent to Tramont, attested to their satisfaction with her abilities and the material which flowed from her in their dual and remote sessions.

In England, Palmer was carrying out remote sessions like Tramont's but was using a medium in his conscious state, to whom he referred as a 'remote scanner.' Palmer and Tramont both died in late 2021 due to complications

from Covid-19, just six weeks apart... and sometimes the question occurs to me whether *that* was the work of dark force entities.

### Sample Cases Suggestive of 'Dark Forces'

The qualifying features in selecting the eight cases to present in this article were:

- Those in which the author assisted as a surrogate.
- Patients who were found to have 'dark force' attachments.
- Patients who were accessible via phone or email.
- Patients who were amenable to discussing their experience.
- Patients whose sessions were relevant to the issues discussed in the article.
- Patients who gave written permission for their history to be published anonymously in this journal.

Patients B, C, and D were the first to be contacted since they had lingered to chat after their sessions, leaving a distinct memory of them. Their enthusiastic responses to inquiries five years after their sessions indicated that others might be open to sharing their experiences. Patient A was chosen because of how frightening, disturbing, and dramatic her session had been. Additionally, there was lasting curiosity about how the patient interpreted that experience and whether she had benefitted from entity removal. Patient B was a veterinarian who commented on one of our felines after his appointment had concluded. His long list of issues to be addressed generated curiosity to see whether he perceived any improvement from his two dual appointments and, if so, in which area(s).

Husband-and-wife patients C and D were struggling to deal with his debilitating addiction to alcohol, a common affliction that can be challenging to overcome. Although she was able to access a Spirit Guide herself and found no foreign energy attached, her description of feeling fragmented and the improvement felt following retrieval of her soul fragments were particularly well expressed. The mass shooting at Mandalay Bay was widely publicized, so the author felt that readers might empathize with Patient E's history and see that there were more victims of that trauma than just those who were shot. Conventional treatments had not done for her what Comprehensive Hypnotherapy accomplished in one session to alleviate her suffering.

Personal interest and participation in the field of

ufology caused Patient F's material to capture my attention, and it was gratifying to learn that he felt a weight had been lifted off his shoulders with a five-year hiatus from perceived contact. Patient G was approachable, considering her career in practicing Reiki, and her feedback demonstrated how memorable and helpful SRT could be to patients, even from a single remote session, with results conveyed in a phone call from Tramont. Years later, she told me that 96% of her emotional fog had been lifted. Patient H approached me in an email and in subsequent phone calls more than five years after his only session, a dual, with effusive gratitude for launching his spiritual journey, improving his digestion issues, and eradicating his opiate dependency. Including his case material was an easy decision.

### Patient A

After assisting with quite a few dual sessions, the author learned to achieve a hypnotic state without needing an induction. That ability was especially helpful several months later when Tramont called me into a session already in progress after the patient had apparently been taken over by a dark force entity. Patient A, a woman in her late fifties, made an appointment in 2015, hoping to rid herself of panic attacks, migraines, and fear, to learn the nature of her life's lesson(s), and to stand up for herself. Her marriage was falling apart. She was able to be hypnotized, and the Spirit Guide, who presented itself early in the session, reported she had no foreign energy. The cause of her migraines was identified during her regression, but then she saw herself killing a person in a past life who had reincarnated as her mother in her present one. Suddenly evil sounds interrupted the exchange between the patient and Tramont. According to his notes, he had watched that woman growling and writhing on his couch for three full minutes when a deep voice arose from her, shouting, "I don't want to talk to you anymore!" At this point, Tramont summoned me to join them.

Walking into the room was frightening, but the author lay down next to her and silently slipped into the hypnotic state. Immediately and without any hesitation at all, words came forth in a strong and most authoritative tone as my Spirit Guide commanded, "FEAR NOT," until it overrode the demonic effect within the patient, and we proceeded with the spirit release. Tramont's notes read, "Lots of screaming & noise while being encapsulated." My Guide found the patient to have three powerful dark forces and two demonic Reptilians attached to her. The 'Spirit Guide' who initially came to her had been an impostor. When she woke up from the session, Tramont wrote, "Patient feels good."

A conversation with this patient in 2022 revealed that her experience had been a "real eye-opener" and had "opened the door to appreciate the seriousness of what happens when you have an entity attached to you." She reported having no further panic attacks since that day. She had gotten divorced, her migraines had been reduced by 75-80%, and she is now performing spirit release-ments herself. Renewed self-confidence enabled her to take control of her life, a huge improvement from where she had been prior to seeing Tramont. Post-hypnosis rehabilitation and success attest to the power of having dark entity attachments removed.

In his book, Baldwin (1992) noted a distinction between 'regular' dark forces and 'powerful' dark forces, asserting that the powerful ones were higher up in the celestial hierarchy (p. 278). Unaware of this distinction, in the surrogate-hypnotic state, my subconscious mind distinguished between the two by sensing that the less powerful dark forces caused suffering in the patient while powerful ones drove the patient to cause suffering in others, too. In addition to Patient A, several more dual and remote cases involving dark force removal are included here with recent feedback from the patient. Addendum-B contains further patient comments and transcripts of Tramont's session notes.

### Patient B

A 34-year-old veterinarian sought Tramont's help in 2014 and brought a lengthy list of physical, emotional, and personal issues he desired to address, primarily anxiety, depression, lack of self-confidence, back pain, and the desire to communicate with animals and Spirit Guides. Recommended by those who had heard Tramont's lecture, this open-minded individual was already familiar with Tramont's unusual approach and asked, "In what area of metaphysics/medicine/healing should I focus?" When he was unable to achieve the hypnotic state, the author was called in for a dual, and a week later he returned for another dual session. The following narrative is summarized from Tramont's extensive notes.

At the first session, one powerful dark force was found attached to him, so we went through the spirit release process. Also attached was an earthbound, who in life had been a disc jockey that died in a car accident. This DJ feared rejection of women but could enjoy them from afar while he worked. He said he liked rhythm but "had a hard time finding his own rhythms." The earthbound had back pain, few friends, and little opportunity to share his thoughts. He liked the way Patient B moved and wanted to stay with him. Unwilling to leave, we discovered this DJ's spirit had two dark forces attached to him, so we per-

formed an entity releasement on the earthbound, after which he agreed to leave. Reportedly sent to cause chaos, a Reptilian was found hovering but still negatively affecting Patient B, instigating indecisiveness to detract from and delay success in his veterinary practice. He had been with Patient B for a year. Also unwilling to leave, Tramont called in “all the archangels” to help pull him away from the patient, who was finally pronounced free of foreign energy.

Patient B’s Anxiety and poor self-esteem resulted from residual feelings of guilt from past-life situations in which he wanted to do right but was diverted from it due to circumstances. For example, he was seen torturing animals in an earlier life, pulling wings off insects as the result of peer pressure. And as a Jewish man during World War II, he was afraid for his life and wanted to conceal his identity, abandoning his family rather than staying with them to try to protect them.

To communicate with animals and sense their vibrations, it was suggested that he look for their subtle movements. He was reminded that he is a capable, trained professional... but also a perfectionist. It was advised that he surround himself with crystals and potted plants; as they live and grow, they exude subtle energy. Being around them would improve his memory and nurture subtle changes in him.

The second dual session detected no foreign energy, but information continued to flow from the Spirit Guide. It saw the patient as being a “hyper-alert” person who would benefit from trusting others to competently perform their duties. The patient had been “a perfectionist and not in touch with himself; he’s unfamiliar with his soul. Lack of trust creates stress, and forgiving others relieves it. His life’s blueprint is to learn the interconnect-edness of all nature; rocks, crystals, plants, and even volcanoes— are all alive.” Tramont spoke with the patient at length after the session was completed, and the author had left the room. His notes indicated a “long discussion on patterns of behavior disappearing slowly but steadily.”

Seven and a half years later, Patient B was contacted to determine whether his two sessions had been of any benefit. Likely quite surprised to hear from me, he was quiet for a little while and then responded that Spirit Release Therapy had been an “excellent stepping stone” on his spiritual path, with “manifested improvement.” He had learned to communicate with animals, which was at the top of his list of personal concerns. What he identified as the most helpful aspect of his experience was an awakening to the reality of dark forces, “a realization of what my inner self knew,” he said, stating that he “believes 100% in all of this,” emphasizing that he *knows* there are dark forces. Patient B told me he is now doing “energy work,”

having added the removal of dark spirits from animals and people and the ‘cleansing of homes’ to his repertoire of services in addition to veterinary medicine.

## Patients C and D

There was a multi-talented and gregarious American couple in their early fifties who came together to see Tramont in 2017. The first appointment addressed the husband’s severe alcoholism problem dating back to his teens. Hospitalized many times for this addiction, he’d even resorted to drinking hand sanitizer and rubbing alcohol.

With his wife in attendance, Patient C was able to achieve the hypnotic state himself and found his Spirit Guide, who identified two dark forces, an earthbound spirit, and three mind fragments attached to him. The Guide also found two ETs: one was evil with a dark force attached to it, and the other was benign. After Tramont confirmed through his Guide that the patient was free of foreign energy, the patient’s mind fragments were retrieved, and his past lives were explored. Every entity and prior life scene had contributed to his drinking problem in some way. Tramont’s notes say he then read a forgiveness script which detailed benefits to the patient in forgiving himself and others.

A week later, they returned to address the wife’s weight concerns, fears, and her various relationship issues with immediate family members. As her husband watched, Patient D successfully slipped into the hypnotic state where a strong Spirit Guide appeared in her mind and told her he’d been with her for “ages.” No foreign energy was attached, but the Guide reported an earthbound spirit and three benevolent ETs were all hovering nearby to protect her. Her soul was fragmented, and Tramont helped her retrieve the fragments. Then, after a PLR, the Spirit Guide offered the wife enlightening information, which released some fears she’d been harboring and allowed the ETs to depart.

Patient D had only one session, but we were asked to perform a remote on the husband a week later. Here are the doctor’s pertinent notes from that session:

**Surrogate:** Deep down, he welcomes the foreign energy as it encourages him to drink; he chooses to do this. Patient C doesn’t dwell in his Higher Self, as he should. He needs something more exciting than drinking. He drinks out of frustration and doesn’t realize how many options are out there for him. Taking more responsibility in his daily routine will stop him from drinking. He must accept and agree to this responsibility!

A dramatic change is needed. A mere intention to agree not to drink is not enough. With his first drink after his session that he chose to have, dark forces came in. They drove him to drink to excess but did not drive him to drink in the first place. He needs to maintain the attitude that he is good enough. He needs to be his wife's partner, and she has been very patient. One Powerful dark force is present.

**Tramont note:** Exorcism carried out... call in Troops and St. Michael the Archangel. Now free of foreign energy.

**Surrogate:** His soul is not fragmented. He needs to look at all the reasons that he is drawn to drinking and find substitutes that will satisfy whatever the needs are that draw him into this.

**Tramont:** Is his Spirit Guide protecting him?

**Surrogate:** Yes! But even his Guide cannot stop Patient C from drinking. Only patient C can! He hurts his wife every time he leaves the house and drinks. It's a selfish thing. He must realize a lifetime of patience and understanding will not carry a relationship. He needs to take her with him on these trips and go to places that don't serve alcohol. He needs to deal with the reasons why he drinks. There may be many. He is to deal with them, one by one, and find alternatives that will address those needs and satisfy them. He needs to look at the repercussions, the consequences, and the side effects of his actions and how it affects his spouse and others. Does he feel remorse afterwards? What is affected: the loving relationship between him and his wife, self-esteem issues, resentment, forgiveness, etc. If his problem is a physical dependence caused by an emotional dependence, then the medical community can work on the physical dependence while he works on his emotional problems. He should categorize them by the timeline involved, namely past, present, or future events. If he cannot get past any of these issues, he should return for another session.

A year later, they returned for a dual session on the husband with assistance from his wife's Spirit Guide, who reported no attached foreign energy but that he had fragmented three times.

In the follow-up call of July 2022, the wife exclaimed

that they had just been talking about Tramont and me the prior evening. In response to the query of any perceived benefit, she readily replied that the changes were "revolutionary, life-changing, and ongoing." She described her fragmentation experience as feeling that her "soul had shattered into a million pieces" and that pulling all the fragments back had left her with a "visceral feeling of wholeness." The PLR, together with the retrieval of fragments, had helped her. She had not seen any other hypnotherapists before or since her appointment, but she had just purchased Baldwin's book because she wanted to learn how to do spirit releasements herself to perform this work. Her pursuit of learning Spirit Release Therapy speaks to the success of Patient C and D's treatment.

Her husband chose his words carefully when speaking about his experiences five years earlier. He articulated that "The lie from Satan is that alcohol will make me more peaceful," but now he realized he'd opened himself up to entities, allowing himself to be "invaded by outside visitors" due to decisions he'd made. Twice he volunteered that he is now taking responsibility for his actions, which is what was emphasized in our remote session but not mentioned in Tramont's notes of his other two sessions. Patient C admitted that although he stayed sober for a while, he still has relapses from time to time. Also, in that remote, my Spirit Guide suggested that dramatic lifestyle changes would be helpful. The couple had moved out of state, expanded their professional interests, and Patient C was using a different first name and dramatically changed his appearance by growing a full beard. The ease with which both spoke indicated they were more self-confident, content, and happier with themselves and each other.

## Patient E

A local woman in her early thirties was left traumatized after America's worst mass shooting, committed from the Mandalay Bay Hotel in Las Vegas on October 1, 2017. The patient was suffering with extreme anxiety, fear of death, and fear of being shot. In the six months following that tragedy, she had lost 45 pounds and had been having 3 to 4 panic attacks daily, and apparently, counseling had provided insufficient relief.

Although she was hypnotized, she was unable to access a Spirit Guide. I was called in to help with a dual session, locating and helping rid her of four dark forces and two mind fragments, one of which had come from her mother following a traumatic event and the other from a young person attending the Mandalay Bay shooting who panicked and felt lost in the turmoil of the hysterical crowd. Four and a half years after her only appointment,

she was contacted for a follow-up, and again the patient said that she and her uncle had just been talking about us the day before. She enthusiastically stated that her anxiety had been dramatically reduced, and she had not had a single panic attack after that session. When asked what aspect of the treatment had been most helpful, she said, “getting rid of the attached entities,” and added that she would remember that session for the rest of her life. She volunteered to write a Testimonial about her experience with Tramont, which is included in Addendum-A.

### Patient F

In 2017 a concerned father brought his 36-year-old son, Patient F, in from Texas. For over ten years, the son had held a responsible position as a military security guard and was quite familiar with guns in his line of work, but he had received a medical discharge from the service. The patient was married and the father of three.

Tramont’s interview notes began with, “Visits at night, gets paralysis. One year ago — sat up and felt that *‘the Black Man was here.’* Saw an alien, thin and tall. Pistol not working, no bullets; couldn’t wake up wife. Alien grabbed his wrist. Had three fingers, minimal nose. 6’6” tall. Has apnea, a “micro” pituitary tumor, heart problems. Who was *‘the Black Man’*? As a kid said things about a sterile room. May have had abductions.”

With his father present, we conducted a dual session which revealed two dark forces and one mind fragment attached; the latter was from a human who had seen him and recognized the effects from shared experiences. The Spirit Guide identified those to have been alien abduction experiences. This human’s intense gaze had influenced our patient subconsciously by causing a dormant memory to resurface, instilling in Patient F a strong fear of contact with ETs. The attachments were all removed.

The Spirit Guide sensed that *‘the Black Man’* was the shadow of a benevolent ET before it came over to him and grabbed his arm, knowing that a firearm would have been unnecessary since he had no intention of harming Patient F. This ET and his fellow ETs want humans to develop the skills they have, to not fear ETs, to have an open mind and not be judgmental. Seeing Patient F as a respected and compassionate man, they feel one day, he will be able to influence his peers to accept that ETs are real.

A month after the session, the patient’s father wrote Tramont a note thanking us for our “awesome work,” saying his son had been sleeping much better than he had in a long time. In a follow-up conversation with Patient F in 2022, he spoke slowly and thoughtfully, saying the experience had left him feeling as if “a weight had been taken off my shoulders.” Spiritually, he said, he felt lighter and

much improved. He’d only had one visit from an ET since his session... but it was recent. The subconscious memory of the fellow abductee’s intense gaze likely would have remained dormant without the benefit of the session with us, which apparently allowed the patient’s nocturnal ET visits to subside for five years. This patient had only a single session with Tramont.

### Patient G

In early 2018, Patient G, a 65-year-old divorced female Reiki Master, had contacted Tramont seeking relief from feeling she’d been “haunted” over the prior few years by a negative presence which she sensed at various times. She’d been feeling an “emotional fog” coming over her that was causing a sadness she couldn’t shake off, leaving her feeling drained. She had a history of abusive relationships with her parents and both spouses. At the time of her only session with us, a remote, she was living with her two adult sons, one of whom had issues that occasionally caused her great stress. Patient G was also unhappy with some extra weight she’d gained.

Shortly after our session began, my Spirit Guide sensed three dark forces, one of which was powerful. After they all were removed, an earthbound spirit was identified as the deceased father of her children. When Tramont asked him why he had attached to her, he replied, “She made me miserable. I wanted to get even.” Since two dark forces were found attached to this earthbound, they had to be removed prior to continuing the session. Tramont asked the earthbound how he was feeling now that they were released. My Spirit Guide sensed that he was far less hostile, and he readily proceeded to the Light.

A mind fragment from one of her sons was making her feel guilty, causing her discomfort as its influence was constantly in the back of her mind. It had been there for many years, and it was released. My Spirit Guide sensed that two benevolent Gray ETs visit her from time to time to encourage her in her work and bathe her in positive energy. One in particular, ‘Misha,’ helped her find her talent in healing others and said Patient F could speak to him “as though he were an angel.” He conveyed that if she ever comes to a stumbling block and needs guidance or strength, she can silently ask him for advice, and he will give her peace and conviction which will help her.

After confirming there was no additional foreign energy, her mind fragments were retrieved, advice was offered, and past lives were explored. When asked if she’d had a past life with her ex-husband, who had died, the answer was affirmative; she’d had several, and that’s what had attracted them to each other in the first place. My Spirit Guide sensed that she and her second husband had

been puppies together in a prior incarnation.

When called in 2023 to investigate any perceived benefit from our session for her five years earlier, Patient G vividly recalled Tramont, its results, and my work on her behalf. We spoke for almost an hour while she reported that the mental fog had lifted “tremendously.” Knowledge of the dark forces that had been affecting her had “opened the door” to what the trouble was. She said she had seen a “black goo covering everything,” with a hand coming down to remove it. Hearing Tramont explain what came through in the remote had opened her mind to the idea that ETs could be beneficial and that people could incarnate in forms other than human. She also recalled Tramont telling her that she and her second spouse were seen as having a past incarnation together as puppies; that had special but unfortunately painful personal significance to her, but it helped her understand some unpleasant thoughts she’d been harboring. The upbeat tone of voice in which she discussed this detail implied emotional healing of that memory. Then she volunteered new information, that her “attacks in bed had stopped” after her remote session, confirming the attacks had been physical and sexual in nature. It seems a great deal was accomplished in only one session.

### Patient H

A 34-year-old single male had flown to Las Vegas from out of state in October of 2017, seeking relief from persistent digestive issues for which he’d been taking medically prescribed opioids. He’d had a tremor since age 12 and a difficult childhood with alcoholic parents who had not exposed him to religion. He contacted Tramont after watching his interview with Mishlove on the *Thinking Allowed* podcast.

When Patient H was unable to achieve the hypnotized state, I was called in, and under hypnosis, my Spirit Guide sensed two attached dark forces. The soul fragment of a bully who had tormented him in middle school was found to be contributing to his digestive problems, and a Reptilian was sensed to be responsible for activating the tremor and presently was causing confusion and distrust. Patient H also had an ET implant, and all attachments were removed. Following the Spirit Releasement, a past life with his sister was uncovered in which she had been a guidance counselor, and patient H had rejected her advice. In another past life, he had been on one of the ships accompanying Christopher Columbus; while his life before that voyage had been difficult, he experienced great joy after he arrived in the new world.

The author called Patient H at his request on February 4, 2023, to thank him for his kind email sent

the prior month after he had learned of Tramont’s passing. Five years following his only session, he was found to have nearly perfect recall of everything that was said, adding that he had been doing his protective affirmations “almost daily” ever since then, agreeing they were quite powerful. Although the tremor had not disappeared, his digestive issues had improved, and he was no longer using opiates. He felt the most significant benefit was the personal growth that the session had triggered, launching a spiritual journey that presently occupied his thoughts most of the time. He reported that metaphysics had become the primary focus of his life and was extremely passionate about that field and very well informed in it.

Patient H’s email of January 2023 stated, “After leaving your home in a taxicab I was left feeling with a new wonder and intrigue into life. I also experienced nausea that I attribute to the light work and banishing of the dark forces that you and your husband helped to remove from being attached to me.” On the phone, he commented that he vomited after arriving at the airport. Tramont had discussed entity releasement in detail in his Mishlove interviews, so the patient already knew what to expect. Tramont’s notes stated Patient H was awake, making his session an acutely memorable experience with immediate personal validation in his nausea. Patient H had come to believe that there *are* entities in a reality that people do not perceive with their five senses.

Patients seemed to resonate with what takes place in this methodology, perhaps providing the frequency they needed to heal. Apparently, it felt right and true and made sense to them, independent of whatever teachings, treatments, or beliefs they’d had earlier, or perhaps strengthening or expanding their existing beliefs rather than replacing them. SRT is not affiliated with religion, although groups of ambiguous celestial entities, such as “Legions of Heaven,” “Warrior Spirits of Light,” and “Rescue Spirits of Light,” are named as an integral part of Baldwin’s (1992) process, including Michael the Archangel who was summoned to detach encapsulated dark force entities and take them to their destination (p. 283 and 339).

The conviction of patients’ belief in dark forces, which third parties may lack, must come from personally experiencing the methods utilized in Spirit Release protocols:

1. Learning—and feeling—that they apparently have attached foreign energy;
2. Perceiving firsthand what feels to them like the actual removal of the entity or entities, or second-hand as they process information from Tramont regarding entities’ removal in their remote session.

3. Experiencing improvement in one or more areas of their lives and attributing that improvement to the removal of attached entities.

### Personal Growth after Serving as a Surrogate Spirit Guide

Tramont (2016) described another possession experience with a patient in his *What's Missing in Medicine*. Rarely failing in dark entity removal, his second book makes it easy to understand why his belief in dark forces was so strong, as this event was experienced more by Tramont than by his patient:

One of my earliest and most frustrating cases of attempted intimidation by the dark force entities was a gentleman who went deeply into trance and immediately began growling and snarling and jumping up at me at various intervals from a lying position. When this occurred, I would then gently place his head and chest back on the couch. The patient then began to howl with his tongue out while his head and hands shook convulsively. Laughing in an evil fashion, he began to display hideous grimaces as he flapped his tongue with his mouth wide open and continued to growl and assume the position of a powerful beast by flexing his arms and legs and curling his hands into what looked like claws. Nothing I said seemed to make any difference. This bizarre behavior continued for over an hour until I decided to wake the patient up. He had no conscious memory of what had occurred. (Tramont, 2016, p. 55).

Reading through Tramont's patient files was enlightening, as the author personally had little or no memory of what emerged from the dual and remote sessions. The apparent reality of dark forces and their effects became far more convincing when conversing with his patients, in their choice of words and vocal inflections, which written words cannot adequately convey. Although they had seen us many years earlier, their enthusiastic, positive responses reflected lasting improvement. The notion of ghosts as manifestations of deceased spirits was familiar, but sensing earthbound spirits while in the hypnotized state expanded my beliefs. Tramont's case notes of their reasons for attaching to people allowed me to see some earthbounds from *their* perspective, which broadened mine as they shed a whole new light on the subject.

Tramont introduced me to the concept of a 'mind frag-

ment.' Eventually, it became acceptable to me, but that conviction became firmer after feeling myself fragmented, under hypnosis, realizing later that at least twice, my mind had completely blocked out memories of traumatic events of my own making. This led me to consider that unconscious memory blocking as a self-defense mechanism could evidence fragmentation, secondary to formal psychological explanations. And the retrieval of my own fragments may have contributed to subsequent recollection of the events, which are now far less emotionally troubling than they had been at the time the author experienced them.

ET implants had been identified and removed in at least five of our patients. It was perplexing how this all could be possible until a plausible explanation was found in notes of a 2002 phone conversation with my friend Jim Sparks, whose conscious memories of his extensive abduction history were credible enough to warrant study and publication by researchers Linda Moulton Howe (Howe, 1998, Chapter Three) and Harvard professor, Pulitzer Prize winner, and prior SSE member John Mack (1999, pp. 49, 63, 96-100, 103-4, 111-112, 114-115, 120-121, 123, 140, 143, 157-160, 164, 224, 254, 271). My notes commemorated Jim saying, "Implants are made with energy... graph of a device... they beam energy into biological material and make a machine from live tissue," leading me to accept that if implants are made with energy, they can be removed with energy. Baldwin (1992) also mentioned ET implant removal under hypnosis, but this was unknown to me during my work with Tramont.

### DISCUSSION

Since my work with Tramont, some new viewpoints have come to my attention and are worth considering. In September 2022, upon approaching Penny Kelly, naturopath, and gifted author of many books on consciousness, for permission to quote her, she responded affirmatively and included a novel interpretation of 'dark forces' from her perspective after working in a research lab with SSE member William Levengood, Ph.D. (1925-2013):

Everything is aware and has at least some functions of consciousness. The range of differing kinds of consciousness here in this reality zone is staggering. Some of it is pretty limited and vastly different from human consciousness, but it is still aware. Plasma responds directly to consciousness, and we demonstrated this in the lab again and again! All particles are aware and communicating, and it is my understanding that when there is a collection of particles such as oc-

curs in a plasma, the intent they hold is part of the nature of their spin, size, direction, and the interaction with other plasmas. They are self-organizing because of the nature of consciousness and its characteristics (spin, size, direction, type of motion, etc.).

A plasma is always in motion, and when that motion provides destructive interference to neighboring plasmas, we often interpret that as 'evil.' Energies either build form or undo form. Since everything is always trying to garner more energy in order to grow and evolve – including those energies that function in such a way as to break down neighboring energies, we humans end up believing in evil spirits and devils. It would be much more accurate to realize that an incompatible plasma or set of plasmas is in operation and just needs to be canceled out, something akin to redirecting, which can be done using consciousness because – as we demonstrated in the lab – plasma responds directly to consciousness.

If we take the old term 'spirits' or 'spirituality' and realize that this term refers to the workings of energies functioning in a given environment, and then realize that the ancients called it 'spirit' because they couldn't see, hear, taste, or touch it, but they recognized good outcomes (something they liked) vs. bad outcomes (something they termed as evil), we have some idea of how religions got going, 'evil' was recognized, and 'priests' appeared. They were people who had an inherent ability to move energy, heal, communicate with plants, animals, and elements, or generate unusual phenomena.

We see some of these people around today. Since everyone is generating effects within reality, and some people are suffering from arrested development, they end up generating some really destructive effects and do not realize what they are doing. Many people do not have a successful conclusion to the first four stages of Piaget's model of human development, let alone the four additional stages of development that go on beyond his last stage, called 'the age of reason' or 'capable of abstract reasoning.' It is this lack of full human development that results in the darker side of spirituality. I discuss these stages of development in detail in the updated version of *Evolving Human*, and it is people like yourself that try to help and heal those who get caught in counter-productive energies! So, thank you for that! (P. Kelly personal communication to N. Tra-

mont, September 6, 2022).

This theory might make sense, but whatever the source of these 'dark or counter-productive' energies, the work of Charles Tramont showed that Comprehensive Hypnotherapy can be a powerful tool for a patient's healing and spiritual development. The subconscious mind provides solutions to questions whose answers are not found anywhere else. SRT techniques suggest that belief, as well as the subconscious mind, are crucial to the healing process. It was not Tramont who did the healing; it was his patients themselves, and he just guided them through the process. Further study in the mind-body relationship pertaining to the subconscious mind and perception of spirit attachment and release might be helpful. When the source of suffering is sensed to be from foreign energy or events envisioned in a prior lifetime, their negative effects often can be mitigated with Comprehensive Hypnotherapy, thus enabling healing to begin. The years spent with Tramont battling 'dark entities' proved to us both not only the existence of such forces but that these battles can be won.

## ENDNOTE

- 1 Retrieved from <https://www.youtube.com/watch?v=-JvGSDUFv4dk>

## NOTE

Supplemental materials regarding this article were registered with JSE and provided to the commentators of this target article. These materials are available by request to the author.

## REFERENCES

- Baldwin, W. J. (1992). *Spirit releasement therapy: A technique manual*. Headline Books, Inc.
- Howe, L. M. (1998). *Glimpses of other realities, volume II: High strangeness*. Paper Chase Press.
- Mack, J. (1999). *Passport to the cosmos: Human transformation and alien encounters*. Three Rivers Press.
- Palmer, T. (2014). *The science of spirit possession* (2nd ed.). Cambridge Scholars Publishing.
- Tramont, C. V. (2009). *From birth to rebirth: Gnostic healing for the 21st century*. Granite Publishing.
- Tramont, C. V. (2016). *What's missing in medicine: Unleashing the healing power of the subconscious mind*. Du Lac Publishing.
- Weiss, B. L. (1988). *Many lives, many masters: The true story of a prominent psychiatrist, his young patient, and the past-life therapy that changed both their lives*. Touchstone.



**SPECIAL  
SUBSECTION  
COMMENTARY**

# Confronting the Boggle Threshold of Tramont's "Spirit Release Therapy"

**Jack Hunter**

jack.huter@uwtsd.ac.uk

Alister Hardy Religious Experi-  
ence Research Centre, University  
of Wales Trinity Saint David

## HIGHLIGHTS

Rather than be dismissed or pathologized, claims about spirit release therapy might better be understood from the lens of gothic psychology.

## KEYWORDS

High Strangeness, complexity, Gothic psychology, non-human.

<https://doi.org/10.31275/20233229>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

I was delighted to be invited to read over this fascinating account of the life and work of Charles Tramont M.D., especially because his case has several overlaps with aspects of my own research. There are a few themes in particular that resonate with some of the ideas I have been exploring in recent publications, about which I will offer a few comments below. It is my hope that they might be useful for opening up new avenues for research on extraordinary experiences.

### High Strangeness and Boggle Thresholds

This is an example of what could reasonably be called a 'high strangeness' case. In high strangeness cases - a term coined by the pioneering UFO researcher Dr J. Allen Hynek - the various different strands of the paranormal seem to intersect with one another, and dissolve any attempts at neat classifications of phenomena. In this instance, mediumship, spirit possession, extraterrestrial entities, and alien implants collide with hypnosis and past-life regression. Such a hodgepodge of paranormal

motifs (not to mention chakra balancing) might exceed the 'boggle thresholds' of some readers, but there is also reason to suggest that such high strangeness may have something important to tell us about the nature of the paranormal (Hunter, 2023). Rather than triggering an automatic dismissal, then, elements of high strangeness - of overlapping strands of the paranormal - may be a signal to take the account more seriously. As the UFO experimenter, Mike Clelland explains, 'The more complicated the interwoven details, the more valid it seems' (Clelland, 2020, p. 44).

### Similar Biographical Details and Parallels with Mediumship Development

Another observation is that there appear to be some interesting similarities in the career trajectories and biographies of researchers into spirit mediumship, and spirit release practitioners in particular. My late friend and colleague Dr. Terrence Palmer, whose work is referenced in the paper, for example, strikes me as having a very similar career trajectory to that of Charles Tramont (indeed,



the paper notes that both men died due to complications from COVID-19 in 2021). Both were retired, successful professionals and businessmen before becoming interested in trance, possession, and spirit release, which became their main interest in later life. This was also the case in my own fieldwork at the Bristol Spirit Lodge, a private home-circle for the development of trance and physical mediumship in Bristol. It was founded by retired Christine Di Nucci in order to pursue (in her own words) a 'DIY-Housewifey' kind of science in her investigations into trance and the afterlife, an interest that emerged after she had her own extraordinary seance experiences as a guest sitter at another circle (Hunter, 2020). There are also a number of parallels between the practices described in the paper and those I have observed in mediumship development at the Bristol Spirit Lodge, which deserves further attention. One such parallel is the use of spirit guides to mediate between the human and spirit worlds. In my own research, mediums, and sitters worked toward the development of strong spirit teams, sometimes of up to sixteen distinct entities, who would assist in the production of seance phenomena (Hunter, 2020).

### Gothic Psychology

If the phenomena described in this paper are real then they would imply that consciousness is far more complex than any of the standard models of mainstream psychology can accommodate. Indeed, it could be said that the model of mind they suggest is a 'gothic psychology' - a term offered by William James in an obituary for F.W.H. Myers. James explains:

[...] their work is like going from classic to Gothic architecture, where few outlines are pure and where uncouth forms lurk in the shadows. A mass of mental phenomena are now seen in the shrubbery beyond the parapet. Fantastic, ignoble, hardly human, or frankly nonhuman are some of these new candidates for psychological description [...] The world of the mind is shown as something infinitely more complex than was suspected; and whatever beauties it may still possess, it has lost at any rate the beauty of academic neatness...But despite the triumph of romanticism, psychologists as a rule have still some lingering prejudice in favor of the nobler simplicities (James, 1901).

Myers also gives a useful description of this gothic view of consciousness, in which the individual is seen as both multiple and permeable:

I regard each man as at once profoundly unitary and almost infinitely composite, as inheriting from earthly ancestors a multiplex and 'colonial' organism - polyzoic and perhaps polypsychic in an extreme degree; but also as ruling and unifying that organism by a soul or spirit absolutely beyond our present analysis - a soul which has originated in a spiritual or metetherial environment [...] (Myers, 1992, p. 19).

There are further parallels here with shamanic traditions as well. Tramont describes the retrieval of fragments of the self, for example, which may be severed through trauma. A hallmark of many shamanistic traditions is both the notion of the self as divisible (often being ritually separated and re-aggregated in initiatory experiences), and of lost souls that must be retrieved in order to cure illness. There is great scope for cross-cultural comparative work to be done here, exploring the similarities and differences between traditional and shamanistic approaches to the person and contemporary therapeutic practices. The anthropologist Fiona Bowie has done some great work in this direction (Bowie, 2013).

### The Role of the Non-Human

There has been a tendency in parapsychological research to shift emphasis towards the individual and the psychological and away from the possibility of external, independent agencies. This tendency can be seen in William Roll's RSPK model of poltergeists, for example, and in the psychologization and pathologization of mediumship (Lauresn, 2016). These explanations downplay or dismiss the possibility of the influence of real discarnate entities. This focus on the human, however, may represent a form of anthropocentrism, blinkering researchers to the non-human element of the experience. In my introductions to *Greening the Paranormal* (2019) and *Deep Weird* (2023), I suggested that the non-human is, in fact, a central feature of many paranormal experiences, and as such, a re-focusing on the non-human may provide new opportunities for understanding the nature of the paranormal. The non-human manifests in a number of different forms throughout the paper - in past life regressions, for example, where it is revealed that past lives are not necessarily human lives (the example of a past life as a 'tree fairy' is given, for instance). Tramont also develops a taxonomy of non-human beings, drawing on experiences with spirit release and hypnosis, including:

[...] various races of extraterrestrials (ETs), whose

physical appearance he described as humanoid, dolphin, lizard, and other shapes, with some life forms less dense than human bodies. Their intelligence level was reportedly far more advanced than that of human beings, and some were seen to be pure intelligent energy from higher dimensions or planes of existence. (Smoot-Tramont, 2023, p. 727)

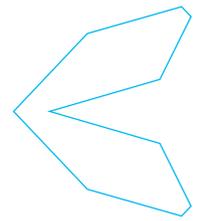
It is my suggestion here that a shift of emphasis towards the non-human in extraordinary experiences may go some way towards bringing anomalistic research in line with contemporary perspectives in the humanities such as with the so-called non-human turn (Grusin 2015), which encourages a re-appraisal of the agency of the non-human.

## CONCLUSIONS

Although only a brief exploration, the themes outlined above may provide some useful avenues for investigating not only the case of Tramont, but also the paranormal in general. To briefly summarize, these include a re-engagement with the concept of 'high strangeness' and a loosening of the 'boggle threshold,' an emphasis on the biographical details of those engaged in practices such as spirit release therapies and comparison with other forms of mediumship development, the sketching out of a 'gothic psychology' that understands mind and consciousness as complex and porous phenomena, and a re-orientation towards the non-human in extraordinary experience research.

## REFERENCES

- Bowie, F. (2013). Building bridges, dissolving boundaries: Toward a methodology for the ethnographic study of the afterlife, mediumship, and spiritual beings. *Journal of the American Academy of Religion*, 8, 698-733.
- Clelland, M. (2020). *The messengers: Owls, synchronicity and the UFO abductee*. Beneath the Stars Press
- Grusin, R. (2015). *The nonhuman turn*. University of Minnesota Press.
- Hunter, J. (2019). *Greening the paranormal: Exploring the ecology of extraordinary experience*. August Night Press.
- Hunter, J. (2020). *Manifesting spirits: An anthropological study of mediumship and the paranormal*. Aeon Books.
- Hunter, J. (2023). *Deep weird: The varieties of high strangeness experience*. August Night Press.
- James, W. (1901). Frederic Myers's service to psychology. *Proceedings of the Society for Psychical Research*, 17, 1-23.
- Laursen, C. (2016). *Reimagining the poltergeist in twentieth century America and Britain*. Unpublished PhD Dissertation: University of British Columbia.
- Smoot-Tramont, N. (2023). From 'Baby Doctor' to 'Witch Doctor': A retrospective of Charles Tramont's work with spirit releasement therapy. *Journal of Scientific Exploration*, 37, 724-736.



**SPECIAL  
SUBSECTION  
COMMENTARY**

# Science and Spiritual Practices: How Far Can The Dialogue Proceed? Tramont's Spirit Releasement Therapy as a Case Study

**Everton de Oliveira  
Maraldi**

everton.nom@gmail.com

orcid.org/0000-0002-3330-5893

Religious Studies Department,  
Pontifical Catholic University of São  
Paulo

Brazil D'Or Institute for Research  
and Education, Rio de Janeiro, Brazil

## HIGHLIGHTS

Science can assess the effectiveness and mechanisms of spiritual practices, but important philosophical and methodological challenges must be addressed.

## KEYWORDS

Spiritual practices, health, spirituality, science, religion.

<https://doi.org/10.31275/20233187>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

The scientific output on spirituality and health has increased significantly over the last few decades, with contributions from various disciplines, methods, and theoretical perspectives (Demir, 2019). Overall, these studies indicate that, contrary to earlier conceptualizations of religion and spirituality as detrimental to health and wellbeing (e.g., Ellis, 1980; Freud, 1927), spiritual practices, beliefs, and experiences are positively associated with a series of mental and physical health indicators, even though negative and no significant correlations were also identified (VanderWeele, Balboni & Koh, 2017). The recent rise of research focus on spiritual practices and therapies such as meditation techniques, yoga, and prayer, along with the creation of academic journals and research groups dedicated to studying these topics, suggest that "spirituality and health" have, to a great extent, become a mainstream research field. Many researchers, professionals, and organizations now recognize the significance and impact of spirituality on health and recommend clinicians

to consider their patients' spiritual needs when diagnosing and treating them (e.g., Moreira-Almeida et al., 2016).

On the other hand, there is an emphasis in this literature on the more favorable aspects of spirituality to the detriment of studies focusing on the potential adverse effects of spiritual practices (e.g., Farias et al., 2020). Although it is of fundamental importance to understand how spirituality can serve a protective, salutary function, it is equally essential to explore further those circumstances where spirituality can cause harm or is linked to pathological processes and conditions. This is especially relevant given the limitations of available diagnostic criteria to differentiate between healthy and pathological expressions of spiritual experience (Maraldi, 2020; Moreira-Almeida & Cardeña, 2011).

Tramont's spirit releasement therapy (henceforth called TSRT) offers an interesting case study of a spiritual practice developed precisely to deal with the darker aspects of spirituality. It diagnoses the origin of suffering and emotional imbalance as resulting from a combination of different spiritual factors, with special attention to the



pernicious influence of obsessive spirits and “spiritual attachments”. It also considers a range of other factors from past-life unresolved issues to the pathological manifestation of dissociated parts of the self. According to Nancy Smoot Tramont (2023), her husband’s therapeutic approach consists of a “powerful healing tool” (p. 724) with numerous successful cases of remission and personal transformation. If that is so, then academics and health professionals might benefit from delving deeper into (and gaining more knowledge about) it. But is it possible to investigate TSRT scientifically? Before tackling that issue, it is important to examine more closely the relationship between science and spiritual practices.

## THE DIALOGUE BETWEEN SCIENCE AND SPIRITUALITY: PITFALLS AND POSSIBILITIES

Research on spirituality and health is largely based on the assumption that a dialogue between science and spirituality is not only viable but potentially fruitful. However, as many historians have remarked, the relationship between these two domains of knowledge varies widely, ranging from more conflicting perspectives to dialogical and integrative approaches (McGrath, 2020). The conditions or prerequisites for a dialogue between these two areas are being constantly debated and redefined. But maybe the most important prerequisite is open-mindedness from both sides. Open-mindedness means here an openness to different ideas and worldviews, that is, a serious consideration of alternative or contrasting perspectives and opinions. This is not something easy or simple to achieve. Fostering communication and collaboration between diverse fields of human knowledge and activity remains a complex and challenging goal in democratic societies (e.g., Habermas & Ratzinger, 2006).

### Going Beyond Patients’ Testimonies

One of the first things to consider is that the evidence criteria of scientists are usually different from those of spiritual practitioners and patients. When a person is suffering and seeks help for her ailments, he/she is typically not worried about methodological rigorousness or degrees of evidence. She wants to be freed of what causes her pain and suffering. She may consider, at most, the credentials of the person who attends her if that person is recognized in a specific field, but she will not always have sufficient knowledge to objectively evaluate the treatment received. She knows only the effects upon her (or what she believes to be those effects).

Of course, scientists and health professionals should take patients’ perceptions of their treatment into account. Such perceptions are a fundamental part of the

whole picture. However, they are unable to tell the whole story. This is so because our perceptions are vulnerable to several cognitive and emotional biases, especially when pain, suffering, lack of meaning, or disorientation is involved. We will do our best to find meaning because this is what our lives are all about; but we may eventually find meaning in things that are not meaningful or relevant in themselves. That’s when science comes in to help us evaluate the evidence and separate what is relevant from what may appear effective but has not been rigorously demonstrated to be so.

### What is Science?

Science is a form of rigorous knowledge based on experimentation and systematic observation. Because of its enormous power, efficacy, and social influence, some may become convinced that it is the only path to knowledge. However, there are many other forms of perceiving (and thinking about) the world. Science has more to do with a certain attitude toward the data, with the methods used rather than the assumptions made. In this sense, it is not in itself materialist or spiritualist. Put otherwise, science should have no partisan bias.

That would be the ideal situation, but my colleagues from social sciences and the philosophy of science would partially disagree with me at this point because science is a human activity and, as humans, we cannot be completely neutral. Science is also about how the scientific community reaches a consensus on specific topics, a decision that is not entirely determined by empirical investigation and the methods used but which depends to a significant extent on social, political, economic, and historical factors (e.g., Kuhn, 1996). Therefore, the dialogue with spirituality rests largely on the interest of the scientific community to pursue such a relationship and see it as relevant.

Most of the training in different scientific disciplines involves the assumption of “methodological agnosticism” which requires a suspension of beliefs and ideological preferences while carrying out scientific research (Porpora, 2006). That means, in practice, that scientists and academics are routinely trained to avoid identifying possible connections between science and spirituality because this could eventually put at risk the legitimacy or scientificity of their work. Even scientists who are also spiritual practitioners may simply prefer to compartmentalize their relationship with each type of knowledge. They are scientists when doing science and spiritual believers when practicing their spiritual traditions. This is not essentially different in the case of many health professionals; for example, a significant percentage of psychiatrists

see themselves as spiritual or religious and consider spirituality important to health, but are afraid of exceeding the role of the doctor when discussing the spiritual needs of their patients and complain about the lack of adequate training to deal with such issues in clinical practice (Menegatti-Chequini et al., 2019).

A similar, but inverse, attitude to science is observed among most spiritual practitioners. Although some doctrines, theologians, and mystics have associated their spiritual teachings with scientific concepts (e.g., Swami Vivekananda, Teilhard de Chardin), this is not necessarily a fundamental factor in the endorsement of spiritual beliefs by laypersons or the regular practitioner, who often ignore the technicalities and difficulties of a debate between science and spirituality. There is also the fact that these attempts at integration may not fully adhere to the scientific concepts to which they refer or be too speculative (for example, attempts to explain spiritual experiences and phenomena by quantum physics Schweber, 2011), thus requiring further empirical confirmation and theoretical substantiation before they can be scientifically established.

### Reconciling Science and Spiritual Practices Through Health

Despite the above-mentioned challenges and limitations, there is still room for advancing the dialogue. In the field of spirituality and health, an important move was made to start a conversation between spiritual traditions or epistemologies and academics from the health sciences (Lukoff, Lu, & Turner, 1992). This field is largely based on the assumption that spiritual practices have something important to teach us, and that it is possible to learn from (and integrate) them with more secular approaches (Sheldrake, 2017). Even some atheists and non-believers now agree with such an assessment of the field (De Botton, 2012; Harris, 2014).

But as previously stated, both sides should exercise openness and collaboration for the dialogue to flourish. Spiritual practitioners should be open to understanding that their theoretical assumptions and expectations are not always amenable to scientific investigation and can even be contradicted by scientific evidence. On the other hand, scientists should be open to the possibility of certain spiritual therapies having some efficacy or validity beyond spurious or illusory effects and that such practices are relevant and meaningful to individuals in different societies, regardless of religious or non-religious affiliation. Spiritual traditions actually formed the basis through which modern systems of psychotherapy historically emerged (Shamdasani, 2005). Acknowledging these

roots is an important step in fostering dialogue between science and spirituality. But would it be reasonable to expect scientists to adhere to the existence of spirits, the afterlife, and reincarnation, all topics considered essential for spirit releasement therapy? In other words, how far can the dialogue proceed? What are the limits and conditions for such a dialogue?

This is a complex discussion that far exceeds the more limited scope of the present commentary. But some aspects of the problem can already be discerned and dealt with. Firstly, it might be useful to separate the efficacy of the spiritual treatment from the hypothesized processes that enable its occurrence. We may be able to demonstrate the former without finding sufficient evidence of the latter. Secondly, for either the efficacy or the causal mechanisms of the treatment to be rigorously investigated, we must adhere to at least four basic principles in health science: adequate operationalization of the treatment; systematic assessment of its effects and possible mediators or moderators; controllability and replicability. Depending on the characteristics of the treatment, the mechanisms hypothesized to be involved, and the quality of the research design, the conditions for satisfying each one of those principles may vary, as well as the reliability and robustness of the evidence obtained.

### MOVING THE DIALOGUE FORWARD: TRAMONT'S APPROACH AS A CASE STUDY

Nancy is careful when discussing the scientific status of Tramont's therapy. She readily acknowledges that she "is not a scientist or researcher" and that her paper "aims neither to convert anyone's beliefs nor to prove the reality of discarnate entities". In this direction, she urges readers to "focus on the positive patient results and allow the clinical testimony to speak for itself" (Smoot-Tramont, 2023, p. 725). However, her paper was published in a scientific journal. Even if the findings are preliminary, it is important to understand how rigorous evidence of the treatment's efficacy and mechanisms can be obtained and how we can advance the discussion regarding its scientific investigation. This is especially relevant in view of the scarcity of research on spirit releasement therapy in comparison to other complementary or alternative spirit-ist therapies (e.g., Luccheti et al., 2011). Below are some recommendations of methodological steps to consider in this research area to help advance the present discussion.

#### Development of a Structured Protocol

Tramont's therapy is actually a combination of many different things, of past-life regression with spirit release therapy and other holistic treatments. Although some

general principles or guidelines can be discerned in Tramont's practice (e.g., identifying whether the patient is able to achieve trance, resorting to dual sessions when this is not the case, searching for the past-life origins of present conflicts, releasing the patient from obsessive spirits), the specific procedures may vary substantially from one session to another and from one patient to another. There is no clear definition of the next steps; the decisions are made throughout the sessions, depending on what emerges from the spiritual experiences. Without a structured protocol, it will be more difficult to establish the scientific validity of Tramont's therapeutic model.

On the other hand, one could argue that the phenomena under consideration may not be easily subjected to rigorous or structured procedures. This is a reasonable observation. Even so, it might be possible to systematize and formalize certain aspects or procedures that are at this moment only preliminarily described (for example, it might be possible to better define under what circumstances certain steps should be taken or are, on the contrary, not recommended). This would help discriminate the role of each procedure in the obtained success in order to allow for a more comprehensive understanding of what exactly makes Tramont's treatment successful, at least based on the patients' testimonies.

### Assessment of Clinical Outcomes

A fundamental aspect to consider in the development of a structured protocol is the systematic assessment of clinical outcomes. The use of measurement tools such as psychological scales or inventories is extremely helpful in clinical research, especially with larger sample sizes – which will be required to allow for greater generalization of the findings. Crucially, the variables and measures should be defined before the commencement of the study, and the questionnaires completed by participants at different moments during the study, with the aim of assessing the effects of the treatment over time. Qualitative data analysis methods such as thematic content analysis of patients' reports and statistical analyses of quantitative findings are also strongly recommended, since they will allow a more objective assessment of the treatment.

For all this to be done, the outcomes – that is, the expected results of the treatment – should be clearly stated and defined. For example, in the case of patient C., he improved in a series of different aspects. But what was the purpose of the treatment? Was it the remission of alcoholism? Was it a better relationship with his wife? Although all these things are certainly interconnected, a scientific investigation of the efficacy of Tramont's therapy would require a better operationalization of the ex-

pected outcomes and the ways through which the treatment attempts to address them. This would also allow further understanding of the conditions under which the treatment can be most effective.

### Assessment of Predisposing Factors and Confounds

There are many cases in which the apparent success (or unsuccess) of the treatment results from factors that are not directly related to the treatment itself and that were not properly assessed or considered by researchers in the design of the study. For example, some individuals may evidence good mental or physical health at the beginning of the treatment, and for that reason, they will tend to evidence better outcomes in comparison to other participants. It is thus essential to assess participants' general health status or health indicators before the commencement of the therapy to allow for further statistical control of such variables or even to inform the selection of participants for the study, thereby reducing potential sampling biases.

It is also recommended to examine the psychopathological profile of these individuals to rule out an explanation of the spiritual experiences in terms of psychosis or other mental disorders. In addition, given the spiritual nature of the therapy, it is important to systematically assess participants' levels of religiosity, spirituality, and paranormal beliefs since such factors may impact the adherence to (and efficacy of) the treatment in different (and currently unacknowledged) ways.

### Controllability and Replicability

The many different techniques used in the context of Tramont's therapy also pose another challenge: the specification of an adequate control group. The golden standard in clinical research is the randomized controlled trial (or RCT). In this experimental design, participants are allocated at random to either an experimental group (which will receive the target treatment) or a control group (for comparative purposes). The definition of the control group may vary; depending on the study, participants will receive another established treatment, a placebo, or simply no treatment at all. Each group (the experimental and the control) will be independently followed during the study to identify any possible differences in outcomes between the conditions. RCT's often rely on blind protocols, so participants, researchers, and professionals do not know which participants will be allocated to which condition. These procedures allow us to reduce potential selection biases and isolate more clearly the factors that may determine the efficacy of a treatment.

Putting aside for the moment all the complex subtleties involved in the design of RCTs, we can say that, in the best-case scenario, the findings should indicate that the treatment under investigation is better than a standard health treatment or than receiving no treatment at all. In many cases, evidence indicating that a new therapy is at least similarly efficacious to standard treatment can also count as a positive finding, particularly if it is possible to show that the new therapy is beneficial to specific groups (for example, the use of religiously integrated psychotherapy with religious believers, Koenig et al. 2015).

However, problems arise with the research design or the analyses if one cannot objectively differentiate the target treatment from the control group. For some techniques, like meditation, it is sometimes difficult to determine what would be an adequate placebo (Relaxation? Guided imagery? A combination of techniques?). A similar situation applies to Tramont's treatment. In effect, various aspects of his therapy are identifiable in standard psychotherapeutic approaches, for example, a cooperative relationship with the client; positive reappraisals of adverse or traumatic experiences; attribution of meaning to otherwise disturbing or confusing experiences; a safe space for expressing negative emotions or feelings; and the use of hypnosis techniques. Of course, this is not a challenge only to Tramont's therapy but applies to virtually any psychotherapeutic model.

An important first step would be to systematically evaluate whether his therapy is at least superior to a no-treatment condition. Then, other layers of evidence could be added in subsequent studies. Many comparative groups could be used, such as, for example, other holistic or complementary treatments and standard psychotherapy (e.g., cognitive behavioral therapy). For the efficacy to be significantly evidenced, the findings should be replicated by independent researchers. Once again, the development of a structured protocol is crucial since it will facilitate the replication and comparison of findings across studies.

### Causal Mechanisms

The last and most difficult aspect to consider is certainly the investigation of the causal mechanisms of TSRT. A therapeutic technique may sometimes work for reasons that are unrelated to the theories or conceptions that gave rise to it. In Patient's F case, the positive reappraisal of the black man as a benevolent ET may have served the role of a desensitization technique based on belief change. If such an interpretation is valid, then the patient's improvement has no necessary relationship with spiritual manifestations. It wouldn't be necessary to

raise a spiritual hypothesis if more parsimonious explanations are available based on what we already know from psychology. This is important to stress not because I think that standard or secular psychotherapeutic treatments are superior to TSRT but because demonstrating the efficacy of a treatment is not always the same as demonstrating the philosophy behind it. In spiritual therapies, it is often difficult (if not sometimes impossible) to discriminate whether spiritual processes are really the cause of the symptoms or events reported by the clients or whether these individuals were led by their beliefs (or the therapist's interventions) to appraise their experiences as spiritual problems. Are we demonstrating the effectiveness of the spiritual technique *per se*, with all its metaphysical implications, or are we evidencing the power of attributional processes and beliefs in explaining, shaping, and coping with negative life experiences, regardless of their other-worldly origin?

One major challenge in the investigation of the hypothesized causal mechanisms of TSRT is the demonstration of several interrelated, metaphysical assumptions, including, among others: the existence of spirits; their influence in this world; the potential influence of those incarnated upon them – either by their own methods or with the aid of benevolent spirits –; the effectiveness of specific “releasement” techniques or procedures over others; the existence of successive lives or incarnations; the possibility of accessing memories from those lives through hypnosis; the existence of intelligent extraterrestrial beings and the reality of their communication and interaction with humans. The scientific demonstration and acceptance of all these assumptions are unlikely to occur in the short term – if such processes, phenomena, or beings are indeed genuine. It may turn out that at least some of these assumptions are beyond scientific investigation or are not empirically falsifiable. If they are taken for granted by spirit release therapy adherents, they are still highly controversial among scientists and will require a great dose of research efforts, discussions, and openness to be seriously and amply investigated and eventually accepted as real.

There are already many efforts from parapsychologists and researchers in allied fields to investigate several of the paranormal claims relevant to spirit release therapy (for example, the existence of life after death or the survival hypothesis), but if the experimental and qualitative evidence so far obtained apparently points to some scientific anomalies (regardless of their actual explanation, Rock et al., 2023), it cannot be said that it necessarily confirms a metaphysical or spiritual origin (Maraldi, 2021). The evidence is also limited in terms of potential practical uses, which discourages the creation of a whole

therapeutic model based on it. For the sake of brevity, I refer the reader to other of my publications in which the epistemological and methodological challenges in survival research and related areas were extensively discussed (Maraldi, 2017, 2021, 2023; Maraldi & Krippner, 2013).

### CONCLUDING THOUGHTS

More important than settling the debate is to keep the conversation going. We need to expand the opportunities for a dialogue between spiritual practitioners and the scientific community. Beyond the more scientific and theoretical aspects, it is also important to understand further how these discussions may impact society and public health policies and how we can bring different collaborators and perspectives to the debate. In this sense, we should not neglect the role of cultural factors. These are topics that tend to attract more attention among members of groups, cultures, or countries where religion and spirituality are seen as relevant and widespread (Maraldi & Krippner, 2019). The decisions that may serve certain cultures may be hard to replicate elsewhere. The question of whether it is possible to achieve a universal consensus on these topics is still open. There are many alternatives to the relationship between science, health, and spirituality (McGrath, 2020). The most important thing to consider is the autonomy of science and the autonomy of spirituality. One should not be reduced to the other, but they can cooperate and eventually enrich each other.

### REFERENCES

De Botton, A. (2012). *Religion for atheists: A non-believer's guide to the uses of religion*. Pantheon Books.

Demir, E. (2019). The evolution of spirituality, religion and health publications: Yesterday, today and tomorrow. *Journal of Religion and Health*, 58(1), 1-13. <https://doi.org/10.1007/s10943-018-00739-w>

Ellis, A. (1980). Psychotherapy and atheistic values: A response to A. E. Bergin's, "Psychotherapy and religious values.". *Journal of Consulting and Clinical Psychology*, 48, 635-639. <https://doi.org/10.1037/0022-006X.48.5.635>

Farias, M., Maraldi, E., Wallenkampf, K.C., & Lucchetti, G. (2020). Adverse events in meditation practices and meditation-based therapies: A systematic review. *Acta Psychiatrica Scandinavica*, 142(5), 374-393. <https://doi.org/10.1111/acps.13225>

Freud, S. (1927). The future of an illusion. In J. Strachey (Trans. and Ed.) *The standard edition of the complete psychological works of Sigmund Freud*, Vol. 21. Hogarth Press.

Habermas, J. & Ratzinger, J. (2006). *The dialectics of secular-*

*ization: On reason and religion*. Ignatius Press.

Harris, S. (2014). *Waking up: A guide to spirituality without religion*. Simon and Schuster.

Koenig, H. G., Pearce, M. J., Nelson, B., Shaw, S. F., Robins, C. J., et al. (2015). Religious vs. conventional cognitive behavioral therapy for major depression in persons with chronic medical illness: A pilot randomized trial. *Journal of Nervous and Mental Disease*, 203 (4), 243-251. <https://doi.org/10.1097/NMD.0000000000000273>

Kuhn, T. S. (1996). *The structure of scientific revolutions* (3° ed). University of Chicago Press (Originally published in 1962). <https://doi.org/10.7208/chicago/9780226458106.001.0001>

Lucchetti, G., Lucchetti, A. L. G., Bassi, R. M., & Nobre, M. R. S. (2011). Complementary spiritist therapy: Systematic review of scientific evidence. *Evidence-Based Complementary and Alternative Medicine*, 2011, 1-19. <https://doi.org/10.1155/2011/835945>

Lukoff, D., Lu, F. & Turner, R. (1992). Toward a more culturally sensitive DSM-IV: Psychoreligious and psychospiritual problems. *Journal of Nervous and Mental Disease* 180, 673-682. <https://doi.org/10.1097/00005053-199211000-00001>

Maraldi, E. O. (2017). The scientific investigation of anomalous self and identity experiences. *Journal of Nervous and Mental Disease*, 205, 900. <https://doi.org/10.1097/NMD.0000000000000762>

Maraldi, E. O. (2020). Spirituality and wellbeing: is there a necessary link? Toward a critical approach to the study of spirituality. In B. Schmidt & J. Leonardi (Eds.), *Spirituality and wellbeing: Interdisciplinary approaches to the study of religious experience and health*, (pp. 19-43), Equinox Publishing Home.

Maraldi, E. O. (2021). *Parapsychology and religion*. Brill. <https://doi.org/10.1163/9789004467835>

Maraldi, E. O. (2023). The varieties of afterlife experience: Epistemological and cultural implications. *International Journal of Transpersonal Studies*, 42(1), 27-31. <https://doi.org/10.24972/ijts.2023.42.1.27>

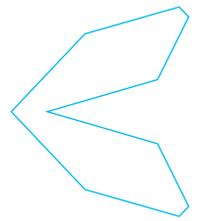
Maraldi, E. O., & Krippner, S. (2019). Cross-cultural research on anomalous experiences: Theoretical issues and methodological challenges. *Psychology of Consciousness: Theory, Research, and Practice*, 6(3), 306-319. <https://doi.org/10.1037/cns0000188>

McGrath, A. E. (2020). *Science and religion: A new introduction*. Wiley-Blackwell.

Menegatti-Chequini, M. C., Maraldi, E. O., Peres, M. F. P., Leao, F. C., & Vallada, H. (2019). How psychiatrists think about religious and spiritual beliefs in clinical practice: Findings from a university hospital in Sao Paulo, Brazil. *Brazilian Journal of Psychiatry*, 41, 58-65. <https://doi.org/10.1590/1516-4446-2017-2447>



- Moreira-Almeida, A. & Cardeña, E. (2011). Differential diagnosis between non-pathological psychotic and spiritual experiences and mental disorders: A contribution from Latin American studies to the ICD-11. *Brazilian Journal of Psychiatry*, 33 (suppl 1), 21-28. <https://doi.org/10.1590/S1516-44462011000500004>
- Moreira-Almeida, A., Sharma, A., van Rensburg, B. J., Verhagen, P. J., & Cook, C. C. H. (2016). World Psychiatric Association position statement on spirituality and religion in psychiatry. *World Psychiatry*, 15 (1), 87-88. <https://doi.org/10.1002/wps.20304>
- Porpora, D. (2006). Methodological atheism, methodological agnosticism, and religious experience. *Journal for the Theory of Social Behaviour*, 36, 57-75. <https://doi.org/10.1111/j.1468-5914.2006.00296.x>
- Rock, A., Houran, J., Tressoldi, P. E., & Laythe, B. (2023). Is biological death final? Recomputing the Drake-S equation for postmortem survival of consciousness. *International Journal of Transpersonal Studies*, 42(1), 9-26. <https://doi.org/10.24972/ijts.2023.42.1.9>
- Schweber, S. (2011). Book review of How the hippies saved physics: Science, counterculture, and the quantum revival. *Physics Today*, 64 (9), 59-60. <https://doi.org/10.1063/PT.3.1261>
- Shamdasani, S. (2005). Psychotherapy: The invention of a word. *History of the Human Sciences*, 18(1), 1-22. <https://doi.org/10.1177/0952695105051123>
- Sheldrake, R. (2017). *Science and spiritual practices: Reconnecting through direct experience*. Hodder & Stoughton.
- Smoot-Tramont, N. (2023). From 'baby doctor' to 'witch doctor': A retrospective of Charles Tramont's work with spirit releasement therapy. *Journal of Scientific Exploration*, 37(4), 724-736.
- VanderWeele, T. J., Balboni, T. A., & Koh, H. K. (2017). Health and spirituality. *JAMA*, 318 (6), 519-520. <https://doi.org/10.1001/jama.2017.8136>



**SPECIAL  
SUBSECTION  
COMMENTARY**

# The Neuroscience of Spirits: A Spark in the Dark

**Peter Brugger**

peterbrugger.ch@gmail.com  
orcid.org/0000-0002-5137-0314

## HIGHLIGHTS

Rather than prove the paranormal, testimonials about anomalous experiences during spirit releasement therapy arguably support biomedical explanations.

## KEYWORDS

History of hypnosis, history of hypnotherapy, neurology of spirit possession.

<https://doi.org/10.31275/20233245>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

[S]pirits only dwell in the cerebral cells.  
Beard, (1879). (p. 67)

It is not easy to classify Nancy Smoot Tramont's Target Article. Is it a testimonial of a religious delusion? Is it the report of a husband-wife *folie-à-deux*, nourished by electrical discharges in the mesial temporal lobes (Persinger, 1987)? Or is it simply a widow's romantic and kitschy text memorial of her deceased husband's esoteric life? Be it as it may, the fact that I do not have to comment on a scientific text frees me from having to stick to orthodox rules of commentary writing. My text will present what Tramont promised to present (Smoot-Tramont, 2023) but somehow omitted, that is, very brief histories of each (1) hypnosis and hypnotherapy, (2) spirit possession, and (3) academics' life transitions. I will write from a cognitive neuroscience perspective and conclude that the thoughts developed in the target article do not make

a useful contribution to the scientific literature.

## Hypnosis and Hypnotherapy: A Very Brief History

Early work on hypnosis and hypnotherapy already harshly criticized the esoteric mud, in which many 19<sup>th</sup>-century therapists, amateur or professional, loved to wallow. Particularly mesmerizing is Robertson's (2008) compilation of the complete writings of James Braid, the father of hypnotherapy<sup>1</sup>. It contains essays, reports, and pamphlets giving testimony to a modern and enlightened view of hypnotic phenomena, free of the dark side of spirituality into which the Tramonts have obviously fallen back. Criticizing the precursor of hypnotism, animal magnetism, Braid made fun of those who believed that magnetic energies were needed to induce those states of the mind, whose value for therapeutic purposes he never denied. Likewise, the often religiously nourished critique of a "Satanic agency" underlying hypnotic trance was mocked about by Braid (1842, in Robertson, 2008 p. 376-381), who would never succumb to the view that



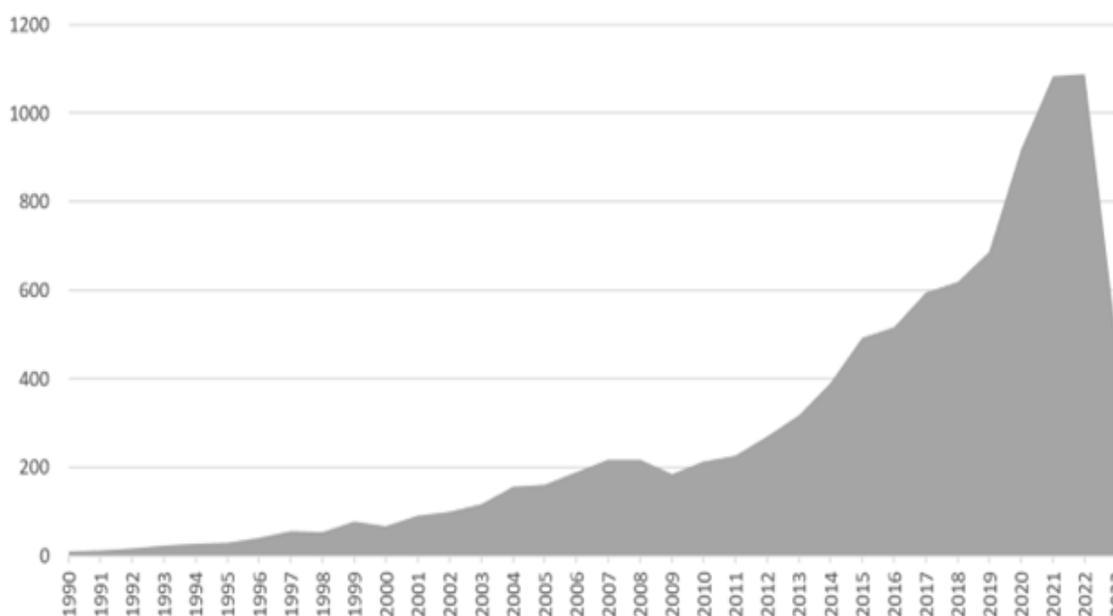
“outside forces” mentioned by a hypnotized individual would be “outside” in a literal sense (as assumed by the Tramonts in the case of her and her husband’s clients). Braid strongly rejected “dark-side-views” in many fields of the borderlands of science. Thus, he considered clairvoyance a fallacy,<sup>2</sup> designated homeopathy a “palpable absurdity” (Braid, 1853; cited in Robertson, 2008, p. 107; 108). On the other hand, he presented a visionary anticipation of the notion of a placebo (Braid, 1853; cited in Robertson, 2008, p. 271). Coining the term “neurypnology” or “neuro-hypnotism”, Braid (1843) clearly recognized the neural basis of hypnotic phenomena and evidently convinced neurologists of his time to take the matter seriously (e.g., Beard, 1881; see also Oakley and Halligan, 2013, who review the more modern literature). Yet, while the cerebral basis and the neural correlates of hypnotic suggestion and trance phenomena are important for the understanding of what happened to the Tramonts and their patients, neuroscience alone cannot provide the sole “explanation”. Some notes in the target article on cultural variations among individual patients are indeed interesting (Smoot-Tramont, 2023, p. 729; differences between the US versus Russia/Eastern Europe patients). Anthropological studies can provide novel frameworks to better understand hypnotic interventions and possession states in natural settings (Ravenscroft, 1965; Bhavsar et al., 2016).

### Spirit Possession: A Very Brief History

In combination, the terms “spirituality” (or “spiritual”) and “science” (or “scientific”) are used with a steadily increasing frequency in the biomedical literature (Fig. 1). I emphasize this to show that there is by no means a disinterest in the topic from the part of established science. On the contrary, the importance of scientific investigations of spiritual belief for illuminating how the brain works in health and disease is increasingly appreciated (cf. Brugger and Mohr, 2008).

Historically, neurology has long been a forerunner in this respect (see Brown, 1983; Hammond, 1876 for reviews of the early literature). While some of the early work was devoted to the physics and physiology of spiritualism in the narrow sense, i.e., procedures to mediate the purported communication with the deceased (e.g., Hammond, 1870; Faraday, 1853), modern studies are more concerned with the relation between spirit possession phenomena and concepts of personhood and intentionality (e.g., Rashed, 2020).

Most stimulating, from a neurocognitive stance, are studies that show how brains (or nervous systems, more generally) enable persons to develop a sense of self and under which conditions such a sense is lost. Phenomena of “alien control” and the hearing of voices (auditory-verbal hallucinations) are as relevant as is spirit possession in the narrow sense (Blakemore et al., 2003; Polito et al., 2018; Stephan-Otto et al., 2023). Work on the functional neuroanatomy of possession phenomena (Deeley et al., 2014) has illuminated our current-day conceptu-



**Figure 1.** Frequency of publications containing the terms “spirituality” (or the adjective “spiritual”) and “science” (or the adjective “scientific”) between 1990 and 2023 according to PubMed (total entries = 8450). Note: Before 1990, the number of annual publications was less than 10, adding up to a total of 7683 publications between 1886 and 1989

alizations of the borderlands between self and nonself. It illustrates how heterogeneous the cognitive processes underlying the feeling of a unified sense of self are. Naïve notions of spirits as outside agents abound all over the world. Tramont's thoughts about spirits reflect the belief in an objective nature of "attached discarnate entities" as it is shared by many cultures (Pfeifer, 1994). Tramont does barely consider that spirits are creations of the human mind, haunting merely subjective planes (see opening citation by 19<sup>th</sup>-century American neurologist George Beard). In this respect, the lengthy patient reports<sup>3</sup> are worthless if not counterproductive: who tells which dark force had originated in an individual patient and which in the Tramonts' brains? Reportedly, all patients were "open-minded" (Smoot-Tramont, 2023, p. 729), but while Tramont understands this term in an everyday sense, the context suggests otherwise: I see it synonymous with "naïve", "gullible" and "craving for crap".

Such dark thoughts may be interesting from the perspective of a sociology of science or from a clinical point of view. They illustrate the broad range and the extraordinary persistence of popular delusions (Tramont deals with past life regression, communication with the dead, prophetic dreams, extraterrestrial influences, etc.). Already Mackay (1841) opened his chapter on animal magnetism as the precursor of hypnosis with the phrase, "The wonderful influence of imagination in the cure of diseases is well known". But as imaginative as Tramont's thoughts may be, they do not contribute novel aspects to the fields of hypnosis or hypnotherapy. Paraphrasing Mackay (1841), they definitely belong to the "madness of crowds".

### Academics' Life Transitions: A Very Brief History

As admirable life as transitions can theoretically be, they are devastating if a medical doctor's appreciated clinical work is gradually replaced by theorizing about ostensibly paranormal phenomena. Charles Tramont's transition "from baby doctor to witch doctor" (subtitle of target article), follows a sad developmental trajectory. But it is not unique. Similarly, sad transitions can be found in the lives of many a scientist. I may refer to an especially impressive example, to the case of Ludwig Staudenmaier (1865-1933), a Bavarian priest and later a professor of chemistry. One day, he made contact with the dark forces of spirit communication and gradually advanced from a spiritistic medium into a full-blown state of psychosis (Brugger, 2001). There are other autopathographic records by academics (e.g., Fehrlin, 1912/2022; Fusar-Poli et al., 2022 for some references), each providing a lively picture of the many faces of cognitive disintegration. Particularly valuable are individual life transitions if they reveal

the processes and mechanisms underlying mass delusions – Mackay's (1841) "madness of crowds". They allow us to track down the neural basis of idiosyncratic beliefs that ultimately spread to subcultures and whole societies – "from haunted brain to haunted science" (Brugger, 2001). James Braid's transition from a skillful and highly reputable surgeon to a pioneer in both pharmaceutical and hypnotic analgesia and finally to the founder of modern hypnotherapy (Kravis, 1988) reads perhaps less romantic and less dramatic. But it reflects a more healthy development, one from darkness to light.

### ENDNOTES

1. In the present context of Charles Tramont's origin in obstetrics, a note on the application of hypnosis to childbirth appears worthy to be mentioned (Baird, 1853; p. 107 in Robertson, 2008).
2. Actually, he offered a substantial sum of money to anyone who would be able to prove the existence of extrasensory, or dark forces beyond doubt. He thus anticipated James Randi's famous one million dollar offer to any person demonstrating a genuinely supernatural or paranormal ability (Anonymous, 2008).
3. My favorite case is that of the vet, who had tortured animals in one of his previous lives, and whose foreign energy was now hovering as a Reptilan above him (p.xx) – what a rich combination of esoteric, paranormal, and psychoanalytic superstitions!

### REFERENCES

- Anonymous. (2008). Time is running out for paranormal prize. *Nature*, 451, 235. <https://doi.org/10.1038/451235e>
- Beard, G. M. (1879). The psychology of spiritism. *North American Review*, 129, 65-80.
- Beard, G. M. (1881). The phenomena of trance. *Med Rec* 19, 183.
- Bhavsar, V., Ventriglio, A., & Bhugra, D. (2016). Dissociative trance and spirit possession: Challenges for cultures in transition. *Psychiatry and Clinical Neurosciences*, 70, 551-559. <https://doi.org/10.1111/pcn.12425>
- Blakemore, S.-J., Oakley, D. A., & Frith, C.D. (2003). Delusions of alien control in the normal brain. *Neuropsychologia*, 41, 1058-1067. [https://doi.org/10.1016/S0028-3932\(02\)00313-5](https://doi.org/10.1016/S0028-3932(02)00313-5)
- Braid, J. (1843). *Neurypnology or the rational of nervous sleep considered in relation with animal magnetism illustrated by numerous cases of its successful application in the relief and cure of disease*. John Churchill.
- Braid, J. (1853). Hypnotic therapeutics: Illustrated by cases with an Appendix on table-moving and spirit rapping. *Monthly Journal of Medical Science*, 17, 14-47.

- Brown, E. M. (1983). Neurology and spiritualism in the 1870s. *Bulletin of Historical Medicine*, 57, 563-577.
- Brugger, P. (2001). From haunted brain to haunted science: A cognitive neuroscience view of paranormal and pseudoscientific thought. In J. Houran & R. Lange (Eds.): *Hauntings and poltergeists: Multidisciplinary perspectives*. (pp. 195-213). McFarland.
- Brugger, P., & Mohr, C. (2008). The paranormal mind: How the study of anomalous experiences and beliefs may inform cognitive neuroscience. *Cortex*, 44, 1291-1298. <https://doi.org/10.1016/j.cortex.2008.05.008>
- Deeley, Q., Oakley, D. A., Walsh, E., Bell, V., Mehta, M. A., & Halligan, P. W. (2014). Modelling psychiatric and cultural possession phenomena with suggestion and fMRI. *Cortex*, 53, 107-119. <https://doi.org/10.1016/j.cortex.2014.01.004>
- Faraday, M. (1853). Experimental investigation of table moving. *The Athenaeum: Journal of English Foreign Literature, Science, and the Fine Arts*, 1340, 801-803.
- Fehrlin, K. (1912). *Die Schizophrenie*. Edited and translated by Luchsinger, K., & Specht, R. (2022). *Die Schizophrenie. Kommentierte Neuauflage mit schriftdentscher Übersetzung*. Chronos.
- Fusar-Poli, P., Estradé, A., Stanghellini, G., Venables, J., Onumere, J., et al., (2022). The lived experience of psychosis: a bottom-up review co-written by experts by experience and academics. *World Psychiatry*, 21, 168-188. <https://doi.org/10.1002/wps.20959>
- Kravis, N. M. (1988). James Braid's psychophysiology: A turning point in the history of dynamic psychiatry. *American Journal of Psychiatry*, 145, 1191-1206. <https://doi.org/10.1176/ajp.145.10.1191>
- Hammond, W. A. (1870). The physics and physiology of spiritualism. *North American Review*, 110, 233-260.
- Hammond, W. A. (1876). *Spiritualism and allied causes and conditions of nervous derangement*. Putnam's Sons.
- Mackay, C. (1841). *Extraordinary popular delusions and the madness of crowds*. Richard Bentley.
- Oakley, D. A., & Halligan, P. W. (2013). Hypnotic suggestion: Opportunities for cognitive neuroscience. *Nature Reviews Neuroscience*, 14, 565-576. <https://doi.org/10.1038/nrn3538>
- Persinger, M. A. (1987). *Neuropsychological bases of god beliefs*. Praeger.
- Pfeifer, S. (1994). Belief in demons and exorcism in psychiatric patients in Switzerland. *British Journal of Medical Psychology*, 67, 247-258. <https://doi.org/10.1111/j.2044-8341.1994.tb01794.x>
- Polito, V., Barnier, A. J., & Connors, M.H. (2018). Hypnotic clever hands: Agency and automatic responding. *Journal of Experimental Psychology: General*, 147, 815-828. <https://doi.org/10.1037/xge0000451>
- Rashed, M.A. (2020). More things in heaven and earth: Spirit possession, mental disorder, and intentionality. *Journal of Medical Humanities*, 41, 363-378. <https://doi.org/10.1007/s10912-018-9519-z>
- Ravenscroft, K. (1965). Voodoo possession: A natural experiment in hypnosis. *International Journal of Clinical and Experimental Hypnosis*, 33, 157-182. <https://doi.org/10.1080/00207146508412938>
- Robertson, D. (2008). *The discovery of hypnosis: The complete writings of James Braid, the father of hypnotherapy*. National Council for Hypnotherapy Ltd.
- Smoot-Tramont, N. (2023). From 'baby doctor' to 'witch doctor': A retrospective of Charles Tramont's work with spirit release therapy. *Journal of Scientific Exploration*, 37(4), 724-736.
- Stephan-Otto, C., Nunez, C., Lombardini, F., Cambra-Marti, M. R., Ochoa, S., Senior, C., & Brebion, G. (2023). Neurocognitive bases of self-monitoring of inner speech in hallucination prone individuals. *Scientific Reports*, 13, Article 6251. <https://doi.org/10.1038/s41598-023-32042-4>



**SPECIAL  
SUBSECTION  
COMMENTARY**

# Commentary on “From Baby Doctor to Witch Doctor”

**Robert D. Klauber**

bobklauber@yahoo.com

Maharishi International University

## HIGHLIGHTS

Non-physical beings, such as those considered in spirit releasement therapy, could conceivably exist without contradicting modern physics.

## KEYWORDS

Standard model, elementary particle theory, subtle bodies, subtle realms, non-material realms, dark matter, other universes.

<https://doi.org/10.31275/20233019>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

The Target Article by Tramont (2023) is probably at, or beyond, the “boggle threshold” of most people, even many readers of this *Journal*. I believe that may be the reason the Editor-in-Chief asked me, a physicist, to comment on it. In particular, I suspect he, and readers, wonder if the things Tramont reports are, in fact, possible. More specifically, does modern science, particularly physics, refute such things unequivocally or not? Is there any opening, in our most fundamental and material-centric science, by which the non-material entities described by Tramont could actually exist?

There are two levels to this question: (1) According to physics, can trans-physical levels of creation, replete with intelligent beings, exist? and (2) Do some of these levels actually exist and contain entities like those described by Tramont? The second of these questions I am in no position to answer. The first, I address herein. I discussed a closely related issue in Klauber (2000). The reader may wish to read that article in tandem with this one.

In the interest of full disclosure, I note that, though I am a physicist, I am not a materialist. Ontologically, though ultimately agnostic regarding the essential nature of our existence, I lean towards idealism, which I believe best resolves thorny philosophical issues such as the hard problem of consciousness, and which comprises the simplest explanation for certain experiences I have had. But my personal feelings in that regard should play little role in addressing the physics related to question 1 above.

## SOME PHYSICS BACKGROUND

The idea that no two objects can occupy the same place at the same time lies at the foundation of the belief, by many, that ghosts, spirits, and the like cannot possibly be real. After all, the thinking goes, can anything which purportedly passes through doors and otherwise cohabits the same space as other objects in our world possibly exist?

Scientifically, this perspective is so nineteenth-century. Since the dawn of quantum mechanics a hundred or



so years ago, we have known that elementary particles of matter are actually wavelike and that two or more waves can readily occupy the same region of space at the same time. When doing so, they may or may not, interact with one another. In the former case, the waves/particles exert a force between themselves and thereby exchange energy, momentum, and possibly other things we won't delve into here. In the latter case, no force is exerted, and the waves/particles simply co-exist and remain unchanged.

When large numbers of microscopic waves/particles exert forces between themselves, the force can manifest macroscopically. This is what typically happens in the world as we experience it. The waves/particles making up my hand do not pass through the computer mouse I am currently touching, because the enormous number of electron waves in my hand and those in the mouse exert many small forces against one another. These add up to keep my hand on the surface of the mouse and not interior to it.

But, there are exceptions. You may have heard something to the effect that a trillion or so neutrinos (one type of elementary wave/particle) pass through your body every second. Yet, you feel nothing. The reason is that the neutrino waves, for all intents and purposes, do not interact with (exert force on or “collide” with) the normal matter-type waves in your body. To be precise, they interact so slightly that only very rarely, perhaps a handful of times during your lifetime, do they actually collide. You don't feel these occasional occurrences because each collision (interaction) is with only one-minute wave/particle in your body out of trillions upon trillions of them.

There is actually another type of neutrino that doesn't interact at all with our world. (Gravitational interaction excepted, but that is so slight, it is far, far below the level any measurement we could carry out could detect.) The point is, our theory tells us that waves/particles exist that are truly “ghostlike”. They pass through doors, people, and the entire planet with ease.

The difference between waves/particles that interact with one another and those that don't have to do with what is called “coupling”. Are the two particle types coupled to one another or not? If they are not, nothing happens. The waves/particles remain inviolate and unaltered. If they are, the coupling can be robust (like between the electrons in my hand and those in the mouse) or feeble (like the first type of neutrino described above and the waves/particles in our bodies). Robust, feeble, or no coupling at all – the degrees to which waves/particles can interact (exert force on one another).

Beyond the degree of interaction *strength*, there is interaction *type*, of which there are four known to modern physics. The former is a quantitative distinction; the lat-

ter, is qualitative. Two of the types, the electromagnetic and gravitational interactions, are familiar in our macroscopic world. Two, the strong and weak forces, are predominantly subatomic.<sup>1</sup> The entire physical universe, as we know it, was created, and is driven and maintained, via these four types of interaction.

So, we have a group of elementary particles (electrons, neutrinos, quarks, photons, and a few others) that interact with one another via four types of forces, to varying degrees. That is the essence of the world we know, see, touch, and feel. The nature of that world is determined by the nature of the coupling each of the elementary particle types has with the four different forces. The theory describing these particles and the four forces is called the *standard model*.

In the standard model (Klauber, 2021), quarks are coupled to (interact via) all four forces: electrons via three of them, one type of neutrino, via two; and the other, via one. Some of these couplings are robust. Some are feeble. Some are zero, as in the cases of one coupling type for the electron and two or three for neutrinos. If these couplings were different in quality or strength, our universe, if it could even exist, would be much, much different.

## DARK MATTER AND DARK ENERGY

Few readers of this article have not heard of dark matter and dark energy—the hypothesized invisible “somethings” that make up 95% of the mass-energy content of our universe, but of which, we know little. We cannot see either, but we can detect them from the gravitational effects they have on the universe via supernovae, motions of galaxies, and the cosmic microwave background radiation, the leftover light from shortly after the Big Bang. They do not interact with our world, at least to any degree that we have been able to measure, via any of the three non-gravitational forces. Their electromagnetic, weak, and strong couplings are either extremely feeble or zero.

Dark matter, though invisible, acts like normal matter in the sense that it attracts other matter. Dark energy, on the other hand, acts like anti-gravity in the sense that it repels normal matter. No one knows of what they are made, but not for lack of trying. Huge sums of money, and extraordinary amounts of time and effort, have been spent in attempts to detect dark matter particles and determine what they are. All such efforts have, to date, come up empty.

Dark matter particles are more ghostlike than neutrinos. We have yet to find any way they interact with normal matter other than gravitationally. They pass through us all the time, but we are totally oblivious to them. So, what could they be?

In the early days of dark matter detection research, there were several candidate particles, cousins of standard model particles, going by such names as WIMPS, Wimpzillas, lightest SUSY particle, micro charged particles, and axions. (Understanding what these terms stand for is not necessary for this article.) Experiments so far have cast doubts on the viability of the first three of these, and little experimentation has been done for the fourth or fifth.

There is growing concern among elementary particle physicists that dark matter may only interact gravitationally, in which case, we could never detect it via experiments on Earth or in space. In such a case, we would never know much more than we know about it now— that it is some otherwise mysterious particle type coupled to our known universe solely through the gravitational force.

However, there is an intriguing wrinkle on this perspective that has garnered rudimentary, though growing, interest in the physics community. It segues us into the central point of this article.

## POSSIBLE DARK MATTER WORLDS

Some (e.g., Loeb, 2022) have suggested that dark matter may not be a single particle but a family of particles that (other than gravity) do not interact with our known universe, but do interact with one another. In other words, (other than gravity) dark matter is not coupled to standard model particles, but instead, has its own types of interaction that only work between dark matter particles. There could be three, or four, or five, or whatever different types of interactions. These could then, independent of us, form their own universe, with dark matter stars (Sutter, 2023), planets, and possibly even living things. Such living things could evolve into intelligent beings, never aware of our presence, even though we would occupy the same space as them, at the same time. They would never be aware, that is, until perhaps one day when they notice gravitational effects from our universe on theirs. For them, we would be the “dark matter”. Those in their universe and those in ours would have some dim awareness of the other’s existence, but never much more than that. Each would be ghostlike for the other.

## PHYSICS AND SUBTLE REALMS

This all opens up an enormous range of possibilities. Imagine, for example, a family of particle types different from those with which we are familiar, which are completely uncoupled from the four forces of the standard model, even from gravity. They would have their own set of interactions, their own “standard model”, which generated its own universe, independent of ours. And this uni-

verse could well spawn intelligent species.

If this could happen once, why not many times? Why not a near-infinite number of times? Untold universes, unfolding, whose inhabitants have no, or perhaps at best dim, awareness of any of the others.

If there is one such other family, why not many? If the universe favors anything, it favors unimaginably large numbers. Since, as we suppose, there are an uncountable number of galaxies (including those beyond our horizon of visibility) and, as many theorists propose, an uncountable number of other possible universes, then why not an uncountable number of other independent particle families? In the very place where you, the reader, now sits, there may now also sit a near-infinite number of other sentient beings, some of whom might also be pondering the sensory limitations of their particular version of [the standard model] (Klauber, 2000, p. 278)

Now imagine that one or more of these other worlds is somehow slightly coupled to ours. Perhaps something on the order of one-thousandth or one-millionth the coupling strength of the electromagnetic force (Hagelin, 2005). Maybe this other realm (or realms) and ours shared a common genesis, born at the same time and evolving together, with intermittent interplay between them.

This coupling, as Hagelin (2005) and I (Klauber, 2000) suggest, might somehow be tied in with consciousness. Some beings might be endowed with, or learn, the ability to modify certain interactions (strength, type, number of particles, etc.) such that they could, at least at times, impact other worlds in some manner. They might connect via interaction types that are only activated through consciousness. Or they may have subtle bodies (astral, causal, or other), which some literature links to consciousness itself, composed of particles that, due to their coupling types and strengths, cause such bodies to seem otherworldly to us. Such beings could be like those Tramont describes - ethereal, but not totally so.

And why not other concepts beyond those of spirits, angels, astral planes, subtle bodies, and ETs, such as heaven and hell, near-death tunnels, auras, and other “dimensions.” Why not?

## THE BOTTOM LINE

I conclude by first citing my own words (Klauber, 2000, p. 279):

*... note we certainly have not proven that subtle realms [with living agents such as Tramont de-*

scribes] actually exist. Yet we must bear in mind that in the long history of mankind’s numerous metamorphoses in paradigm, the universe has repeatedly surprised us by being far more extraordinary and expansive in every regard than we had previously imagined (or even, as some have said, than we can imagine.) Given such a history, it would seem prudent to proceed carefully and without prejudice in matters of purported metaphysical nature, and draw conclusions based on empiricism alone. In particular, no proponent of materialism should ever denounce as scientifically indefensible, claims made by others regarding the possible existence of non-physical realms [or beings]. As we have seen, modern physics imposes neither a limit on the probability for the existence of such transcendental [entities], nor restrictions on their nature, total number, or ultimate extent.

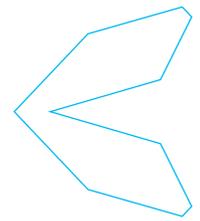
In short, yes, the existence of living beings such as those described by Tramont is possible. They are not precluded by extant theories of physics.

## ENDNOTE

1. We use the words “feeble” and “robust” herein to designate relative strength between forces. Hopefully, this will minimize confusion with the use of the words “weak” and “strong” in elementary particle theory to distinguish between types of interactions. As one might surmise, the weak force is generally less robust than the strong force. The electromagnetic force is quite robust; the gravity force, quite feeble.

## REFERENCES

- Hagelin, J. (2005). An interview with John Hagelin by Cate Montana, *The Bleeping Herald*, [www.quantumfieldtheory.info/Hagelin\\_Dark\\_Matter\\_interview.pdf](http://www.quantumfieldtheory.info/Hagelin_Dark_Matter_interview.pdf)
- Klauber, R. D. (2000). Modern physics and subtle realms: Not mutually exclusive. *Journal of Scientific Exploration*, 14(2), 275–279. [https://www.scientificexploration.org/docs/14/jse\\_14\\_2\\_klauber.pdf](https://www.scientificexploration.org/docs/14/jse_14_2_klauber.pdf).
- Klauber, R. D. (2021). *Student friendly quantum field theory Volume 2: The standard model*. Sandtrove Press.
- Loeb, A. (2022). Life not as we know It: Probing the nature of dark matter. *The Debrief*, <https://thedebrief.org/life-not-as-we-know-it-probing-the-nature-of-dark-matter/>.
- Sutter, P. (2023). Strange star system may hold first evidence of an ultra-rare ‘dark matter star’. *Live Science*. <https://www.livescience.com/space/black-holes/strange-star-system-may-hold-first-evidence-of-an-ultra-rare-dark-matter-star>.
- Smoot-Tramont, N. (2023). From ‘baby doctor’ to ‘witch doctor’: A retrospective of Charles Tramont’s work with spirit releasement therapy. *Journal of Scientific Exploration*, 37(4), 724-736.



**SPECIAL  
SUBSECTION  
COMMENTARY**

# Meaning Responses and “Rituals of the Mind”? A Nuanced Critical Analysis of an Unconventional Therapeutic Approach

**Madeleine Castro**

Senior Lecturer  
Leeds Beckett University  
m.a.castro@leedsbeckett.ac.uk

## HIGHLIGHTS

Cultural narratives and alternative ideas about rituals and ‘meaning responses’ can help to explain the beneficial changes reported after some unconventional therapies.

## KEYWORDS

Sociocultural frameworks, meaning responses, placebo, ritual, shamanic traditions.

<https://doi.org/10.31275/20233179>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

I am a sociologist and critical social psychologist with an agnostic position towards past lives, spirit, mind fragments, and entity attachments. In response to the target article, I am interested in both the way Charles Tramont’s (CT) approach is depicted and the implications. This includes how CT reportedly understood his clients and their presenting complaints and how matters are framed and thus become comprehensible in a wider context. I begin with a narrow focus, considering issues of ethics and efficacy vis-à-vis regression hypnosis and spirit release techniques. Subsequently, a broader lens aids consideration of patients’ framing in particular sociocultural narratives while also considering alternative understandings. I explore the power of ritual and the *potential* transformative and therapeutic benefits of CTs approach, which leads to an exploration of the ‘placebo effect’, healing responses, and matters of selfhood. While CTs therapy may have

limits, caveats, or problems, I aim to be respectful to the author of the target article, CT, and those who consulted and trusted him and his methods. First, I will outline various observations from the target article to provide a point of departure for my response.

CT was a retired obstetrician and gynecologist turned hypnotherapist who became interested in ‘spirit release therapy’ (SRT) and ‘past-life regression’ (PLR) as tools to aid his clients, predominantly to discern and remove alleged ‘dark entity attachments’ (Smoot-Tramont, 2023, p. 724). CTs’ patients discovered him through word of mouth (p. 725) and various media (including interviews, talks, and books), which popularized his approach and techniques (p. 725). This implies that patients went into treatment understanding CTs perspective. The target article details several patient stories alongside the author’s role as ‘spirit guide’ or conduit (p. 728). Patients present with mostly conventional complaints rather than ‘spirit possession’, including ‘troubling relationships,



undesirable habits, emotional or medical issues, etc.' (p. 726), 'addictions, insomnia, anger' (p. 728), 'digestion issues and opiate dependency alongside alcohol addiction, emotional fog' (p. 729), 'panic attacks, migraines, fear' (p. 730) 'physical, emotional and personal issues... anxiety, depression, lack of self-confidence, back pain' (p. 730), 'history of abusive relationships' (p. 733). These are recast as matters of spirit, entity, or mind fragment attachment, revealed under either individual PLR (e.g., pp. 731-732) or by the author's 'spirit guide' who identifies the number and type of attachments (e.g., p. 732). CT then conducted the release or removal of these 'entities'.

### Ethical and Efficacy Issues Surrounding Regression Hypnosis and Spirit Release Techniques

CT's approach 'eschews traditional biomedical or psychological practices in favor of a hypnotherapeutic approach' (Smoot-Tramont, 2023, p. 725). This establishes CTs positioning in opposition to conventional approaches. Although hypnotherapy is now considered mainstream, e.g., for phobias, PLR is more controversial (Stevenson, 1994). While countless therapists promote PLRs' personal growth and healing benefits, e.g., Carol Bowman and Roger Woolger, there are scholars who advise caution (e.g., Baker, 1982; Spanos et al., 1991; Stevenson, 1994). Critical concerns center on the veracity of PLs or reincarnation (Stevenson, 1994) and the propensity for suggestibility (Andrade, 2017; Baker, 1982; Spanos et al., 1991). While advocates suggest PLR is a 'light trance' state, which requires active client participation (Bowman, n.d.), some claim that 'false' matters can easily be 'planted' by the practitioner (e.g., Baker, 1982; Spanos et al., 1991). In the 1990s, regression hypnosis seemingly produced 'false recollections of sexual abuse' (Lacey, 1994: online), which has undoubtedly tarred its reputation. Practitioners, such as CT, will, therefore, be subject to reproach regarding matters of suggestibility and undue influence. In this vein, Andrade (2017) argues that PLR is unequivocally unethical because of the 'false memories' risk and because there is 'no evidence' for past lives.

However, while indisputable 'scientific' evidence for reincarnation has not been established, this impasse is unlikely to be breached due to the physicalist and materialist assumptions on which most currently accepted scientific models rest. Notwithstanding, PLR does not *have* to present matters as undeniably 'true' and *could* draw on PLs in symbolic and imaginal ways, much like dreamwork in therapy (Barham, 2016). Furthermore, the 'false memory' claim relies on conceptualizing memory as a discrete container. But memory is only ever represented in language or via interaction and is perpetually, collaboratively

reconstituted according to the requirements of the situation (Middleton & Brown, 2005). Specifically, memory is socially shaped and consistently (re)formed as life unfolds in the immediacy of human interactions.

Nonetheless, these criticisms highlight ethics in PLR and regression therapies. Ethical procedures were provided in the target article. CT issued Informed Consent and a Disclaimer prior to treatment and did not claim to cure, diagnose, or treat 'any mental illness or disease' (p. 726). CT rejected responsibility for potential harm, and patients waived rights to any claims. The provided disclaimer asserted that harm is unlikely, 'We personally know of no case or have knowledge of any case on record where an individual has ever been harmed in any way by hypnosis, self-hypnosis, or regression'. However, although the target article (p. 726) claims that '[c]ontent of ostensible prior lives, as well as the presence and identification of foreign energy, always comes from the subject or a surrogate, but never from the 'hypnotherapist', it is impossible to substantiate this. In addition to PLR and 'consultation' via a conduit, SRT is used.

The target article depicts CTs treatment process on p 8; invoking 'spiritual protection', inquiring 'whether there was any foreign energy present in the patient', and detailing how 'dark forces' were dealt with, following first Baldwin's (1992) 'entity removal' or 'release' protocol (Smoot-Tramont, 2023, p. 726). Palmer (2015: online) describes SRT as 'a clinical treatment sometimes used with patients who appear to be 'possessed' by a harmful spirit entity, and who have not responded to conventional psychotherapy or psychiatric methods'. Palmer (2015) mentions the *status* of SRT – as unconventional and essentially not yet established or demonstrated by a comprehensive body of evidence – its' claimed *efficacy* – in the eyes of some practitioners, seemingly better than traditional methods – and SRTs' *scope* – centered on mental ill health and related somatic manifestations. SRT is considered controversial because it does not have an established body of evidence for its' efficacy and its' framing is not consistent with secular psychological models. Palmer (2015) remarks how SRT clients have often exhausted traditional clinical avenues. Does this make them especially vulnerable or desperate, and therefore, more likely to be persuaded of matters they would not usually entertain, as is claimed (e.g., Andrade, 2017). This criticism obscures that clients may be vulnerable to matters of projection or transference. Additionally, these types of therapeutic intervention require rapport and trust, and 'abuse' of this is possible in any setting. However, the lack of SRT regulation combined with the projection of a 'paranormal' framework will be an irreconcilable difficulty for many.

## Sociocultural Narratives, Patient Framing, and Alternative Understandings

The target article's framework reflects ideas found in the holistic milieu (Heelas & Woodhead, 2005). This describes a context in which multiple ideas and objects associated with holistic spiritualities, esoteric traditions, (Neo)paganism, and the 'mind, body, spirit' genre coalesce with well-being practices such as yoga, self-help, complementary and alternative medicine (CAM), mindfulness, and meditation (Heelas & Woodhead, 2005). Here, crystals and Tibetan singing bowls abut with tarot and paranormal or spiritual ideas such as reincarnation, the 'oneness' of consciousness, and/or forms of spiritism/animism. Many of these are essentially 'folk theories', which are often part of everyday sense-making processes. As Luhrmann et al. (2021, p. 1) note, 'In many aspects of everyday life, cultural models...or, in other parlance, "folk theories"...and personal orientations (attitudes, motivations, and tendencies)...play complementary roles in shaping people's experience and behavior: Cultural models represent how the world works (that is, how it is often understood to work in a particular social-cultural setting), and personal orientations lead an individual to engage with that world in a particular way.'

In the target article, there are references to spirits, UFOs, and aliens. However, the author also intimates that 'dark forces' might be explained *psychologically* by 'imagination, archetype, collective hallucinations, mass hypnosis... [or] a projection of the therapist' (Baldwin, 1992, p. 276 in Smoot-Tramont, 2023, p. 727). The author acknowledges that '[b]elief in spiritual entities will vary from person to person' (p. 726), but the spirit/alien framework is repeatedly reinforced. This is evidenced by the target article's reported claims, including that up to 100 percent of people will be 'influenced by one or more discarnate spirits in their lifetime' (p. 726). If nothing else, this represents entrenchment in a particular perspective. There is no indication that CT seriously entertained any alternative explanations for the 'entities' he 'conversed' with, nor that he questioned the discernment of 'dark attachments'. While the presenting complaints were undoubtedly real enough for those seeking help, how might we view the projected framework?

SRT could be viewed as one element of a wider reaction to Western biomedical, dualist, or reductionist models of human health and well-being (Mijares, 2022). Western models tend to classify, pathologize, and medicate much mental distress (Frazer-Carroll, 2023), though some psychiatrists are open to alternate models of health and well-being (e.g., Powell, 2003; Sanderson, 2022). Within such contexts, the manifestation of multiple 'per-

sonalities' has variously been conceptualized as possession, alters, subpersonalities (Rowan, 1990), archetypes, or ego fragmentation (Mijares, 2022) resulting from trauma, complex repressions, and dissociations (Winkelman, 2012). In conventional psychiatry, 'subpersonalities' may be diagnosed as Dissociative Identity Disorder (DID). The DSM V describes DID as 'a disruption of identity characterized by two or more distinct personality states or an experience of possession' (American Psychiatric Association., 2013, p. 292). Conventional treatments likely include psychopharmacology and psychotherapy. Other approaches include somatic therapies, which work to release and reintegrate through therapeutic movement (Mijares, 2022).

Evidently, the way in which such 'diagnoses' are discerned, the manifestation of 'symptoms', and the treatments offered are very different from CTs approach. Likewise, these alternate voices, however, they manifest, are not exclusively served by one methodology. Shamanic traditions, found in cultures across Australia, Siberia, Korea, and the Americas (Tributsch, 2018), often focus on healing. While exact forms vary, ordinarily, a trained and initiated individual (the shaman) enters an altered state of consciousness or trance state in order to communicate with the spirit world and direct 'healing' (Dobkin De Rios, 2002). Lindquist (2004) advocates an initial suspension of disbelief or judgment when encountering the invoked and enacted shamanic 'non-ordinary reality' (p. 158) to understand how the 'descriptions of phenomenological worlds... by being narrated, performed, and acted upon, become subjectively and socially real' (p. 159). Distinctively, regardless of the veracity of spirit worlds, possession, past lives and reincarnation, alien entities, or fragmentation, the *impact* of incorporating rituals of release and integration in a particular phenomenological framework (e.g., CTs) could have a *real* effect on an individual, somatically, mentally, emotionally, etc. Indeed, Lindquist (2004) affirms that 'some rituals do, in fact, achieve the transformations that they purport to achieve' (p. 157), but 'for transformation to work, a ritual has to create its own phenomenal universe with its own internal logic' (p. 158). It is possible that CTs approach reflects this, with the release protocol as a potentially transformative symbolic ritual. Lindquist (2004) also suggests that these are 'rituals of the mind', in that they occur primarily in the mind of the practitioner (e.g., CT and/or conduit). This is not to diminish the conceivable potency of such rituals but instead to interrogate how we might understand their transformative power. There might be a clue in the 'placebo effect' and healing responses.

## The Placebo Effect: Understanding Healing and

## Therapeutic Responses

Contrary to negative conceptions of the 'placebo effect' as indicating failure, where an inactive treatment seems to confer patient improvement via some non-specific phenomenon, research has demonstrated the presence of dopamine, opioid, and cannabinoid neurotransmissions in 'placebo' reactions (Beedie et al., 2018). Some argue, therefore, that the 'placebo effect' is a manifestation of a 'patient's self-healing power' (Stub et al., 2017: 2). However, not everyone embraces this healing capacity without caution due to unpredictable results and the 'nocebo effect' (negative outcomes) (e.g., Beedie et al., 2018). The dominant explanation for the 'placebo effect' is (positive or negative) 'expectation'. Nevertheless, some (e.g., Hutchinson & Moerman, 2021, p. 368, original emphasis) have comprehensively argued that expectation is not a convincing explanation because it is reliant on '*belief that*' a particular outcome will or will not occur. They argue that 'studies have shown that those responding to a placebo often do not have the knowledge—the epistemic resources— required to form the belief as to the benefit of the relevant factor' (Hutchinson & Moerman, 2021, p. 368). If the 'placebo effect' is not caused by nonspecific expectancy or *anticipation*, as Hutchinson and Moerman (2021) argue, then how might it be understood, and what is its relevance?

Hutchinson and Moerman (2021, p. 371) convert the 'placebo effect' into 'meaning responses', emphasizing the 'role of meaning' in treatment. Walach (2013) incisively draws on Frank and Frank's (1961) general model of healing in psychotherapeutic practice to understand the sometimes-strong meaning response in CAM therapies. Their four-part model is included here, with a supplementary aspect from psychotherapy research (see also Lambert & Vermeersch, 2002), which combine to promote a healing response (from Walach, 2013, p. 194). In parallel, I highlight how CTs approach might fulfil these.

- 'A therapeutic myth or narrative, shared by both patient and practitioner' – this is evident in CTs framework regarding spirits, aliens, and mind fragments (Smoot-Tramont, 2023, p. 729).
- 'A persuasive therapeutic ritual' – the comprehensive SRT protocols (p. 726).
- From provided documentation from Smoot-Tramont, 'A strong affective bond between patient and practitioner that conveys security, understanding and thereby promotes relaxation and a reduction of anxiety' – evident from reported relationships with patients and reputedly glowing client testimonials.

- 'Convincing insignia of therapeutic power of the practitioner' – confidence in CT, seeking out his services, recommendations, hearing him speak about his approach in various forms of media (p. 725).
- 'Mobilizing resources in the patient and empowering ... [them]' – this suggests that improvements for help-seekers are more likely when the patient is disposed to enact long-term change (p. 729, p. 732).

This model of healing resonates with what Money (2001) calls the 'shamanic healing paradigm', which points to stimulating the body's (and mind combined) own restorative response and offers possible indications as to why patients might report improvements after treatment. While there are still unanswered questions about the efficacy of CTs approach, this is a possible route to understanding its' claimed potency. The target article hints at the notion of individual 'subconscious healing' (p. 736), but how is the self constructed?

In contrast to many Western psychotherapeutic methodologies, CTs approach allows clients to locate the cause of their afflictions and difficulties outside of themselves. This might be problematic for some because of a lack of awareness of attached spirits, indicating the possibility that an individual is being 'duped' into believing that unknown forces are responsible for their ills. Accordingly, this is misaligned with our dominant ideas about selfhood in the contemporary era – as autonomous, independent beings with agency and responsibility for our lives and choices – a 'bounded self' (Taylor, 2007). Yet what if assigning such responsibility was actually aiding healing in a freeing fashion? The opportunity to attribute agency to unsolicited entities who bear at least *some* responsibility may be beneficial for some individuals and help alleviate their problems.

Contemporary evidence convincingly portrays the never-ending laborious pursuit of 'self-improvement', as an overwhelming and distracting neoliberal project (see, for instance, Gill, 2017; Gill & Orgad, 2018). Furthermore, the atomization of our mental distress, as individualized and located 'in us', fails to recognize the role of our living conditions and context as contributing factors to such problems (Frazer-Carroll, 2023).

## CONCLUDING REMARKS: THE HEALING POTENTIAL IN PERSPECTIVES OUTSIDE OF THE DOMINANT PARADIGM

Ultimately, there are likely scientists, scholars, and lay people who have concerns about the 'controversial' approach detailed in the target article. These are likely to be centered on the spirit/alien framework, the treatment,

ethics (suggestibility and false memories), and efficacy. Such difficulties rest on dominant Western knowledge forms – memory as a store, the paranormal as bunkum, and people as easily duped. While efficacy concerns are valid, the notion of cure or recovery in *all* psychotherapeutic or psychiatric contexts is relatively capricious (McCrae, 2011). Further, you do not have to subscribe to a paranormal perspective to see the potential value for some people in CTs approach.

Different approaches to healing across the globe have similar frameworks in terms of spirits and possession and healing, including shamanism. Notions of the body-mind, African ontologies, Shamanic traditions, Traditional Chinese Medicine, and perspectives from Indigenous traditions offer challenges to mind-body dualism and reframe some psychological and mental health difficulties as less pathological and more potentially transformative. While it could be argued that CT does not consider alternative ways of interpreting the patients' manifesting issues, it is perhaps this singular focus that contributes to the transformative potential in his approach. Even if some are unable to embrace the target article framework, this does not mean that the actual therapeutic benefits of PLR and SRT are not 'real' for those who can/do. The potential efficacy of CTs therapeutic approach *might* be understood via the concept of a 'meaning response', which appears both in Shamanic traditions (Money, 2001) and the general model of healing (Frank & Frank, 1961). Equally, in the power of ritual to conceivably transform, even those that might occur first and foremost in the mind of a practitioner (Lindquist, 2004). Locating some of the responsibility for an individual's ills outside themselves could also be liberating. Overall, we might wish to consider to what extent is the attribution of attached entities (that are potentially temporary and seemingly resolved by 'release') detrimental to an individual, their presenting circumstances, or their longer-term health and well-being? We know about the intractability of psychiatric disorders, of the crippling side effects of medication, of the limitations of a biomedical model of health, of the problematic pathologization of mental distress, and the Western dualistic framing of the body and mind (Frazer-Carroll, 2023). As such, there may be room for a 'ritual of the mind' (Lindquist, 2004), with its' own internal logic and phenomenology that appears to promote beneficial change for some.

## REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi.org/10.1176/appi.books.9780890425596>  
 Andrade, G. (2017). Is past life regression therapy ethical?

- Journal of Medical Ethics and History of Medicine*, 10 (11), 1-8.
- Baker, R. A. (1982). The effect of suggestion on past-lives regression. *American Journal of Clinical Hypnosis*, 25(1), 71–76. <https://doi.org/10.1080/00029157.1982.10404067>
- Barham, A. (2016). *The past life perspective: Discovering your true nature across multiple lifetimes*. Enliven Astria.
- Beedie, C., Whyte, G., Lane, A. M., Cohen, E., Raglin, J., Hurst, P., Coleman, D., & Foad, A. (2018). 'Caution, this treatment is a placebo. It might work, but it might not': Why emerging mechanistic evidence for placebo effects does not legitimise complementary and alternative medicines in sport. *British Journal of Sports Medicine*, 52(13), 817–818. <https://doi.org/10.1136/bjsports-2017-097747>
- Bowman, C. (n.d.). *Past life regression*. <https://www.carol-bowman.com/past-life-regression>
- Dobkin De Rios, M. (2002). What we can learn from shamanic healing: Brief psychotherapy with Latino immigrant clients. *American Journal of Public Health*, 92(10), 1576–1578. <https://doi.org/10.2105/ajph.92.10.1576>
- Frank, J. D., & Frank, J. B. (1961). *Persuasion and healing: A comparative study of psychotherapy* (3rd ed.). John Hopkins University Press.
- Frazer-Carroll, M. (2023). *Mad world: The politics of mental health*. Pluto Press. <https://doi.org/10.2307/jj.4418234>
- Gill, R. (2017). The affective, cultural and psychic life of postfeminism: A postfeminist sensibility 10 years on. *European Journal of Cultural Studies*, 20(6), 606–626. <https://doi.org/10.1177/1367549417733003>
- Gill, R., & Orgad, S. (2018). The amazing bounce-backable woman: Resilience and the psychological turn in neoliberalism. *Sociological Research Online*, 23(2), 477–495. <https://doi.org/10.1177/1360780418769673>
- Heelas, P., & Woodhead, L. (2005). *The spiritual revolution: Why religion is giving way to spirituality*. Blackwell.
- Hutchinson, P., & Moerman, D. E. (2021). The meaning response, "placebo," and methods *Perspectives in Biology and Medicine*, 61(3), 361–378. <https://doi.org/10.1353/pbm.2018.0049>
- Lacey, H. (1994, January). The dangers of memory: Can "regression therapy" by hypnosis produce false recollections of sexual abuse? *The Independent*. <https://www.independent.co.uk/life-style/the-dangers-of-memory-can-regression-therapy-by-hypnosis-produce-false-recollections-of-sexual-abuse-hester-lacey-reports-5431250.html>
- Lambert, M. J., & Vermeersch, D. A. (2002). Effectiveness of psychotherapy. In *Encyclopedia of Psychotherapy Vol I* (pp. 709–714). Elsevier Science. <https://doi.org/10.1016/B078-0890425596>

- org/10.1016/B0-12-343010-0/00084-2
- Lindquist, G. (2004). Bringing the soul back to the self: Soul retrieval in neo-shamanism. *Social Analysis: The International Journal of Social and Cultural Practice*, 48(2), 157–173. <https://doi.org/10.3167/015597704782352564>
- Luhrmann, T. M., Weisman, K., Aulino, F., Brahinsky, J. D., Dulin, J. C., Dzokoto, V. A., Legare, C. H., Lifshitz, M., Ng, E., Ross-Zehnder, N., & Smith, R. E. (2021). Sensing the presence of gods and spirits across cultures and faiths. *PNAS Social Sciences*, 118(5), 1–8. <https://doi.org/10.1073/pnas.2016649118>
- McCranie, A. (2011). Recovery in mental illness: The roots, meanings, and implementations of a “new” services movement. *The SAGE Handbook of Mental Health and Illness*, May, 471–489. <https://doi.org/10.4135/9781446200988.n23>
- Middleton, D., & Brown, S. D. (2005). *The social psychology of experience: Studies in remembering and forgetting*. Sage. <https://doi.org/10.4135/9781446221808>
- Mijares, S. G. (2022). Archetypes, ego states and subpersonalities: An exploration of diversity within somatic awareness. *Body, Movement and Dance in Psychotherapy*, 17(4), 343–355. <https://doi.org/10.1080/17432979.2022.2090436>
- Money, M. (2001). Shamanism as a healing paradigm for complementary therapy. *Complementary Therapies in Nursing and Midwifery*, 7(3), 126–131. <https://doi.org/10.1054/ctnm.2001.0546>
- Palmer, T. (2015). Spirit release therapy. In *Psi Encyclopedia*. Society for Psychical Research. <https://psi-encyclopedia.spr.ac.uk/articles/spirit-release-therapy>
- Powell, A. (2003). *Psychiatry and spirit release therapy*. [www.rcpsych.ac.uk/college/sig/spirit/publications/index.htm](http://www.rcpsych.ac.uk/college/sig/spirit/publications/index.htm)
- Rowan, J. (1990). *Subpersonalities: The people inside us*. Taylor & Francis/Routledge.
- Sanderson, A. (2022). *Psychiatry and the spirit world: True stories on the survival of consciousness after death*. Park Street Press.
- Smoot-Tramont, N. (2023). From ‘baby doctor’ to ‘witch doctor’: A retrospective of Charles Tramont’s work with spirit releasement therapy. *Journal of Scientific Exploration*, 37(4), 724–736.
- Spanos, N. P., Menary, E., Gabora, N. J., DuBreuil, S. C., & Dewhirst, B. (1991). Secondary identity enactments during hypnotic past-life regression: A sociocognitive perspective. *Journal of Personality and Social Psychology*, 61(2), 308–320. <https://doi.org/10.1037/0022-3514.61.2.308>
- Stevenson, I. (1994). A case of the psychotherapist’s fallacy: Hypnotic regression to “previous lives.” *American Journal of Clinical Hypnosis*, 36(3), 188–193. <https://doi.org/10.1080/00029157.1994.10403068>
- Stub, T., Foss, N., & Liodden, I. (2017). “Placebo effect is probably what we refer to as patient healing power”: A qualitative pilot study examining how Norwegian complementary therapists reflect on their practice. *BMC Complementary and Alternative Medicine*, 17, Article 262. <https://doi.org/10.1186/s12906-017-1770-8>
- Taylor, C. (2007). *A secular age*. Belknap Press.
- Tributsch, H. (2018). Shamanic trance journey with animal spirits: Ancient “scientific” strategy dealing with inverted otherworld. *Advances in Anthropology*, 08(3), 91–126. <https://doi.org/10.4236/aa.2018.83006>
- Walach, H. (2013). Placebo effects in complementary and alternative medicine: The self-healing response. In L. Colloca, M. A. Flaten, & K. Meissner (Eds.), *Placebo and pain: From bench to bedside* (pp. 189–202). Academic Press. <https://doi.org/10.1016/B978-0-12-397928-5.00019-2>
- Winkelman, M. (2012). Shamanism in cross-cultural perspective. *International Journal Of Transpersonal Studies*, 31(2), 47–62. <https://doi.org/10.24972/ijts.2012.31.2.47>



**SPECIAL  
SUBSECTION  
RESPONSE**

# Response to Commentaries on “From ‘Baby Doctor’ to ‘Witch Doctor’”

**Nancy Smoot Tramont**  
nsmoot2003@yahoo.com

## HIGHLIGHTS

Incorporating the commentaries leads the author to conclude that further protocols and research in this domain are warranted for validating spiritual therapy techniques.

## KEYWORDS

Spirituality, clinical practice, research methods, clinical outcomes.

<https://doi.org/10.31275/20233289>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

The Target article in this issue—*From ‘Baby Doctor’ to ‘Witch Doctor’*—presented the history and protocols of retired physician Charles Tramont’s shockingly unusual, though not unique, practice of Spirit Releasement Therapy (SRT) as an alternative approach to certain types of requests for healing. Five brave and esteemed scientists contributed their thoughts regarding his methods and conclusions, as well as how these might be further researched or possibly explained. My formal Reply, therefore, emphasizes some points of agreement and disagreement and clarifies areas as needed or where further information is available but was not included in my original paper.

### Points of Agreement

Each commentator made strong points with which I agreed. Clearly, those authors’ perspectives are vastly different from mine since they all hold doctoral degrees

and are professors and scientists, whereas I have a Bachelor of Arts degree. Hopefully, my descriptive summary of Tramont’s work and his patients’ testimonies will encourage further scientific research on SRT and related approaches. With these commentaries, I believe we are off to a great start.

Prominent consideration is to be given to the skeptical opinions from cognitive neuroscientist Peter Brugger because they likely reflect the attitudes of much of mainstream academia and certainly the conventional biomedical community. His viewpoint provides a realistic launching pad from which the other four more ideologically-tolerant authors acknowledge the obstacles but also encourage additional study of various aspects of SRT. Brugger sees things vastly different from the other commentators, whose life experiences and interests may have led them to investigate extraordinary experiences of their own. He did rightfully acknowledge that scientific interest in spirituality increased significantly between 1990-2023, during which time journal articles about this



general topic skyrocketed 1000-fold.

Noting that “non-human entities” are often central figures reported in paranormal-like encounters, anthropologist Jack Hunter encouraged more research in the entity component of SRT. Hunter’s (2023) statement that “if the phenomena described in this paper are real, then they would imply that consciousness is far more complex than any of the standard models of mainstream psychology can accommodate” (p. 738) is one that I, though untrained in psychology, would take to be true, especially after reading the psychologists’ commentaries. The concept of “Gothic psychology” intrigued me when Hunter quoted William James’ comparison of Gothic architecture to Myers’ model of the mind, which evoked images of designer Gaudi’s *La Sagrada Familia Cathedral* in Barcelona, Spain. Interior and exterior photographs of that majestic edifice brought on feelings that were at once somewhat synesthetic and discombobulating but stimulating, powerful, and appropriate to this entire discussion... and perhaps similar to what one might feel were one to have a personal extraordinary experience with non-humans.

Sociologist and critical social psychologist Madeleine Castro outlined the Complementary and Alternative Medicine (CAM) therapeutic model and the Placebo Effect, explaining how people can heal themselves, and I agree that CAM features seem applicable to Tramont’s SRT practice. There was a strong bond between Tramont and his patients, who knew his approach upfront and discussed their desires and expectations during the initial interview. I believe this interaction would have promoted relaxation in the hypnotic induction. His patients trusted Tramont, and he instilled confidence in the patient to expect improvement. Tramont’s patients essentially did heal themselves in SRT, and in the process, some came away with a broader perspective and a different mindset after their session. Ultimately, Castro (2023) concluded that Tramont’s CAM therapy may be useful to some people, although the psychological characteristics of receptive people or the presenting complaints that are most associated with positive outcomes deserve serious study.

I stand corrected by the psychologists in that hypnotherapists *can* and often *do* plant ideas in the patients’ minds as part of the practice of conventional medical hypnosis to minimize labor pain, to address smoking cessation and other unwanted habits, or phobias and such. Tramont had very successful results with conventional medical hypnosis, too, but that was not addressed in the Target article because the present author was not included in that process.

Some encouraging technical information came from quantum physicist Robert D. Klauber (2023), who concluded that “the existence of living beings such as those

described by Tramont is possible...They are not precluded by extant theories of physics.” (p. 754). Klauber described not only how discarnate entities might exist but also how “they could, at least at times, impact other worlds in some manner. They might connect via interaction types that are only activated through consciousness” (p. 753). The world turns on such innovative thoughts from researchers.

### Points of Disagreement

Regarding Brugger’s (2023) statements that Tramont was naive and that his “transition ‘from baby doctor to witch doctor’... follows a sad developmental trajectory” (p. 749), I strongly disagree. Tramont’s 30-plus years in both military and traditional medical practice included conventional medical hypnosis in his later years of obstetrics. In both professions, Tramont likely dealt with his patients’ intimate emotions as they shared their more guarded thoughts with him. After retiring, his curiosity prompted him to investigate the possible therapeutic value of past-life regression (PLR). While doing that research, he heard what he interpreted to be a discarnate entity speaking to him about his patient and through his patient. With no prior training on how to handle that circumstance, Tramont looked for answers and found them in Baldwin’s book, *Spirit Releasement Therapy: A Technique Manual*. (1992) Tramont had not been focusing at all on SRT until his practice led him to it.

Regarding the assertion that “there is no evidence for past lives”, according to Castro’s (2023) quotation from Andrade (p. 756), I beg to differ. While Castro referenced Ian Stevenson’s work as being unsupportive of the practice of PLRs, it was this same Stevenson who founded the Division of Perceptual Studies at the University of Virginia in 1967 to actively investigate reincarnation, and that department is still going strong. Stevenson’s books, including *20 Cases Suggestive of Reincarnation*, (1980) have brought many researchers into that field. In the Consciousness Studies program I attended, psychiatrist and professor Raymond Moody invited two psychiatrists from UVA to share their research: Bruce Greyson, who shared his findings on near-death experiences and their profound effect on him, and James Tucker, who, in 2001, summarized details of the 2700+ reincarnation cases investigated at UVA. But perhaps of greater interest to those reading this Reply was what guest speaker and Seattle pediatrician Melvin Morse presented as support for reincarnation, namely a sketch drawn by a resuscitated six-year-old patient after she had apparently drowned. Morse was called to the site and accompanied her on the helicopter flight to the hospital. She was known to have no heartbeat for 45 minutes, but after recovering,

she sketched out what she had envisioned while clinically dead. In his lecture, Morse displayed her drawing, which he said accurately depicted her on a gurney with doctors on either side of the table. Three angels were drawn above them, as well as a door on the right side of her picture behind which, she **explained**, were grandmas and grandpas and babies, all waiting to be born. Many cultures worldwide accept reincarnation, but on this belief, science and spirituality clash. The question of hypnotherapists' ethics was brought up in the commentaries, to which I would respond that there are unethical practitioners in many if not all, fields of human endeavor

Isolated instances of false memory implantation by a few unethical hypnotherapists should not disqualify this potentially valuable therapeutic modality from being researched. I feel this concern is one of many reasons why formal studies are needed to elevate Tramont's comprehensive SRT from "pseudoscience" to science or at least a proto-science.

### New Insights Sparked by the Commentators

Social psychologist Everton de Oliveira Maraldi outlined many challenges associated with scientific research regarding the theories behind spiritual healing practices, particularly those used by Tramont. Lacking his education, I was unaware of the complexities involved with the nearly infinite variables associated with such formal studies. Maraldi accurately grasped much better than I the philosophy behind Tramont's SRT and its application. By laying out his ideas for research protocols and realistically pointing out the obstacles involved in conducting a scientific study of this multi-faceted therapeutic modality, he has helped to advance this topic to one day becoming an acceptable treatment for spiritually-minded individuals.

Maraldi pointed out the chasm in perspectives between scientists and spiritual practitioners. However, to ignore spirituality and the various religious beliefs held worldwide would be irresponsible; beliefs affect one's mindset, and the mind not only can affect health but can also affect the outcome of scientific experiments. Maraldi (2023) contended "that a dialogue between science and spirituality is not only viable but potentially fruitful," and "the most important prerequisite is open-mindedness, from both sides" (p. 741).

UnityGpt (<https://unitygpt.org/>), an AI-search engine, reported that "the World Health Organization's support extends to the broader category of CAM their (sic) policies, their overall stance on integrating traditional and alternative medicine suggests that they would support the inclusion of these practices as long as they meet

certain criteria, such as safety, efficacy, and cultural relevance... and contribute to the overall goal of improving healthcare" (author query conducted 17 October 2023). As the United States and other Westernized societies increasingly become melting pots, belief in various types of spirits and their potential effects on humans may become less exceptional and more "culturally relevant".

With malevolent human behavior, mental illness, and unrest increasing at an alarming rate, I hope the study and acceptance of SRT as a viable tool or tactic will come sooner rather than later. If my Target article does nothing else, it hopefully will prompt further investigation so that practitioners ponder the potential benefits of SRT in their arsenal of hypnotherapeutic treatment. Ultimately, the goal is that SRT be recognized by clinicians as a valid alternative to traditional therapies.

Tramont had several patients from the Middle East, Russia, and America seeking relief from hexes, spells, and curses. While remotes were performed for them, it has been impossible for me to investigate the efficacy of our treatment, but the requests deserve to be recognized.

Additionally, quite a few American and foreign patients approached Tramont specifically for spirit removal or to address their belief or fear that they'd been abducted by extraterrestrials. So, this author asks, where else would these people go for help? It's likely some patients felt more comfortable with a professional who had spoken publicly about helping those with such spiritual concerns rather than consulting a therapist unknown to them. Maraldi (2023) supported this notion, pointing out that "a significant percentage of psychiatrists... complain about the lack of adequate training to deal with spiritual needs of their patients in clinical practice" (p. 741).

### Protocol Clarification

In his section titled *Development of a Structured Protocol*, Maraldi (2023) correctly pointed out that Tramont's therapy included past-life regression, SRT, and other holistic treatments (such as chakra-balancing, on occasion, but rarely). However, when Maraldi asserted that "specific procedures may vary substantially from one session to another and from one patient to another," I would disagree and say that Tramont's application of the protocols was actually quite consistent. As I detailed in the original paper, and as Tramont himself summarized in the session transcripts provided, the overall protocols were fairly uniform and thorough, although his note-taking may have been sketchy. Perhaps that was due to his need to focus on the flow of the conversation while simultaneously trying to take notes. In a more structured research situation, video and audio recordings could supplement or elimi-

nate the therapist's note-taking task. At least Tramont left us some authentic historical material with which to work. Tramont followed Baldwin's protocols in SRT following his initial private interview with the patient. After invoking the protection of all who were present in the room and the patient was hypnotized, his protocols were:

- Inquire about any attachment of dark forces. If there are any, use the specific protocols for their removal.
- Inquire about any attachments of earthbound spirits, mind fragments, extraterrestrials, or other entities and their reasons for attaching to the patient.
- Using the entity-specific guidelines for each, conduct their removal as needed and confirm their release.
- Inquire whether the patient himself is fragmented. If so, retrieve the fragments.
- Inquire about prior lives appropriate to the patient's situation (medical and/or emotional problems, relationship issues, etc.).
- Inquire about the number of past lives and the present life's purpose.
- Supplement with additional helpful information, either from the patient's own Spirit Guide, the surrogate's Spirit Guide, or the reading of any therapeutic script(s), if appropriate.
- Instruct the patient to repeat affirmations and seek spiritual protection daily.

One area in which I can shed some light is in Tramont's past-life regression protocols, as few were provided in the Target article. These are from my own experience, all of which took place before he had ever heard of spirit attachments.

As a new subject, I was initially directed to go back to infancy in this life and was then asked to look at my prior life. Material that came through in that prior life regression was later validated when an important but obscure detail came through which my conscious mind certainly did not know. As Tramont was conducting research on PLR, I was asked to go to a life when I had a special talent or lived on another planet, "if such a life existed", or to a life when I might have experienced an event that caused a health problem or concerns with which I was dealing at the time. After the trance state was achieved, Tramont began with general questions such as:

- What do you see?
- Are you indoors or outdoors?
- What are you wearing?
- Are you male or female?
- Are you alone or with other people?
- What are you doing?

- And then, "Please go to the next significant event in this life," which was usually requested a few more times.
- Then finally, "Let's go to the last day of that life. What is happening?"

When no answers were forthcoming, we just moved on. Towards the close of the session, he would at times read a script (such as the chakra-balancing technique) if needed and then wake me up gradually until I was fully awake.

### Tramont's Conclusion

In late 2021, Tramont was diagnosed at home with Covid-19 and treated with Ivermectin, but a few days later, after becoming almost rigid, he was taken to a local hospital. The following day, he had improved enough to sit up in bed, watch television, and enjoy a full meal, but that night, he had a heart attack and developed blood clots in his legs and lungs. The hospital wanted to intubate him, but Tramont had put in writing that he did not want his life prolonged by artificial means, so his son and I decided instead to put him under Hospice care, which allowed him to come home from the hospital, although apparently unconscious.

On oxygen with a cannula, his breathing was raspy and labored. His son and I sat by his side for 24-hours, with music playing softly, trying to make him as comfortable as possible. A Hospice nurse visited and told us that sometimes the transition was eased when stimuli were removed, so we turned off the music, and with both of us seated on either side of Tramont, I let go of his hand. Charles instinctively conducted the relaxation technique his father had used in his hypnotic inductions. In a calm voice, he slowly led his father to relax his body from his toes to his head, counting softly from ten down to one, progressively addressing various body parts to "fully and completely relax." At the count of three, focusing on the upper chest area, Tramont's breathing became normal, and at the count of one, he simply never inhaled again. Charles and I looked at each other and smiled. His dad's suffering had ended; our tears would come later.

At the funeral home the following day, Charles and I met with the elderly gentleman who handled our needs and shared the story of Tramont's passing. At its conclusion, the funeral director put his hands, palms down, on the table, gazed into our eyes, and said, "I've been looking for a new career for about ten years now. I believe I just found it" ...as a sort of midwife for the dying. Tramont still had something to offer the world with his dying breath. I feel it's my duty, and my privilege, to pass it on.

Charles Tramont can do no more, but the rest of us

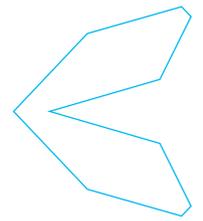
can. That the *JSE* found this material worthy of publication, and these venerated scientists were stimulated enough to support further study of his treatment methods, is most encouraging. The lack of sufficient training in the field of psychiatry on how to deal with the spiritual needs of patients points out a treatment deficiency which potentially affects the mental health of a significant portion of the population, and Hypnotic Spirit Release Therapy may help satisfy that need. My hope is that further knowledge will bring further investigation of this practice's efficacy.

### ACKNOWLEDGMENTS

I would like to express heartfelt gratitude to Dr. Jeffrey Mishlove, who encouraged me to write about my work with my husband; to the SSE editors for accepting my essay for publication in the *Journal*; to all five commentators who invested their time and effort into reading my essay and for sharing their extensive professional opinions in their reports; and to the eight selfless souls who gave permission for their cases to be shared in this *Journal*.

### REFERENCES

- Baldwin, W. J. (1992). *Spirit releasement therapy: A technique manual*. Headline Books, Inc.
- Brugger, P. (2023). The neuroscience of spirits: A spark in the dark. *Journal of Scientific Exploration*, 37(4), 747-750.
- Castro, M. (2023). Meaning responses and "rituals of the mind"? A nuanced critical analysis of an unconventional therapeutic approach. *Journal of Scientific Exploration*, 37(4), 755-760.
- Hunter, J. (2023). Confronting the boggle threshold of Tramont's "spirit releasement therapy". *Journal of Scientific Exploration*, 37(4), 737-739.
- Klauber, R. D. (2023). Commentary on "from baby doctor to witch doctor". *Journal of Scientific Exploration*, 37(4), 751-754.
- Maraldi, E. O. (2023). Science and spiritual practices: How far can the dialogue proceed? Tramont's spirit releasement therapy as a case study. *Journal of Scientific Exploration*, 37(4), 740-746.
- Stevenson, I. (1980). *Twenty cases suggestive of reincarnation*. University of Virginia Press.
- Unity GPT. (n.d.) <https://unitygpt.org> (author query conducted 17 October 2023)



**SPECIAL  
SUBSECTION  
COMMENTARY**

# Data Versus Belief - Interpretation, Ideology, and the Limits of Science: Afterword to the Special Subsection

**Brian Laythe**

journal@scientificexploration.org  
orcid.org/0000-0001-9081-2253

## HIGHLIGHTS

When scientist's examine a method of treatment encapsulated in ideology, to what extent to they examine their own unproven assumptions during their analyses?

## KEYWORDS

Philosophy of science, limits of perception, limits of measurement, ideology, belief.

<https://doi.org/10.31275/20233287>

## PLATINUM OPEN ACCESS



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

## INTRODUCTION

Tramont's Target Article in this issue and the invited Commentaries have given me much to ponder regarding the process and use of Science itself. Being trained as a social psychologist and sociologist, I have no visceral negative response to a therapeutic practice set within the context of a spiritual belief system. These are certainly not unheard of in Western culture given that Christian therapy systems (e.g., Wade, Worthington, & Vogel, 2007), and certainly, other less-known esoteric spiritual practices in therapy (Levin, 2021), are present in today's society, and generally show at least promise of efficacy. After all, with all of its flaws, social psychology is essentially the study of large belief systems that vary in size and effect while producing behavioral differences in groups between cultures.

And rather than give you my own critique of Tramont's observations and arguments, I think both her article and the corresponding responses themselves pro-

vide our community of anomalists an opportunity to see broader and scientifically relevant issues when it comes to humans applying the processes of Science. In Tramont's article, we see a common challenge in the study of anomalistics. That is the role of complicated cultural spiritual ontologies intertwined with the effects we wish to study. Given my preference for applying principles of interactionism (i.e., separating the interpretation of the phenomena from the observed phenomena itself: Laythe et al., 2022), it should surprise no one that I am applying it here, but with a twist. The question I propose in this concluding essay is: *To what extent do we as scientists account for our 'assumptive ideologies' when examining 'data' or 'evidence' such as what Tramont has provided?*

Thus, in these closing remarks, I wish to analyze and leverage the expertise of our commentators to make what I believe to be crucial critical thinking points for all of us as scientists when separating beliefs and assumptions from observable and measurable evidence. In essence, I wish to demonstrate the role of ideology within Science



when we apply our trade to others who are not scientists. Thus, my intention is to use the invited Commentaries as examples to remind us that, scientists or not, we work with and apply unprovable assumptions in the ways that we examine data and evidence.

### Making a Transparent Case of Science in Contrast to the Directly Unmeasurable

In order to make my points while avoiding hypocrisy, I should briefly highlight some limits and strengths of Science. Although perhaps pedantic, in this case, it seems appropriate to clearly state the rules and assumptions that guide my commentary. These are presented as bulleted points for ease of review.

- a. No form of applied measurement is perfect. Science is limited factually by the limits of perfect measurement (e.g., Bound, Brown, & Mathiowetz, 2001), the limits of observable evidence that our limited technology and biological perception allow (Proctor & Proctor, 2021), and the former is reinforced by all of our mathematics used to verify a series of repeated measurements (e.g., error terms, variance explained, i.e. Meyers, Well, & Lorch, 2013)
- b. Following the above (and also from our application of samples to populations, which by definition inhibits absolute measurement (e.g., Hansen & Hurwitz, 1943), no absolutes exist in Science (Kuhn, 1996; Popper, 2014). Practical absolutes (e.g., gravity), yes, but technically, exception(s) are allowed to occur because of the above limits.
- c. Science (as part of empiricism, e.g., Churchland & Hooker, 1992) may only make claims based on directly or indirectly observable or measurable evidence.
- d. Any claims made within Science in which observable data is not available is a violation of a science truth claim. Further, a lack of evidence holds no value in Science (Altman & Bland, 1995), and a lack of evidence does not validate a claim either (e.g., appeal to ignorance, Walton, 1999). In sum, A lack of evidence essentially results in the **inability** of Science to make a claim.

To the best of my knowledge and understanding, none of these four assumptions can be factually refuted. Indeed, the above tenets of Science seem to be strong enough that simple layperson observation and evident

thought experiments can verify them (i.e., I have no ability to know what is going on in Africa right now, so my perception is obviously limited). Essentially, they are the groundwork rules for conducting honest Science.

But we have to complicate the above because humans conduct Science. Using these methods above, there are some additional evidential assumptions that seem highly likely to be true due to the interaction of the fallible human using Science. Those principles can be most easily encapsulated in the principles of basic human behavior and functioning, as well as interactionism (Turner, 1988). Thus, we come to a second set of rules/likelihoods/assumptions:

- a. From general cognitive psychology (e.g., Eysenck & Keane, 2020), sensation and perception, as well as neuroscience, the observation of a thing is not equal to the interpretation of a thing (and likely causes bias; see Tesser & Leone, 1977). This is a root fundamental process of the human mind that does not appear to have exceptions.
- b. The interpretation of stimuli (internal or external to the self) is guided by schemas, group interaction and belonging, and cognitive structures, all of which work in a stereotypical manner and influenced by the sum of experience (i.e., developmental interactions and culture; Dickinson & McCabe, 1991; Reynolds et al., 2010).

As such, the often-touted confirmation bias (Klayman, 1995), driven by our cognitive biases inherent in our functioning, creates issues of bias and interpretational 'error' as we use beliefs to give meaning to data, evidence, and measurement (i.e., empiricism).

The essence of the above can be easily summed to much more general points, which essentially are encapsulated by:

- I. Science has limits of knowing based on its inherent methods and inability to 'absolutely or perfectly' measure existence.
- II. Because of I., absolutism, due to a belief that cannot be absolutely verified through the scientific method, is a violation of a putative scientific claim.

Certainly, philosophers with better knowledge than myself could find some type of exception to the above claims, but as general rules, the above holds much more often than not. Yet, I am not alone in this perspective, as Maraldi (2023), within this commentary section, essen-

tially sums the above for me:

“Science has more to do with a certain attitude toward the data, with the methods used rather than the assumptions made. In this sense, it is not in itself materialist or spiritualist. Put otherwise, Science should have no partisan.... Science is a human activity and, as humans, we cannot be completely neutral” (p. 741)

To belabor Maralidi’s (2023) quote, Applications of the Thomas Theorem (Merton, 1995), evidence of belief perseverance (Anderson & Kellam, 1992; but see Anglin, 2019 for methods exceptions) self-serving bias (Shepherd, Malone, & Sweeney, 2008), and false consensus (Marks & Miller, 1987) all point to human’s self-esteem and beliefs as primary motivators for their truth conclusions, scientist or otherwise. Unfortunately, a brief observation of current media propaganda and, frankly, the monetary success of all marketing in a capitalist society provides ample evidence of the above. As I have stated previously in several works, society works under a “popular equals correct” method of validation (Hill et al., 2019; Laythe et al., 2022), often regardless of what evidence is or is not present.

I only wish to make the very evidential point that unprovable and unknowable assumptions within the framework of Science are made with both spiritual and skeptical claims. There are unprovable assumptions at the base of every scientific model. At a broad level of comparison in terms of what is evidentially demonstratable, they do not differ. This, unfortunately, is a limit of the applications of Science and our own nature. As a broad example, how can the materialist make an absolute claim in materialism when Science does not allow an absolute claim? Similarly, scientists of a spiritual inclination cannot make an absolute claim (more correctly called a belief or assumption) of a metaphysical nature (i.e., a hierarchy of discarnate agency), given that observable evidence in a materialist sense is not available to measure.

The guiding principle that allows the *JSE* to publish unpopular topics is that we should not apply our beliefs to what others believe is worth studying. Instead, recognizing Science for the method and technique that it is, we should allow anyone to study anything of potential relevance, so long as they clearly and openly separate their application of Science with clear methods and analysis, and with the honest declaration of their assumptions and beliefs that they bring to their work. This honesty with self and others about where the boundaries of evidence and assumptions meet is the most honest policy with regard to what we *can* and *cannot* affirm with Science.

## THE SCIENTIFIC CRITIQUES OF METHOD, THEORY, AND OUTCOMES

### Klauber

I am not a physicist, but, will admit to being an amateur hobbyist of the field, particularly when it comes to the EM spectrum, probabilities, and quantum mechanics. As such, there are those much more qualified than I to debate the innate details of this commentary. However, at a broad level, Klauber provides us with an honest assessment of his assumptions and perspectives he brings to his commentary of Tramont and further highlights the rules I outlined where a lack of evidence does not negate a claim.

The essence of his argument is clear, with assumptions neutrally defined; nothing in known physics would prevent the potentiality of discarnate agency, given the presence of additional “newly discovered” known energies (i.e., dark matter and dark energy), and the implication that they follow a quantum model similar to what we observe with measurable particles. And if we accept his clearly defined applications of known quantum physics to unknown particle quantum physics, he models a system of evolution on the unknown based on the known. Of course, the above assumptions are debatable, but it is evidentially clear where the assumptions are and how they are applied. Further, the assumptions are clearly based on previously evidentially derived models of observable data.

My only commentary here is the connection between this type of physics (or general Science) argument to much older esoteric belief systems and mainstream religious belief systems (Adair-Toteff, 2015). I bring this up as a reminder that our modern forms of philosophy and Science certainly have a connected history to older (and theological) systems of thought. In religious theology and metaphysics, it is typically bandied about as the concept of “as above, so below.” (The Emerald Tablet, Hauck, 1999). The premise is essentially the same as Kauber’s argument in that the workings of the spiritual unseen mimic the workings of the known and seen. Thus, many religions and belief practices made the more simplified arguments along the lines of the rulership structure here reflects an unseen spiritual structure (as a famous example, see the Bible, Matthew 6:10).

Obviously, Science has greatly refined the detail and evidence of this type of argument, but I bring it to the attention of the reader that it is an often used (and frequently verified model), it remains an ultimately unprovable tenet of faith when applied to things which are not yet measurable or observable.

## Castro

Perhaps unsurprisingly, I am in full agreement with Castro's (2023) commentary, noting that this author clearly stated her assumptions up front, noting her expertise, and clearly indicated that she endorses an "agnostic position towards past lives, spirit mind fragment and entity attachments" (pg. 755). In fact, much of what I would have, Castro provides for us. Castro clearly identifies the potential variables at play within this worldview while neither endorsing nor condemning them. Specifically, she correctly notes that various forms of spiritual practice and past life regression are present in lesser degrees in dreamwork and, I may add, are also used quite openly in PTSD trauma reduction (Blake & Bishop, 1994; Jain et al., 2012). Although at a more micro level than I typically work with, she highlights the role of culture and belief systems with regards to memory and recall and, more importantly, the sociocultural narratives that invariably influence any form of interaction, of which my colleagues and I have modeled in more overtly paranormal context (Hill et al., 2018, 2019; Laythe et al., 2022).

Notably, Castro emphasizes ethical issues that might surround this type of practice, as well as the degree to which PLR and CT in this particular belief system are, in fact, demonstrating therapeutic efficacy. In this sense, I would similarly emphasize that the loosely qualitative data provided by Tramont is in need of additional measures, controls, and likely formal psychometric assessment of Tramont's clientele in order to make a claim with sufficient scientific rigor.

I might add two supporting points to Castro's analysis. With regards to "Shamanic Traditions," it is worth noting that history strongly suggests that the root of all clinical and psychotherapeutic practice originated with priests, shamans, and magic practitioners of the previous ages. Certainly, in a Western tradition documentation of altered states of consciousness, inductive hypnotic states, guided imagery, and in a psychiatric vein, the use of psychedelics, all seem rooted early in history within a magical (and highly spirit/entity infested) cosmology (e.g., Hygromantia circa 1140 A.D.; Torijano, 2002) as well as its proliferation in the Victorian grimoires (e.g., Mathers, 1999; 2021). Clinical psychology is certainly not the originator of these practices, noting Jung's overt use of mystical systems (Jung, 2014). Second, and notably, in my opinion, it is both correct and refreshing to see non-Western ideologies and cosmologies referenced on scientific grounds. Our extreme Western focus on what is and is not acceptable medical and therapeutic practice is highly short-sighted (but profitable) in terms of the research and efficacy of practices from other cultures.

Finally, with some experience in the clinical realm, I might write a note of caution with regards to the controversial diagnosis of dissociative identity disorder and its particular application to a discarnate agency belief system. From Tramont's notes, it is clear that while in hypnosis or PLR, 'negative entities' would speak either through the hypnotized client or Nancy Tramont as a surrogate. However, and through the available notes and case studies presented, these processes seem much more similar to "channeling" as commonly seen with mediums and psychics (Beischel, Mosher, & Boccuzzi, 2014, 2017; Wahbeh, 2023) or in some magical ritual practices (i.e., taking on the God form, Howe, 1985; Regardie, 1998). In the former, the agent channeling the "discarnate agent" has a much greater degree of control over the presence of the purported entity.

In contrast, the diagnosis of DID requires a "loss of time" and repeated intrusions of alternate personalities, often against the will of the core personality (DSM V). These features of DID lend themselves more to traditional possession cases (persistent unwanted intrusion of a mental and somatic nature), both in Western and Eastern domains (Ross, 2011). However, let us also be clear that comprehensive models for explaining either DID or possession are utterly lacking in Science (Cardena, 1992; Serch, 2012). As such, both DID and possession cases remain 'scientifically labeled' but certainly do not adequately explain aspects of human (or spiritual) behavior, notably given the well-documented cases of ostensibly paranormal phenomena that occur around them in legitimate cases where psychotic disorders and dissociative disorders can be reliably ruled out (e.g., Betty, 2005).

## Maraldi

Maraldi's (2023) contribution to the critique fits nicely with Castro, noting that his analysis of Tramont early on highlights the power of belief systems, the potential problems of the positive and negative effects of varying ideological systems, and the complexity of deriving appropriate measurement to assess and separate the outcomes of Tramont's treatments from the belief system within which the practitioners and clients are both entrenched within. These are all excellent and detailed points, so I will not repeat them here. But, Maraldi provides us all with some additional powerful considerations beyond a call for engaging with sufficient operational definitions and data collection to assess this type of ideology-embedded therapeutic practice.

Maraldi states, "That's when science comes in to help us evaluate the evidence and separate what is relevant from what may appear effective but has not been

rigorously demonstrated to be so" (p. 741), and subsequently states, "Most of the training in different scientific disciplines involves the assumption of "methodological agnosticism," which requires a suspension of beliefs and ideological preferences while carrying out scientific research" (p. 741). Notably, between these two quotes, Maraldi specifically tips his hat to social and cultural paradigms via Khun (1996). So, to be clear, we are not at all in disagreement. However, I might emphasize the cultural component further within Science, which we often like to ignore as we all belong to the field of Science (self-serving bias, Sidikides et al., 1988). Aside from the most obvious points that two of our commentators certainly did not engage in "methodological agnosticism," there are more principled issues of scientific accuracy attached to when we do not personally engage with our ideological preferences.

However, Maraldi's own discussion speaks of a need to separate our spiritual beliefs from the practice of Science at the risk of "legitimacy or scientificity of their work" (p. 741), which clearly points to ideological belief systems within Science that proclaim what Science is focused upon as "wrong," or to quote Brugger, "delusional." But let us be clear; these are social and belief-driven pejorative acts (e.g., Social Identity Theory, in-group bias, or derogation of the outgroup, Brewer, 1979; Hogg, 2016; Laythe et al., 2022, ch.3.). From a pure perspective of Science, why should any scientist objectively care what another scientist is choosing to apply Science to? If, in fact, the practices and methods of the scientist's skill are evident, and data is honestly interpreted in terms of its findings as well as applications, the general field of Science wins. In essence, *more* evidence has been collected about our world and the role we play in it.

As I stated earlier, and as Maraldi hints, to what extent are we aware of and applying our own subtle preferences to the interpretation of our data? What assumptions are we not clearly identifying? Certainly, any of us who review papers will see skeptics cite certain like-minded authors while believers do the same in the opposite vein. And similar to the media's attempt at providing news, these papers will certainly not engage with competing information and theories. There is a strong temptation to weave the story around our data that suits our perspective...at the cost of the evidence that we are required to honestly use as scientists to promote or reject a claim.

As an indisputable fact, our entire Western medical and mental health treatment classification system, as well as the use of psychotropic medicines to treat illness, are all couched in a for-profit system. There is nothing wrong with this itself but let us be clear that money is both an influence and a bias in terms of acceptable stan-

dards of treatment within clinical psychology and psychiatry. I do not need to engage in conspiracy theory to apply basic operant conditioning to a body of practitioners or a corporation that is "punished" by loss of revenue or job if a profitable method of treatment is somehow threatened. Similarly, a not-at-all-small temptation exists to ignore research or bury it if the reinforcement of increased income or sustained profit will grace an institution.

As such, when examining alternative therapies, particularly couched in a complex ideology such as Trammont's, our comparisons comprise much more than just our own ideology. They also contain tradition and orthodoxy in terms of practice and treatment, which may well be better justified by the profit they bring, as opposed to conclusive empirical evidence. A case in point to the latter, is that many in mainstream science condemn parapsychology, but notably, have never examined the literature. Did social and ideological pressure and perhaps academic laziness contribute to their conclusion? In my estimation, yes. Is part of that motivation fear of the loss of resources they need to survive? Also, likely yes.

## Ideological Denigration, Ideological Endorsement

### Brugger

Brugger's commentary was highly problematic for me, and for the sake of transparency, please allow me to make some disclosure statements before continuing. First and foremost, I have no issue with skepticism. In fact, I regularly work with, in bulk, skeptical scientists when publishing research. I am of the belief that 'adversarial collaboration' (Houran, 2017) leads to better predictive models and tentative explanations of various strange and odd phenomena. Second, I am an unapologetic believer in 'the paranormal' and certainly personally believe that discarnate agency is some 'type of real' either in an internal Jungian archetype sense or as external agents...or perhaps both. However, I accept and have no problem with the fact that what I believe and what I can prove as a scientist are two very different things.

So, with the above transparency, Brugger's (2023) commentary essentially translates to a large authority-derived faith-based claim of condemnation. Stating early on that "Neuroscience alone cannot provide the sole "explanation" (pg. 748) regarding religious "delusion," and also provides himself an exception from scientific analysis by informing us indirectly that, "Be it as it may, the fact that I do not have to comment on a scientific text frees me from having to stick to orthodox rules of commentary" (pg. 747). In this sense, his statements are honest with Science, but what follows is a materialist sermon a Southern Baptist would be proud of.

Brugger (2023) spared no time describing Tramont's work as "a testimonial of religious delusion" (p. 747), as well as claiming that the Tramonts have "fallen back" (p. 747) and "Naive notions" of spirits as outside agents" (p. 749). More stinging, he labeled the Tramonts as "naive, gullible," and "craving for crap" (p. 749), referring to all spirituality as "popular delusions" (p. 749) and describing Tramont's career as a "sad developmental trajectory." (p. 749) Put bluntly, the entirety of these statements are based on beliefs, ideology, and assumptions that are necessary to 'believe in' in order for any of them to have merit. To highlight a couple of points to the above, I would note that invoking James Braids' belief system before modern neuroscience is a simple appeal to a similar belief system without evidence. Braid in the 1800's certainly did not have access to MRI technology. Further, it is fundamentally unclear to me how either neurology or neuroscience applies comprehensively and completely to the functionality and broad-based predictive outcomes of belief systems, despite his proffered caveat about ignoring 'orthodox rules of commentary.'

Indeed, not being a neuroscientist, I estimate that I need further education on how a mechanistic low-resolution mapping process of the brain, which has failed to solve the hard problem of consciousness (Chalmers, 2017), has empirically and absolutely determined that all religions and spiritual belief systems throughout all of history are delusional. I would enjoy seeing the best argument possible for this claim given the myriad of assumptions required outside the realm of provable Science to establish it.

However, on a broader scale and perhaps when examining these Commentaries in a case-study type manner, Brugger's response brings me back to earlier research in religious fundamentalism and right-wing authoritarianism (Altemeyer & Hunsburger, 1992). Brugger is not wrong to claim that religion can be detrimental. However, there are significant well-researched caveats here. People who have inherent degrees of authoritarianism (which is certainly not unique to right-wing ideologies) inherently hold dogmatic and religious absolutism in their beliefs (Ambrose & Sternberg, 2011; Hunsberger, Pratt, & Pancer, 1994; Weeks & Geisler, 2019). Case in point, within a conservative Christian religious system, it is clear that it is this dogmatism through right-wing authoritarianism is, in fact, the prominent predictor of both racial and homosexual prejudice (Laythe et al., 2001, 2002). In essence, it is not the beliefs held but the ways(s) in which they are held that lead to prejudicial thinking and action. Outside the psychology of religion, the entire body of social identity theory and self-categorization theory (Hogg, 2016) demonstrate that assumptive dogmatism is the problem

variable with regard to negative outcomes in belief systems. In essence, an atheistic or materialistic ideology is not psychologically different than 'religion' with regards to dogmatic behavior and its psychological correlates.

This point is clearly evident in Brugger's claims, as he condemns the faith-based claims of Tramont that he himself espouses in his writing. The essence of Brugger's critique is a faith-based condemnation of the worthiness of Tramont's work, lacking either analysis or objectivity. His approach prefers not to engage with Science-based evidence claims, as opposed to engaging with assumptive and prejudicial ideological preference. Thus, we could nit-pick or debate line by line here, but in sum, Brugger's argument basically boils down to "Your beliefs are bad and unworthy of analysis because mine are right, which I will also not justify." This is the logical equivalent of the claim: "My red apple is different from your red apple." Readers can decide for themselves whether good Science is conducted when the researcher dogmatically "knows" what the correct answer is (or must be) ahead of time.

### Hunter

In a lightly comparable manner, Hunter's anthropological Commentary mirrors Brugger's, albeit in a much more humble and less overtly offensive manner. Whereas I am in partial agreement with Hunter's perspective and note that there is value in making comparisons across esoteric and new-age belief systems, his essay reads very much as a 'carte blanche' endorsement of these belief systems without any critical reflection. In this sense, Hunter's commentary is simply an endorsement commentary. There is no argumentation or critique of Tramont's work, merely (but notably, relevant) cultural and sociological comparisons with other esoteric practitioners within the realm of mediumship.

Hunter (2023) best summarizes his commentary himself, where he advocates "re-engagement with the concept of 'high strangeness' and a loosening of the 'boggle threshold'" (pg. 739) and "biographical details....the sketching out of a 'gothic psychology.' (p. 739). I think Hunter's perspective nonetheless highlights a large 'boggle' that anomalists may not be confronting. Specifically, his Commentary did not address either the truthfulness or efficacy of the beliefs of Tramont's spirit releasement therapy; it merely compares these beliefs to other beliefs of a similar nature. And this does raise questions about to what extent esoteric or new-age beliefs (and related practices) can or should be examined.

Personally, I sit somewhat agnostically with the above. On the one hand, belief systems do not have to be true to be applied to our judgments and worldview (e.g.,

Fong & Markus, 1982; Krahe, Temkin, & Bieneck, 2007; Narvaes & Bock, 2002). Certainly, reviewing these articles proves that. At the same time, if the truth is valuable to us as scientists, we have to engage in a thoughtful critique of issues in mediumship, notably a hodgepodge of inconsistent and sometimes contrary metaphysical systems with a variety of entity structures that do not often align (for an excellent example, see Wahbeh, 2023).

In this sense, I am reminded of an online agora or conference where mediums were present. I asked one medium about demons, who noted they did not exist, while another medium in the chat swore that they did. Being a person known, perhaps shamefully, for asking awkward questions, I asked how they reconciled this considerable difference in theological cosmology. And both quit talking to me. In truth, I was hoping for a really comprehensive answer.

While being a studious consumer and practitioner of esoteric theology, we must obviously raise an eyebrow when a 'speaker of spiritual truth' in an authoritative position posits truths when other 'speakers' provide different and contrary testimony. I think we are on safe philosophical ground when I say that 'truth' (however close we can get to it) is unlikely to have forty versions of absolute truth. One might apply Heideggerian existential concepts to truth in an 'Aletheia' (ἀλήθεια) method (2010) or perhaps apply Plato's cave, (Annis, 1981) but multiple blatant and outright contradictions when all are presented as 'truth' create all sorts of problems both scientifically and theologically.

To the point, and with Tramont as an excellent example, we should up our 'boggle threshold' and embrace high strangeness, but where I would diverge from Hunter's written word is that we apply our critical mind and scientific methodology towards sorting out what may or may not be 'more likely than not' truthful when examining spiritual/paranormal claims. My colleague and I have argued previously (Houran & Laythe, 2022) that there is no phenomenological reason to treat the experience of high strangeness any differently than any other perceptual phenomenon. Notably, sensation and perception psychology has been clear in the sense that our biological and cognitive-perceptual mechanisms are constant. Thus, if we constantly perceive through our biological and perceptual systems, there should be no bias in how we evaluate seeing a 'ghost' versus a 'deer'. Arguments attempting to separate these two perceptive phenomena are deeply flawed and presumptive. Perceptual aberrations are frankly not frequent enough to encompass the sheer frequency in the population of paranormal occurrences. Our model would loosely propose that 39% of paranormal experiences cannot be accounted for by any skeptical or

mundane mechanisms (Houran & Laythe, 2022).

Evidentially, it is clear that separating the observation of a UFO versus a school bus is one of social-cultural prejudice and very little else. The latter is socially accepted as 'normal,' and the latter as 'taboo'. In fact, I would challenge any reader to provide a legitimate argument as to why these are different aside from the fact that one threatens and contradicts our accepted worldview and one does not.

Particularly as scientific anomalists, we should be 'all in' examining these oddities and "damn facts" to quote Charles Fort (2008). Evidence either in the phenomenological study or ontology of both belief and practice within these systems are necessary to see what *does and does not align* with what we can observe and reliably know (actually know, not presume...for the record). My argument to this is more ethical than scientific, as a brief perusal into the historical formation of religion and cults (benign or otherwise) has and still can have staggering and horrible consequences for the people who believe in them and those whom they impose them on. Beliefs are insanely powerful, and historically, millions of deaths, tortures, and sexual assaults can be securely laid at the feet of beliefs gone wrong. Truth probing is a necessary test of belief systems, as beliefs lead to behaviors that have consequences.

## CONCLUDING THOUGHTS

My goal in writing this paper was to highlight the critique of an 'ideology derived' spirit releasement therapy and, in turn, compare and contrast the 'ideology' present with our scientist commentators. The goal, if not painfully obvious by now, was to emphasize that beliefs and ideology (unproven assumptions) are obviously extant in Science and in ourselves. This bias, in turn, affects our ability to apply the tool of Science to other belief systems. And our commentators did not disappoint. I am personally heartened, as we can see that many of our commentators applied fair critiques with regards to better forms of measurement, as well as limits as to what we are able to assess in such a complicated ideology. And in a similar vein, most of our commentators provided clear statements upfront about their perspectives and assumptions. In my opinion only, anomalists appear to be much more honest and transparent than our pseudo-skeptical colleagues (note that I used pseudo-skeptic, and not skeptic alone).

To Tramont, a largely unresolved question here is similar to the questions raised recently in this journal by Wahbeh (2023) and her comparison of spiritual information provided by mediums. Can the methods of Science be applied to at least partially examine the hypotheti-

cal structure of spiritual ontologies? I personally think the answer is “yes,” provided that we *transparently* allow the assumption of the possibility of discarnate agency and then subsequently review spiritual accounts across a wide body of paranormal cultures and experiences for commonalities. If nothing else, comparing the testimonies of near-death experiencers from mediums, occultists, psychics, and then hauntings and poltergeists could at least help us identify common core theological and cultural assumptions across these domains. Certainly, psychometrics could be used with these populations to deduce positive and negative trait and behavioral outcomes as they align to universally congruent spirit ontologies, as opposed to incongruent ones. It is an exciting research program with a mixture of anthropology and experimental psychology.

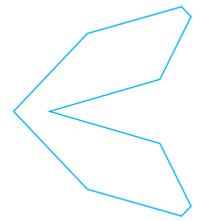
Of course, the problem with beliefs is that we tend to treat them as absolutes and subsequently depend on them, which, of course, makes us resistant to information or data that might not suit our tried-and-true methods of perceiving and evaluating the world around us. Some of these groups might be greatly disturbed by the findings of such a research program. And similarly, we might have to treat such comparisons as nothing more than common cross-cultural ideological themes, as opposed to evidence of ontological spiritual constants. Then again, the latter can really only be demonstrably claimed if we initiate the studies to do the former.

## REFERENCES

- Anderson, C. A., & Kellam, K. L. (1992). Belief perseverance, biased assimilation, and covariation detection: The effects of hypothetical social theories and new data. *Personality and Social Psychology Bulletin*, 18(5), 555-565. <https://doi.org/10.1177/0146167292185005>
- Anglin, S. M. (2019). Do beliefs yield to evidence? Examining belief perseverance vs. change in response to congruent empirical findings. *Journal of Experimental Social Psychology*, 82, 176-199. <https://doi.org/10.1016/j.jesp.2019.02.004>
- Annas, J. (1981). *An introduction to Plato's republic*. Oxford University Press.
- Adair-Toteff, C. (2015). *Fundamental concepts in Max Weber's sociology of religion*. Springer. <https://doi.org/10.1057/9781137454799>
- Altman, D. G., & Bland, J. M. (1995). Statistics notes: Absence of evidence is not evidence of absence. *BMJ*, 311(7003), Article 485. <https://doi.org/10.1136/bmj.311.7003.485>
- Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *International Journal for the Psychology of Religion*, 2(2), 113-133. [https://doi.org/10.1207/s15327582ijpr0202\\_5](https://doi.org/10.1207/s15327582ijpr0202_5)
- Ambrose, D., & Sternberg, R.J. (Eds.). (2011). *How dogmatic beliefs harm creativity and higher-level thinking* (1st ed.). Routledge. <https://doi.org/10.4324/9780203813096>
- Beischel, J., Mosher, C., & Boccuzzi, M. (2014). The possible effects on bereavement of assisted after-death communication during readings with psychic mediums: A continuing bonds perspective. *OMEGA: Journal of Death and Dying*, 70, 169-194. <https://doi.org/10.2190/OM.70.2.b>
- Beischel, J., Mosher, C., & Boccuzzi, M. (2017). Quantitative and qualitative analyses of mediumistic and psychic experiences. *Threshold: Journal of Interdisciplinary Consciousness Studies*, 1(2), 51-91.
- Betty, S. (2005). The growing evidence for demonic possession: What should psychiatry's response be? *Journal of Religion and Health*, 44, 13-30. <https://doi.org/10.1007/s10943-004-1142-9>
- Blake, R. L., & Bishop, S. R. (1994). The Bonny method of guided imagery and music (GIM) in the treatment of post-traumatic stress disorder (PTSD) with adults in the psychiatric setting. *Music Therapy Perspectives*, 12(2), 125-129. <https://doi.org/10.1093/mtp/12.2.125>
- Bound, J., Brown, C., & Mathiowetz, N. (2001). Measurement error in survey data. In J. J. Heckman & E. Leamer (Eds.). *Handbook of econometrics* (Vol 5. pp. 3705-3843). Elsevier. [https://doi.org/10.1016/S1573-4412\(01\)05012-7](https://doi.org/10.1016/S1573-4412(01)05012-7)
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, 86(2), 307-324. <https://doi.org/10.1037/0033-2909.86.2.307>
- Brugger, P. (2023). The neuroscience of spirits: A spark in the dark. *Journal of Scientific Exploration*, 37(4), 747-750.
- Cardeña, E. (1992). Trance and possession as dissociative disorders. *Transcultural Psychiatric Research Review*, 29(4), 287-300. <https://doi.org/10.1177/136346159202900402>
- Castro, M. (2023). Meaning responses and “rituals of the mind”? A nuanced critical analysis of an unconventional therapeutic approach. *Journal of Scientific Exploration*, 37(4), 755-760.
- Chalmers, D. (2017). The hard problem of consciousness. In S. Schneider, & M. Velmans, (Eds.). *The Blackwell Companion to Consciousness*, 32-42. <https://doi.org/10.1002/9781119132363.ch3>
- Churchland, P.M., & Hooker, C. (1992). *Images of science: Essays on realism and empiricism*. Wiley.
- Dickinson, D., & McCabe, A. (1991). *The acquisition and de-*

- velopment of language: A social interactionist account of language and literacy development. York Press. <https://doi.org/10.1002/9781119132363.ch3>
- Durkhiem, E. (1933). *The division of labor*. Macmillan Company.
- Eysenck, M. W., & Keane, M. T. (2020). *Cognitive psychology: A student's handbook*. Psychology Press. <https://doi.org/10.4324/9781351058513>
- Fong, G. T., & Markus, H. (1982). Self-schemas and judgments about others. *Social Cognition*, 1(3), 191-204. <https://doi.org/10.1521/soco.1982.1.3.191>
- Fort, C. (2008). *The book of the damned: The collected works of Charles Fort*. Penguin.
- Hansen, M. H., & Hurwitz, W. N. (1943). On the theory of sampling from finite populations. *The Annals of Mathematical Statistics*, 14(4), 333-362. <https://doi.org/10.1214/aoms/1177731356>
- Hauck, D. W. (1999). *The emerald tablet: Alchemy of personal transformation*. Penguin.
- Heidegger, M. (2010). *Being and time*. Suny Press.
- Hill, S. A., Laythe, B., Dagnall, N., Drinkwater, K., O'Keefe, C., Ventola, A., & Houran, J. (2019). "Meme-spirited": II. Illustrating the VAPUS model for ghost narratives. *Australian Journal of Parapsychology*, 19, 5-43.
- Hill, S. A., O'Keefe, C., Laythe, B., Dagnall, N., Drinkwater, K., Ventola, A., & Houran, J. (2018). "Meme-spirited": I. The VAPUS model for understanding the prevalence and potency of ghost narratives. *Australian Journal of Parapsychology*, 18, 117-152.
- Hogg, M. A. (2016). *Social identity theory*. Springer International Publishing. [https://doi.org/10.1007/978-3-319-29869-6\\_1](https://doi.org/10.1007/978-3-319-29869-6_1)
- Howe, E. (1985). *The magicians of the Golden Dawn: A documentary history of a magical order 1887-1923*. Editorial Kier.
- Hunsberger, B., Pratt, M., & Pancer, S. M. (1994). Religious fundamentalism and integrative complexity of thought: A relationship for existential content only? *Journal for the Scientific Study of Religion*, 33, 335-346.
- Hunter, J. (2023). Confronting the boggle threshold of Tramont's "spirit releasement therapy". *Journal of Scientific Exploration*, 37(4), 737-739.
- Jain, S., McMahan, G. F., Hasen, P., Kozub, M. P., Porter, V., King, R., & Guarneri, E. M. (2012). Healing touch with guided imagery for PTSD in returning active duty military: A randomized controlled trial. *Military Medicine*, 177(9), 1015-1021. <https://doi.org/10.7205/MILMED-D-11-00290>
- Jung, C. G. (2014). *Psychology and alchemy*. Routledge. <https://doi.org/10.4324/9781315725369>
- Kuhn, T. S. (1996). *The structure of scientific revolutions*. (3rd ed.). University of Chicago Press.
- Klauber, R. D. (2023). Commentary on "from baby doctor to witch doctor". *Journal of Scientific Exploration*, 37(4), 751-754.
- Klayman, J. (1995). Varieties of confirmation bias. *Psychology of learning and motivation*, 32, 385-418. [https://doi.org/10.1016/S0079-7421\(08\)60315-1](https://doi.org/10.1016/S0079-7421(08)60315-1)
- Krahé, B., Temkin, J., & Bieneck, S. (2007). Schema-driven information processing in judgements about rape. *Applied Cognitive Psychology*, 21, 601-619. <https://doi.org/10.1002/acp.1297>
- Laythe, B., Houran, J., & Dagnall, N. (2022). *Ghosted!: Exploring the haunting reality of paranormal encounters*. McFarland.
- Laythe, B., & Houran, J. (2022). Adversarial collaboration on a Drake-S equation for the survival question. *Journal of Scientific Exploration*, 36, 130-160. <https://doi.org/10.31275/20222357>
- Laythe, B., Finkel, D. G., Bringle, R. G., & Kirkpatrick, L. A. (2002). Religious fundamentalism as a predictor of prejudice: A two-component model. *Journal for the Scientific Study of Religion*, 41, 623-635. <https://doi.org/10.1111/1468-5906.00142>
- Laythe, B., Finkel, D., & Kirkpatrick, L. A. (2001). Predicting prejudice from religious fundamentalism and right-wing authoritarianism: A multiple-regression approach. *Journal for the Scientific Study of Religion*, 40, 1-10. <https://doi.org/10.1111/0021-8294.00033>
- Levin, J. (2021). Western esoteric healing II: A taxonomy of sources of therapeutic knowledge. *Explore*, 17, 153-161. <https://doi.org/10.1016/j.explore.2019.10.003>
- Maraldi, E. O. (2023). Science and spiritual practices: How far can the dialogue proceed? Tramont's spirit releasement therapy as a case study. *Journal of Scientific Exploration*, 37(4), 740-746.
- Marks, G., & Miller, N. (1987). Ten years of research on the false-consensus effect: An empirical and theoretical review. *Psychological Bulletin*, 102, 72-90. <https://doi.org/10.1037/0033-2909.102.1.72>
- Merton, R. K. (1995). The Thomas theorem and the Matthews effect. *Social Forces*, 74, 379-422.
- Mathers, S. M. (2021). *Sacred magic of abramelin the mage*. FilRougeViceversa.
- Mathers, S. M. (Ed.). (1999). *The key of Solomon the king*. Book Tree.
- Myers, J. L., Well, A. D., & Lorch Jr, R. F. (2013). *Research design and statistical analysis*. Routledge. <https://doi.org/10.4324/9780203726631>
- Narvaez, D., & Bock, T. (2002). Moral schemas and tacit judgement or how the Defining Issues Test is supported by cognitive Science. *Journal of Moral Education*, 31, 297-314. <https://doi.org/10.1080/0305724022000008124>

- Popper, K. (2014). *Conjectures and refutations: The growth of scientific knowledge*. Routledge. <https://doi.org/10.4324/9780203538074>
- Proctor, R. W., & Proctor, J. D. (2021). Sensation and perception. In G. Salvendy & W. Karwowski (Eds.), *Handbook of human factors and ergonomics*, (5th ed., pp. 55-90). Wiley. <https://doi.org/10.1002/9781119636113.ch3>
- Regardie, I. (1998). *The middle pillar: The balance between mind and magic*. Llewellyn Worldwide.
- Reynolds, K. J., Turner, J. C., Branscombe, N. R., Mavor, K. I., Bizumic, B., & Subašić, E. (2010). Interactionism in personality and social psychology: An integrated approach to understanding the mind and behaviour. *European Journal of Personality*, 24, 458-482. <https://doi.org/10.1002/per.782>
- Ross, C. A. (2011). Possession experiences in dissociative identity disorder: a preliminary study. *Journal of Trauma & Dissociation*, 12, 393-400. <https://doi.org/10.1080/15299732.2011.573762>
- Sedikides, C., Campbell, W. K., Reeder, G. D., & Elliot, A. J. (1998). The self-serving bias in relational context. *Journal of Personality and Social Psychology*, 74, 378-386. <https://doi.org/10.1037/0022-3514.74.2.378>
- Shepperd, J., Malone, W., & Sweeny, K. (2008). Exploring causes of the self-serving bias. *Social and Personality Psychology Compass*, 2, 895-908. <https://doi.org/10.1111/j.1751-9004.2008.00078.x>
- Tesser, A., & Leone, C. (1977). Cognitive schemas and thought as determinants of attitude change. *Journal of Experimental Social Psychology*, 13(4), 340-356.
- Torrijano, P. A. (2002). A Translation of the Hygromanteia of Solomon. In *Solomon the Esoteric King* (pp. 231-253). Brill.
- Turner, J. H. (1988). *A theory of social interaction*. Stanford University Press.
- Wade, N. G., Worthington Jr, E. L., & Vogel, D. L. (2007). Effectiveness of religiously tailored interventions in Christian therapy. *Psychotherapy Research*, 17, 91-105. <https://doi.org/10.1080/10503300500497388>
- Wahbeh, H., Speirn, P., Pederzoli, L., & Tressoldi, P. (2023). Channelers' answers to questions from scientists: An exploratory study. *Journal of Scientific Exploration*, 37, 348-369. <https://doi.org/10.31275/20232907>
- Walton, D. (1999). The appeal to ignorance, or argumentum ad ignorantiam. *Argumentation*, 13, 367-377. <https://doi.org/10.1023/A:1007780012323>
- Weeks, M., & Geisler, S. (2019). Revisiting cognitive complexity of religious topics: Multiple complexity, religious fundamentalism, and a quest orientation. *Psychology of Religion and Spirituality*, 11, 433-441. <https://doi.org/10.1037/rel0000160>



**CLOSING  
EDITORIAL**

# Championing “Exchange and Cooperation” Efforts in Frontier Science: Epilogue to the Special Issue

**James Houran**

editor@scientificexploration.org  
<https://orcid.org/0000-0003-1725-582X>

**Malcolm B. Schofield**

m.schofield@derby.ac.uk  
<https://orcid.org/0000-0001-9676-0896>

**HIGHLIGHTS**

Organizations with common goals should collaborate on research and education initiatives on a wider scale to more efficiently address anomalies that likely involve complex or nuanced processes.

**KEYWORDS**

Collaboration, cross-disciplinary, interorganizational relations theory, strategic alliances, team science.

<https://doi.org/10.31275/20233207>

**PLATINUM OPEN ACCESS**



Creative Commons License 4.0.  
CC-BY-NC. Attribution required.  
No commercial use.

**INTRODUCTION**

This Special Issue on THE DARKER SIDE OF SPIRITUALITY represents the first-ever partnership between the *Journal of the Society for Psychical Research (JSPR)* and the *Journal of Scientific Exploration (JSE)*. As such, it is worth discussing the original impetus and intended outcomes for this joint effort. Readers should first note that these two periodicals are not carbon copies. The Society for Psychical Research was founded in 1882 to “examine without prejudice or prepossession, and in a scientific spirit; those faculties of man, real or supposed, which appear

to be inexplicable on any generally recognized hypothesis.” The Society for Scientific Exploration and its *Journal* originated to “critically discuss topics that are for various reasons ignored or studied inadequately within mainstream science and promote an improved understanding of social and intellectual factors that limit the scope of scientific inquiry.” Thus, *JSE* topics cover a wide spectrum, ranging from apparent anomalies in well-established disciplines to rogue phenomena that seem to belong to no established discipline, as well as philosophical issues about the connection between disciplines. The idea here was to leverage the collective resources from the *JSPR*’s



specific interest in people-oriented phenomena and the *JSE*'s emphasis on broader nature-oriented phenomena to explore catalysts, contexts, and contents of spirituality-related experiences, beliefs, or activities that distress or unnerve individuals relative to the more familiar forms of religio-spiritual practice.

Participatory team science projects like ours therefore often adopt the framework of *exchange and cooperation* (E&C) (Ferschl et al., 2021), or alternatively known as *cooperation and liaison* (Wager et al., 2021) or *academic exchange* (Kong & Wang, 2020). Cross-disciplinary groups are especially equipped in this context to understand and tackle problems riddled with complexity or nuance (Tebes et al., 2014), and perhaps no problem is thornier than the fundamental nature of human consciousness and its myriad of altered-anomalous manifestations (Chalmers, 1995; Goff, 2017; Kleiner, 2020). E&C projects between journals seem virtually non-existent from what we can discern, but such initiatives are popular in other scholarly platforms or campaigns that range from basic knowledge

transfer activities across university centers (Franco & Pinho, 2019) to larger joint ventures by institutions and journal editors to set ethical guidelines in research and publishing (Wager et al., 2021).

There also can be cross-pollination of ideas or methods between individual researchers or disciplines, as with SciLogs.com, an English language, cross-network blogging site. And likewise, there are instances of networking between professional associations, as exemplified by the 2022 SSE Symposium “Advanced Energy Concepts Challenging the Second Law of Thermodynamics” (part of the 4th Annual Advanced Propulsion and Energy Workshop hosted by MIT’s UnLAB) or past SSE-PA joint conferences that aimed to bridge the latest thinking in parapsychology with that in other areas of frontier science. The joint work that produced this Special Issue represents yet another step that can serve as a working model for new E&C projects.

### Exploring Templates for Success

**Table 1.** Potential E&C Structures for Advancing Frontier Science Topics\*

Interorganizational Form	Nexus Degree	Traditional Definition	Example of Modified Approach
<b>Joint Venture</b>	Tight	When two or more firms pool a portion of their resources to create a separate jointly owned organization.	<ul style="list-style-type: none"> <li>• Cross-disciplinary team science (e.g., Parnia et al., 2022)</li> <li>• Multi-lab studies (e.g., Maier et al., 2020)</li> <li>• Adversarial collaborations (e.g., Kekecs et al., 2023)</li> </ul>
<b>Networks</b>	Tight	A hub and wheel configuration with a local firm at the hub organizing the interdependencies of a complex array of firms.	The Scientific and Medical Network ( <a href="https://scientificandmedical.net/">https://scientificandmedical.net/</a> )
<b>Consortia</b>	Tight	Specialized joint ventures encompassing many different arrangements. Often involve grouping of firms oriented towards problem-solving and technology development.	The Sturrock (1998) Workshop on the UFO Problem
<b>Alliances</b>	Loose	An arrangement between two or more firms that establishes an exchange relationship but has no joint ownership involved.	Society for Psychical Research collaboration with Apple TV+'s four-part docuseries on the Enfield Poltergeist case ( <a href="https://www.imdb.com/title/tt21377088/">https://www.imdb.com/title/tt21377088/</a> )
<b>Trade Associations</b>	Loose	Organizations (typically nonprofit) that are formed by firms in the same industry to collect and disseminate trade information, offer legal and technical advice, furnish industry-related training, and provide a platform for collective lobbying.	“Breakthrough 2022: New Ideas in Research and Theory” joint conference of the Society for Scientific Exploration-Parapsychological Association ( <a href="https://shorturl.at/awZ14">https://shorturl.at/awZ14</a> )
<b>Interlocking Directorates</b>	Loose	When a director or executive of one firm sits on the board of a second firm or when two firms have directors who also serve on the board of a second firm. These serve as a mechanism for interfirm information sharing and cooperation.	Editors-in-Chief for the <i>JSE &amp; Zeitschrift für Anomalistik</i> have both dually served on the Parapsychological Association’s Board of Directors

\* Adapted from Barringer and Harrison (2000, p. 383, Table 2)

E&C approaches sound simple in principle but often are difficult in practice. In particular, Castañer and Oliveira (2020, p. 975, Table 2) explained the key differences between three critical tasks that must be intentionally defined and implemented for productive outcomes: (1) *Coordination* refers to the joint determination of inter-organizational goals, (2) *Cooperation* refers to the implementation of those goals, and (3) *Collaboration* refers to helping other partners with the implementation of common goals or the counter-party’s private goals. Thus, E&C projects can involve or require three different nexus points or types of mutual engagement.

Fortunately, the literature on Interorganizational Relations Theory (IOR) provides important guidance for E&C planning. IOR focuses on how organizations work together, based on the premise that collaboration among community organizations leads to a more comprehensive coordinated approach to a complex issue than can be achieved by a lone organization (Barringer & Harrison, 2000). This is important, as some research underscores that while people might recognize the important elements that distinguish collaboration from other forms of interaction, this does not guarantee the presence of collective skills, structures, or processes necessary to enable team-based collaborative practice (Newell & Bain, 2020).

“Form follows function” is a helpful heuristic to select the best structure for particular E&C projects. Table 1 shows that six forms of interorganizational relationships are most commonly practiced and discussed in the management literature, i.e., joint ventures, networks, consortia, alliances, trade associations, and interlocking directorates (Barringer & Harrison, 2000). It can also be seen that frontier science has arguably trialed each of these relationships at different times. We would even go further to suggest that these efforts have delivered several good outcomes for the stakeholders and their respective fields. This should not be surprising, as Franco and Pinho (2019) noted that cooperation between teams or organizations is stimulated specifically by the prospects of knowledge transfer, choice of partners, and financial considerations. Interestingly, it also seems that cultural differences between researchers and research centers are regarded as a bonus to cooperation.

### E&C Risks and Rewards

Barringer and Harrison (2000, p. 386) noted seven pitfalls to interorganizational relationships that are worth summarizing here. These include (1) Potential loss of proprietary information, (2) Management complexities, (3) Financial risks and opportunist behavior, (4) Partner over-dependence, (5) Partial loss of decision-making

autonomy, (6) Organizational culture clash, and (7) Loss of organizational flexibility. Further to this last point, we would emphasize the risk of substantially slower decision-making or implementation of ideas. These issues should not prohibit E&C projects, but respective partners must consider and address them in mutually agreeable ways. Proactive negotiation is always preferable to a reactive intercession. In doing so, the various forms of working partnerships offer many potential advantages.

Specifically, businesses typically pursue interorganizational relationships for ten main reasons: (1) Access particular resources, (2) Gain economies of scale, (3) Risk and cost-sharing, (4) Access new markets or audiences, (5) Promote learning, (6) Foster flexibility, (7) Increase the speed to market or delivery of outcomes, (8) Enhance product or service development, (9) Conduct collective lobbying, and (10) Neutralize or block competitors. The benefits of motivators (1) to (7) are rather obvious, but readers might like further explanations of topics (8) to (10). First, E&C approaches would seem to expedite the development or launch of educational and training resources to meet the needs of researchers, students, lay public, and the media with an interest in frontier science. Second, collective lobbying can pertain to the coordinated efforts of groups to normalize and broaden the study of anomalistics within academia via different forms of sociopolitical positioning or influence.

Lastly, the issue of “competitors” involves addressing counterproductive behaviors related to in-group and out-group dynamics (e.g., Drinkwater et al., 2019; Hill et al., 2019.). Within the study of spirituality, parapsychology, and consciousness studies more broadly, camps can vary in their academic orientations or methodologies. To be sure, many scientists and philosophers are firmly vested in their narrative territories or preferred theories. Outside of frontier science circles, there are likewise factions with entirely different ideologies about the reality of anomalies like psi- or survival-related experiences or cognitions. Some of these groups constitute blatant “debunkers” who merely spew the meta-physics of scientism or pathological skepticism, whereas others favor Karl Popper’s (1959) principle of falsification and appropriately suspend or alter judgments in accordance with empirical data.

We contend that E&C efforts are needed on both fronts to advance frontier science. All groups should thus collectively confront the anti-science campaigns of debunkers, but we think it more critical for methodologically and ideologically diverse scientists to advance scientific knowledge with coordinated, solution-focused analyses (McKergow, 2011) that leverage adversarial collaborations or multiteam system approaches (MTS) (Shuffler et

al., 2015) to fairly address controversial issues while controlling for obvious ideological biases or methodological artifacts. Although research collaborations typically trend away from research novelty (Shin et al., 2022), MTSs can be used to accomplish multifaceted tasks in challenging environments, as they comprise interdependent teams that work towards their own proximal goals within and across teams to also accomplish a shared superordinate goal. These can take the form of actual studies or work groups that simply identify, discuss, and scope out relevant issues for future directions in research and analysis (e.g., Houran et al., 2023; for a tangential discussion on cooperative efforts, see Eisenmann et al., 2023).

### E&C Applications to Future Research on Darker Spirituality

Although all the ideas discussed above can apply to any topic in anomalistics, the articles in this Special Issue specifically underscore the need for cross-disciplinary and participatory team science approaches when studying and contextualizing the wide range of phenomena that encompasses *spirituality*, i.e., what institutionalized religions often denote as a search for, and communion with, the sacred or the ultimate controlling force or divine power (Oman, 2013) or what could be described in more secular terms as an existence or experience beyond the normal or physical level (Kitson et al., 2020). “Self-transcendence” in both these views essentially involves an ego-dissolution, whereby the “self” is subsumed into an all-encompassing reality (Corneille & Luke, 2021; Dein, 2020; Drinkwater et al., 2022; Gorelik, 2016; Kapuscinski & Masters, 2010; Marshall, 2022; Mayseless & Russo-Netzer, 2017; Yaden et al., 2017).

Much research certainly suggests that the onset or phenomenology of religio-spiritual experiences and practices is regulated, in part, by mechanisms in conventional social science and perhaps the biomedical or physical sciences. But many authorities caution that the role of anomalous cognitions or putative psi cannot be ruled out (Laythe et al., 2021; MacDonald & Friedman, 2012; Rosenbaum, 2012; Tart, 2002). Comprehensive scientific models should likewise help to refine clinical approaches to experiencers in these contexts. Accordingly, cross-disciplinary research *per se* might be insufficient for advancing knowledge in this area without also applying a systems (i.e., biopsychosocial or enactive) theory of spirituality and associated experiences (e.g., Fisher, 2011; Laythe et al., 2021; Maraldi & Krippner, 2013; Pace, 2017; Plante et al., 2023; Seligman & Kirmayer, 2008; Van Leeuwen & van Elk, 2019). This view seeks to explain and develop hypotheses around emergent behavior, that is, when a complex

system has characteristics that its components do not display on their own.

For instance, various components or layers of spirituality-related phenomena (and perhaps all exceptional human experiences more broadly) have been studied in isolation, though they can also interact with each other in important ways. Here, we suggest a 3 × 3 “Systems Phenomenology Matrix” involving *biological* × *attitudinal* × *normative* influences that work individually or collectively to shape the *core experiences* × *attributions* × *after-effects* that broadly define the structure and experience of religio-spiritual phenomena. Of course, the three components on each axis of the matrix might have common influences, such as *temporal lobe lability* (Persinger, 1983), *attentional bias* (Lange & Houran, 2001), *agency-threat detection* (Van Leeuwen & van Elk, 2019), or *individual differences* (Irvine & Luke, 2022) across a range of perceptual-personality variables like *transliminality* (Evans et al., 2019), *dissociative tendencies* (Ross & Joshi, 1992), or *tolerance of ambiguity* (Houran & Williams, 1998).

A better understanding of the nature, meaning, and impact of darker spirituality should, therefore, derive from coordinated research designs involving research institutes, clinical organizations, and communities of various religio-spiritual practitioners. Below, we touch on these three suggested focus areas for future studies. This not only concerns the development or execution of pre-specified research designs to tackle controversial topics in fair and agreeable ways (Kennedy, 2004), but E&C approaches can also involve planning sessions to identify the most pertinent questions or challenges to address in the first place (Barringer & Harrison, 2000). Here is where decision-making models like Lomborg (2014) can help to effectively rank-stack problems and prioritize the allocation of shared resources.

### Focus Area A: Drivers of Darker Religio-Spiritual Beliefs or Practices

Authors have proposed an array of influences for different types of belief. The role of mental health in the context, catalyst, or content of altered-anomalous experiences and spirituality is a prime area (Johnson & Friedman, 2008; Koenig, 2012; O’Reilly, 2004), with adverse life events in childhood or adulthood being especially well-documented correlates of paranormal beliefs and anomalous experiences (Berkowski & MacDonald, 2014; Houran & Laythe, 2022; Irwin, 1992, 1993, 1994; Lawrence et al., 1995; Lönneker & Maercker, 2021; Rabeyron & Loose, 2015). But the way that drivers of beliefs and experiences have been studied, of course, depends on how those beliefs are perceived in the first place. It is no

coincidence that if the perception of a belief is positive, generally, a more positive or benign theory is attached to them. In contrast, the more negative a belief is perceived, the more negative is the working theory applied.

Some psychological models like Attribution Theory (Spilka et al., 1985) or Self Determination Theory (Ryan & Deci, 2000) explain religio-spiritual type beliefs as primarily coming from a good place to impact people’s lives in efficacious ways (e.g., Joshi et al., 2008; Lucchetti et al., 2021; Villani et al., 2019). Still, this is not always the case. The “belief in a just world” (Kaplan, 2012), for example, is rather sinister in nature and posits that “people get what they deserve.” Perhaps it is unsurprising that adherents of this view often exhibit dark personality traits (Schofield et al., 2022). Many scientists also negatively regard paranormal beliefs, as demonstrated by four popular hypotheses for their endorsement and prevalence, namely: (1) *Social marginality* (i.e., believers tend to be lower socioeconomic class, female, or a particular race: Emmons & Sobal, 1981); (2) *Cognitive deficits* (i.e., believers show poor critical thinking and rely too heavily on intuition: Dean et al., 2022); (3) *Psychodynamic functions* (i.e., believers are potentially mentally ill or have a set of certain (usually negative) personality traits); and (4) the *Worldview model* (i.e., paranormal believers endorse other similar beliefs, such as religious or other esoteric spiritual type beliefs: Zusne & Jones, 1982). Accordingly, researchers’ own views about a belief might lead to them formulating a positive or negative theory—as psychologists know well, it is all about perception.

The above theories suggest that the factors that relate to people’s belief-formation are cognition and personality, but there is considerable debate about the nature of this relationship (Schofield et al., 2020). Positive types of personality usually correlate with religious beliefs, and negative types with paranormal beliefs, although there are exceptions to these trends, and the overall effect of personality is very small (Schofield et al., 2022). A key trait in this context is schizotypy (Schofield et al., 2020), which is related to magical ideation and represents a latent personality construct or liability to develop schizophrenia (Claridge, 1997; Lenzenweger, 2010). It is also one of the strongest and most consistent predictors of paranormal-type beliefs (Schofield et al., 2020). A schizotypal person might, therefore, be open to more unusual kinds of beliefs. As deviations from societal norms, these tendencies are usually framed in negative terms. But schizotypal personality also positively correlates with creativity, which has led to the notion of the “healthy schizotype” (Mohr & Claridge, 2015), i.e., those with loose mental boundaries who are functional despite, or perhaps even in part because of, their anomalous expe-

riences (cf. Evans et al., 2019; Hunt et al., 2002; McCreery & Claridge, 1995).

Once again, it is all about the perception of the personality traits and associated beliefs that shape the “darkness” of one’s perspective. Rather than beliefs or practices inherently being dark, we think that the mind-sets of individuals or their dark personality profiles are what sometimes drive their beliefs or practices to be darker in their expressions. This would further color perceptions of their religio-spiritual experiences. Nevertheless, we admit that the links between belief and experience are blurred, and the direction between them is often difficult to understand. However, another explanation is that if these beliefs are perceived as being dark, then this sets the tone, and the hypotheses offered to explain them are also dark in nature.

### Focus Area B: Sources of Negative Contents in Religio-Spiritual Experiences

Spiritual experience is part of the human condition (Peterson & Seligman, 2004), but there is a quandary as to why some people have positive experiences and others more negative ones. As we discussed above, the drivers of darker beliefs appear to be personality and the perception of those beliefs. But how does experience fit into this? The problem here seems to be that a certain personality profile linking to an experience might lead to a certain belief to take hold. Therefore, if a person with a dark personality has an experience, they are more likely to interpret it as negative. While this might make sense on the surface, people can clearly have dark beliefs that have not been driven by experiences, whereas people with quite positive beliefs and personalities might have very dark spiritual experiences. So, while negative personality and negative belief obviously contribute, other forces are also present. For example, popular culture could play a role, or grief. Social scientists refer to these contextual variables as “state or trait” effects. For example, popular culture’s ubiquity helps to sustain certain attitudes (trait-like effect) compared to a temporary episode like grief (state-like effect). However, this does not entirely explain variations in the content of people’s spiritual experiences.

Our simple Systems Phenomenology Matrix idea pinpoints some potential sources or facilitators of darker religio-spiritual experiences, although the direction of causation or strength of influence are hotly debated. Also, do correlates like personality and belief lead to the perception of these experiences as negative? Otherwise, it is the personality and belief that are interacting with popular culture to drive the spiritual experience to be negative. Does the overall collective perception of the belief lead

to the negative experience? Are these experiences good or bad regardless of the experiencer? Or are they natural, and we place a particular meaning on it? More empirical research is obviously needed on the phenomenology of spirituality across all its guises or expressions.

### Focus Area C: Struggling with Religio-Spiritual Beliefs, Experiences, or Practices

Although spirituality and religiosity are generally positive predictors of subjective well-being (Villani et al., 2019) and can play an important role in physical health (Koenig et al., 2012), it is also well-known that many people report various “religious/spiritual struggles.” These are defined as tensions, strains, or conflicts relative to what people hold sacred (Exline, 2013; Lukoff et al., 1998; Pargament et al., 2005; Pargament & Exline, 2021; Park et al., 2023). However, there are ongoing questions about the nature or factor structure of such struggles. Three general categories are often used to map their contents: (1) *Supernatural struggles* involving perceptions of deities or demonic/evil forces; (2) *Intrapsychic struggles* that reflect strains and tensions about religious/spiritual beliefs, moral issues, or ultimate meaning; and (3) *Interpersonal struggles* that involve conflicts with other people about religious/spiritual issues.

On the other hand, Exline et al.’s (2014) factor analytic study suggested six types of religious/spiritual struggles that are moderately intercorrelated: (1) *Divine* (negative emotion centered on beliefs about God or a perceived relationship with God); (2) *Demonic* (concern that the devil or evil spirits are attacking an individual or causing negative events); (3) *Interpersonal* (concern about negative experiences with religious people or institutions; interpersonal conflict around religious issues); (4) *Moral* (wrestling with attempts to follow moral principles; worry or guilt about perceived offenses by the self); (5) *Doubt* (feeling troubled by doubts or questions about one’s beliefs), and (6) *Ultimate meaning* (concern about not perceiving deep meaning in one’s life).

But, Exline et al.’s (2014) solution has several conceptual and empirical problems. First, their questionnaire items arguably addressed religion more than spirituality per se, as these two concepts are not strictly synonymous (Paul-Victor, & Treschuk, 2020). Second, the six factors seemingly lack any explicit references to difficulties coping with spontaneous spiritual-mystical experiences that are unwanted or unexpected (Rabeyron, 2022). Third, the six factors have not been validated with Modern Test Theory methods (like Rasch scaling) that overcome the limitations of factor analysis alone (Lange, 2017). More advanced psychometric approaches like these might

eventually affirm Stauner et al. (2016) argument for one all-encompassing “religious/ spiritual struggles” factor.

Clarifying the experience structure of religious/spiritual struggles should assist practitioners in developing effective therapeutic approaches for afflicted individuals. The available clinical literature on coping strategies for exceptional human experiences is multi-faceted and includes helping individuals to (a) temper psychobiological mechanisms that facilitate spontaneous altered-anomalous experiences, (b) strengthen their cognitive skills to parsimoniously contextualize unwanted or undesirable spontaneous experiences, and (c) learn stress management techniques skills to deal with any negative after-effects of spontaneous experiences. We refer interested readers to Laythe et al. (2021) for an overview of key literature in these respects.

### Ending on a Lighter and Optimistic Note

Despite a few notable exceptions (e.g., Kelleher & Bigelow, 2022; Mayer, 2021; Wahbeh, 2022), frontier scientists (including spirituality-oriented researchers) often cope with a paucity of resources that seriously hinders the depth or pace of research progress. Fortunately, there is considerable overlap between seemingly disparate fields that can, and should, motivate the exploration of shared goals and even identity. One needs only to ponder the clear conceptual or empirical parallels between, say, *ufology* and *parapsychology* (Ouellet, 2015), *quantum physics* and *bioenergy* (Gonzalez et al., 2019), or *cryptozoology* and *folklore studies* (Dendle, 2006). Likewise, future research on *dark spirituality* might be informed in important ways by studies of psychological concepts that involve a deep sense of cognitive disorientation or existential disruption, such as *situational-enchantment* (Drinkwater et al., 2022), *ominous numinosity* (Cheyne, 2001), *ontological shock* (Mack, 1994), or *finding consonance* (Balch et al., 2023). E&C methods certainly offer important opportunities to harness and amplify resources for facilitating challenge- or charge- discoveries across these and other anomalies. This is a greenfield opportunity that transcends spirituality and transpersonal experience. But all this would likely require participatory team science, education, or training on a larger and sustained level that itself is charting unknown territories.

We are nevertheless encouraged by some successful programs in frontier science that have knowingly or unwittingly leveraged proven interorganizational frameworks. Efforts should now evolve beyond the individual-level linking of researchers or isolated projects among organizations to carefully planned, well-organized, and institutionally backed programs that foster new part-

nerships, academic connections, and research collaborations. According to Hong (2005), these campaigns are the most difficult to organize because they require stakeholders with common interests to have mutual trust, dependable communication, and, most crucially, a determination to carry out projects over long durations. Scientists from different academic fields or ideological camps might likewise need to show more openness, transparency, and intellectual humility (cf. Nosek et al., 2015; Todeva & Knoke, 2005; Wilkins, 2018). Ultimately, we are talking about social savviness and relationship-building (Hardavella et al., 2015). Frontier scientists might thus be well served by exerting greater effort and discipline to focus their collective energies on identifying shared goals, prioritizing the most critical research questions, allocating sparse resources, and then developing practical but effective plans of execution. It is daunting but doable—and certainly not a question of *can* or *should* we...but *will* we.

## ACKNOWLEDGEMENTS

We thank Gerhard Mayer for constructive comments on an earlier draft. Our appreciation also goes to Carrie Childs and Chris Howard for serving as our Guest Co-Editors of this Special Issue.

## REFERENCES

- Balch, J., Grafman, J., & McNamara, P. (2023). Finding consonance: An integrative neurocognitive model of human relationships with supernatural agents. *Religion, Brain & Behavior*. Advanced online publication, <https://doi.org/10.1080/2153599X.2022.2143398>
- Barringer, B. R., & Harrison, J. S. (2000). Walking a tight-rope: Creating value through interorganizational relationships. *Journal of Management*, 26, 367–403. <https://doi.org/10.1177/014920630002600302>
- Berkowski, M., & MacDonald, D. A. (2014). Childhood trauma and the development of paranormal beliefs. *Journal of Nervous and Mental Disease*, 202, 305–312. <https://doi.org/10.1097/NMD.0000000000000123>
- Castañer, X., & Oliveira, N. (2020). Collaboration, coordination, and cooperation among organizations: Establishing the distinctive meanings of these terms through a systematic literature review. *Journal of Management*, 46, 965–1001. <https://doi.org/10.1177/0149206320901565><https://doi.org/10.1177/0149206320901565>
- Chalmers, D. J. (1995). Facing up to the problem of consciousness. *Journal of Consciousness Studies*, 2, 200–219.
- Cheyne, J. A. (2001). The ominous numinous: Sensed presence and ‘other’ hallucinations. *Journal of Consciousness Studies*, 8, 133–150.
- Claridge, G. (Ed.). (1997). *Schizotypy: Implications for illness and health*. Oxford University Press. <https://doi.org/10.1093/med:psych/9780198523536.001.0001>
- Corneille, J. S., & Luke, D. (2021). Spontaneous spiritual awakenings: Phenomenology, altered states, individual differences, and well-being. *Frontiers in Psychology*, 12, Article 720579. <https://doi.org/10.3389/fpsyg.2021.720579>
- Dean, C. E., Akhtar, S., Gale, T. M., Irvine, K., Grohmann, D., & Laws, K. R. (2022). Paranormal beliefs and cognitive function: A systematic review and assessment of study quality across four decades of research. *PLoS One*, 17, Article e0267360. <https://doi.org/10.1371/journal.pone.0267360>
- Dein, S. (2020). Transcendence, religion and social bonding. *Archive for the Psychology of Religion*, 42, 77–88. <https://doi.org/10.1177/0084672420905018>
- Dendle, P. (2006). Cryptozoology in the medieval and modern worlds. *Folklore*, 117, 190–206. <https://doi.org/10.1080/00155870600707888>
- Drinkwater, K., Laythe, B., Houran, J., Dagnall, N., O’Keefe, C., & Hill, S. A. (2019). Exploring gaslighting effects via the VAPUS model for ghost narratives. *Australian Journal of Parapsychology*, 19, 143–179.
- Drinkwater, K., Massullo, B., Dagnall, N., Laythe, B., Boone, J., & Houran, J. (2022). Understanding consumer enchantment via paranormal tourism: Part I - Conceptual review. *Cornell Hospitality Quarterly*, 63, 195–215. <https://doi.org/10.1177/1938965520967920>
- Eisenmann, C., Englert, K., Schubert, C., & Voss, E. (Eds.) (2023). *Varieties of cooperation: Mutually making the conditions of mutual making*. Springer VS Wiesbaden. <https://doi.org/10.1007/978-3-658-39037-2>
- Emmons, C. F., & Sobal, J. (1981). Paranormal beliefs: Testing the marginality hypothesis. *Sociological Focus*, 14, 49–56. <https://doi.org/10.1080/00380237.1981.10570381>
- Evans, J., Lange, R., Houran, J., & Lynn, S. J. (2019). Further psychometric exploration of the transliminality construct. *Psychology of Consciousness: Theory, Research, and Practice*, 6, 417–438. <https://doi.org/10.1037/cns0000163>
- Exline, J. J. (2013). Religious and spiritual struggles. In K. I. Pargament, J. Exline, & J. Jones (Eds.), *APA handbook of psychology, religion, and spirituality: Vol. 1, Context, theory, and research* (pp. 459–476). American Psychological Association.
- Exline, J. J., Pargament, K. I., Grubbs, J. B., & Yali, A. M. (2014). The Religious and Spiritual Struggles Scale: Development and initial validation. *Psychology of Religion and Spirituality*, 6, 208–222. <https://doi.org/10.1037/a0035888>

- org/10.1037/a0036465
- Fersch, S., Till, M., Abu-Omar, K., Pfeifer, K., & Gelius, P. (2021). Scientific cooperation and the co-production of scientific outcomes for physical activity promotion: Results from a transdisciplinary research consortium. *Frontiers in Public Health*, 9, Article 604855. <https://doi.org/10.3389/fpubh.2021.604855>
- Fisher, J. (2011). The four domains model: Connecting spirituality, health and well-being. *Religions*, 2, 17–28. <https://doi.org/10.3390/rel2010017>
- Franco, M., & Pinho, C. (2019). A case study about cooperation between university research centres: Knowledge transfer perspective. *Journal of Innovation & Knowledge*, 4, 62–69. <https://doi.org/10.1016/j.jik.2018.03.003>
- Goff, P. (2017). *Consciousness and fundamental reality*. Oxford University Press. <https://doi.org/10.1093/oso/9780190677015.001.0001>
- Gonzalez, M. J., Sutherland, E., & Olalde, J. (2019). Quantum functional energy medicine: The next frontier of restorative medicine. *Journal of Restorative Medicine*, 9, Article 8. <https://doi.org/10.14200/jrm.2019.0114>
- Gorelik, G. (2016). The evolution of transcendence. *Evolutionary Psychological Science*, 2, 287–307. <https://doi.org/10.1007/s40806-016-0059-3>
- Hardavella, G., Saad, N., & Bjerg, A. (2015). Doing science: Managing colleagues and collaborations in scientific research. *Breathe*, 11, 77–79. <https://doi.org/10.1183/20734735.020814>
- Hill, S. A., Laythe, B., Dagnall, N., Drinkwater, K., O’Keeffe, C., Ventola, A., & Houran, J. (2019). “Meme-spirited”: II. Illustrations of the VAPUS model for ghost narratives. *Australian Journal of Parapsychology*, 19, 5–43.
- Hong, G. (2005). Promoting US-China collaborative sponsored research programs. Paper presented at the 3rd Annual Hawaii International Conference on Education, January 4–7, Honolulu, Hawaii.
- Houran, J., & Laythe, B. (2022). Case study of recognition patterns in haunted people syndrome. *Frontiers in Psychology*, 13, Article 879163. <https://doi.org/10.3389/fpsyg.2022.879163>
- Houran, J., Rock, A., Laythe, B., & Tressoldi, P. E. (2023). Dead reckoning: A multiteam system approach to commentaries on the Drake-S equation for survival. *International Journal of Transpersonal Studies*, 42, 80–105. <https://doi.org/10.24972/ijts.2023.42.1.80>
- Houran, J. & Williams, C. (1998). Relation of tolerance of ambiguity to global and specific paranormal experience. *Psychological Reports*, 83, 807–818. <https://doi.org/10.2466/pr0.1998.83.3.807>
- Hunt, H., Dougan, S., Grant, & House, M. (2002). Growth enhancing versus dissociative states of consciousness: A questionnaire study. *Journal of Humanistic Psychology*, 42, 90–106. <https://doi.org/10.1177/0022167802421005>
- Irvine, A., & Luke, D. (2022). Apophenia, absorption and anxiety: Evidence for individual differences in positive and negative experiences of hallucinogen persisting perceptual disorder. *Journal of Psychedelic Studies*, 6, 88–103. <https://doi.org/10.1556/2054.2022.00195>
- Irwin, H. J. (1992). Origins and functions of paranormal belief: The role of childhood trauma and interpersonal control. *Journal of the American Society for Psychical Research*, 86, 199–208.
- Irwin, H. J. (1993). Belief in the paranormal: A review of the empirical literature. *Journal of the American Society for Psychical Research*, 87, 1–39.
- Irwin H. J. (1994). Childhood trauma and the origins of paranormal belief: A constructive replication. *Psychological Reports*, 74, 107–111. <https://doi.org/10.2466/pr0.1994.74.1.107m>
- Johnson C. V., & Friedman, H. L. (2008). Enlightened or delusional?: Differentiating religious, spiritual, and transpersonal experiences from psychopathology. *Journal of Humanistic Psychology*, 48, 505–527. <https://doi.org/10.1177/0022167808314174>
- Joshi, S., Kumari, S., & Jain, M. (2008). Religious belief and its relation to psychological well-being. *Journal of the Indian Academy of Applied Psychology*, 34, 345–354.
- Kaplan, H. (2012). Belief in a just world, religiosity and victim blaming. *Archive for the Psychology of Religion*, 34, 397–409. <https://doi.org/10.1163/15736121-12341246>
- Kapuscinski, A. N., & Masters, K. S. (2010). The current status of measures of spirituality: A critical review of scale development. *Psychology of Religion and Spirituality*, 2, 191–205. <https://doi.org/10.1037/a0020498>
- Kekecs, Z., Palfi, B., Szaszi, B., Szecsi, P., Zrubka, M., et al. (2023). Raising the value of research studies in psychological science by increasing the credibility of research reports: The transparent psi project. *Royal Society Open Science*, 10, Article 191375. <https://doi.org/10.1098/rsos.191375>
- Kelleher, C., & Bigelow, R. (2022). The 2021 Bigelow Institute for Consciousness Studies (BICS) essay contest. *Journal of Scientific Exploration*, 36, 350–365. <https://doi.org/10.31275/20222693>
- Kennedy, J. E. (2004). A proposal and challenge for proponents and skeptics of psi. *Journal of Parapsychology*, 68, 57–67.
- Kitson, A., Chirico, A., Gaggioli, A., & Riecke, B. E. (2020). A review on research and evaluation methods for investigating self-transcendence. *Frontiers in Psychology*, 11, Article 547687. <https://doi.org/10.3389/>

- fpsyg.2020.547687
- Kleiner, J. (2020). Mathematical models of consciousness. *Entropy*, 22, Article 609. <https://doi.org/10.3390/e22060609>
- Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry*, 2012, Article 278730. <https://doi.org/10.5402/2012/278730>
- Koenig H., King D., & Carson V. B. (2012). *Handbook of religion and health*. Oxford University Press.
- Kong, L., & Wang, D. (2020). Comparison of citations and attention of cover and non-cover papers. *Journal of Informetrics*, 14, Article 101095. <https://doi.org/10.1016/j.joi.2020.101095>
- Lange, R. (2017). Rasch scaling and cumulative theory-building in consciousness research. *Psychology of Consciousness: Theory, Research, and Practice*, 4, 135–160. <https://doi.org/10.1037/cns0000118>
- Lawrence, T., Edwards, C., Barraclough, N., Church, S., & Hetherington, F. (1995). Modelling childhood causes of paranormal belief and experience: Childhood trauma and childhood fantasy. *Personality and Individual Differences*, 19, 209–215. [https://doi.org/10.1016/0191-8869\(95\)00034-4](https://doi.org/10.1016/0191-8869(95)00034-4)
- Laythe, B., Houran, J., Dagnall, N., & Drinkwater, K. (2021). Conceptual and clinical implications of a “haunted people syndrome.” *Spirituality in Clinical Practice*, 8, 195–214. <https://doi.org/10.1037/scp0000251>
- Lenzenweger, M. F. (2010). *Schizotypy and schizophrenia: The view from experimental psychopathology*. Guilford
- Lomborg, J. (2014). *How to spend \$75 billion to make the world a better place*. Copenhagen Consensus Center.
- Lönneker, C., & Maercker, A. (2021). The numinous experience in the context of psychopathology and traumatic stress studies. *Culture & Psychology*, 27, 392–416. <https://doi.org/10.1177/1354067X20922139>
- Lucchetti, G., Koenig, H. G., & Lucchetti, A. L. G. (2021). Spirituality, religiousness, and mental health: A review of the current scientific evidence. *World Journal of Clinical Cases*, 9, 7620–7631. <https://doi.org/10.12998/wjcc.v9.i26.7620>
- Lukoff, D., Lu, F., & Turner, R. (1998). From spiritual emergency to spiritual problem: The transpersonal roots of the new DSM-IV category. *Journal of Humanistic Psychology*, 38, 21–50. <https://doi.org/10.1177/00221678980382003>
- MacDonald, D. A., & Friedman, H. L. (2012). Transpersonal psychology, parapsychology, and neurobiology: Clarifying their relations. *International Journal of Transpersonal Studies*, 31, 49–60. <https://doi.org/10.24972/ijts.2012.31.1.49>
- Mack, J. E. (1994). *Abduction: Human encounters with aliens*. Ballantine Books.
- Maier, M. A., Buechner, V. L., Dechamps, M. C., Pflitsch, M., Kurzrock, W., et al. (2020). A preregistered multi-lab replication of Maier et al. (2014, Exp. 4) testing retroactive avoidance. *PLoS One*, 15, Article e0238373. <https://doi.org/10.1371/journal.pone.0238373>
- Maraldi, E. O., & Krippner, S. (2013). A biopsychosocial approach to creative dissociation: Remarks on a case of mediumistic painting. *NeuroQuantology*, 11, 544–572. <https://doi.org/10.14704/nq.2013.11.4.695>
- Marshall, P. (2022). Does mystical experience give access to reality? *Religions*, 13, Article 983. <https://doi.org/10.3390/rel13100983>
- Mayer, G. (2021). Bigelow, BIAL, and the funding of parapsychological research. *Zeitschrift für Anomalistik*, 21, 354–366. <http://dx.doi.org/10.23793/zfa.2021.354>
- Maysseless, O., & Russo-Netzer, P. (2017). A vision for the farther reaches of spirituality: A phenomenologically based model of spiritual development and growth. *Spirituality in Clinical Practice*, 4, 176–192. <https://doi.org/10.1037/scp0000147>
- McCreery, C., & Claridge, G. (1995). Out-of-body experiences and personality. *Journal of the Society for Psychological Research*, 60, 129–148.
- McKergow, M. (2011). Solution focused approaches in management. In C. Franklin, T. Trepper, E. McCollum, & W. Gingerich (Eds.), *Solution-focused brief therapy: A handbook of evidence-based practice* (pp. 327–341). Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195385724.003.0134>
- Mohr, C., & Claridge, G. (2015). Schizotypy—Do not worry, it is not all worrisome. *Schizophrenia Bulletin*, 41, S436–S443. <https://doi.org/10.1093/schbul/sbu185>
- Newell, C. & Bain, A. (2020) Academics’ perceptions of collaboration in higher education course design. *Higher Education Research & Development*, 39, 748–763 <https://doi.org/10.1080/07294360.2019.1690431>
- Nosek, B. A., Alter, G., Banks, G. C., Borsboom, D., Bowman, S. D., et al. (2015). Promoting an open research culture. *Science*, 348, 1422–1425. <https://doi.org/10.1126/science.aab2374>
- Oman, D. (2013). Defining religion and spirituality. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the psychology of religion and spirituality* (pp. 23–47). Guilford Press.
- O’Reilly, M. L. (2004). Spirituality and mental health clients. *Journal of Psychosocial Nursing and Mental Health Services*, 42, 44–53. <https://doi.org/10.3928/02793695-20040701-06>
- Ouellet, E. (2015). *Illuminations: The UFO experience as a parapsychological event*. Anomalist Books.

- Pace, E. (2017). Systems theory and religion. *Civitas - Revista De Ciências Sociais*, 17, 345–359. <https://doi.org/10.15448/1984-7289.2017.2.25281>
- Pargament, K. I., & Exline, J. A. (2021). *Shaken to the core: Spiritual struggles in research and clinical practice*. Guilford Press.
- Pargament, K. I., Murray-Swank, N., Magyar, G., & Ano, G. (2005). Spiritual struggle: A phenomenon of interest to psychology and religion. In W. R. Miller & H. Delaney (Eds.), *Judeo-Christian perspectives on psychology: Human nature, motivation, and change* (pp. 245–268). American Psychological Association. <https://doi.org/10.1037/10859-013>
- Park, C. L., Silverman, E. J., Sacco, S. J., Kim, D., Lewis Hall, M. E., et al. (2023). When suffering contradicts belief: Measuring theodical struggling. *Current Psychology*. Advance online publication. <https://doi.org/10.1007/s12144-023-04642-w>
- Parnia, S., Post, S. G., Lee, M. T., Lyubomirsky, S., Aufderheide, T. P., et al. (2022). Guidelines and standards for the study of death and recalled experiences of death—A multidisciplinary consensus statement and proposed future directions. *Annals of the New York Academy of Sciences*, 1511, 5–21. <https://doi.org/10.1111/nyas.14740>
- Paul Victor, C. G., & Treschuk, J. V. (2020). Critical literature review on the definition clarity of the concept of faith, religion, and spirituality. *Journal of Holistic Nursing*, 38, 107–113. <https://doi.org/10.1177/0898010119895368>
- Persinger, M. A. (1983). Religious and mystical experiences as artifacts of temporal lobe function: A general hypothesis. *Perceptual and Motor Skills*, 57, 1255–1262. <https://doi.org/10.2466/pms.1983.57.3f.1255>
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Oxford University Press; American Psychological Association.
- Plante, T. G., Schwartz, G. E., Exline, J. J., Park, C. L., Paloutzian, R. F., Seitz, R. J., & Angel, H-F. (2023). Human interaction with the divine, the sacred, and the deceased: Topics that warrant increased attention by psychologists. *Current Psychology*, 42, 31961-31975 <https://doi.org/10.1007/s12144-022-04226-0>
- Popper, K. R. (1959). *The logic of scientific discovery*. University Press. <https://doi.org/10.1063/1.3060577>
- Rabeyron, T. (2022). When the truth is out there: Counseling people who report anomalous experiences. *Frontiers in Psychology*, 12, Article 693707. <https://doi.org/10.3389/fpsyg.2021.693707>
- Rabeyron, T., & Loose, T. (2015). Anomalous experiences, trauma, and symbolization processes at the frontiers between psychoanalysis and cognitive neuroscience. *Frontiers in Psychology*, 6, Article 1926. <https://doi.org/10.3389/fpsyg.2015.01926>
- Rosenbaum, R. (2012). Psychoanalysis, psi phenomena, and spiritual space: Common ground. In L. J. Miller (Ed.), *The Oxford handbook of psychology and spirituality* (pp. 271–285). Oxford Library of Psychology. <https://doi.org/10.1093/oxfordhb/9780199729920.013.0018>
- Ross, C. A., & Joshi, S. (1992). Paranormal experiences in the general population. *Journal of Nervous and Mental Disease*, 180, 357–361. <https://doi.org/10.1097/00005053-199206000-00004>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Schofield, M. B., Baker, I. S., Staples, P., & Sheffield, D. (2020). Modelling supernatural belief: Cognition and personality. *Journal of the Society for Psychical Research*, 84, 129–156.
- Schofield, M. B., Roberts, B. L. H., Harvey, C. A., Baker, I. S., & Crouch, G. (2022). Tales from the dark side: The dark tetrad of personality, supernatural, and scientific belief. *Journal of Humanistic Psychology*, 62, 298–315. <https://doi.org/10.1177/00221678211000621>
- Seligman, R., & Kirmayer, L. J. (2008). Dissociative experience and cultural neuroscience: Narrative, metaphor and mechanism. *Culture, Medicine and Psychiatry*, 32, 31–64. <https://doi.org/10.1007/s11013-007-9077-8>
- Shin, H., Kim, K., & Kogler, D. F. (2022). Scientific collaboration, research funding, and novelty in scientific knowledge. *PLoS One*, 17, Article e0271678. <https://doi.org/10.1371/journal.pone.0271678>
- Shuffler, M. L., Jiménez-Rodríguez, M., & Kramer, W. S. (2015). The science of multiteam systems: A review and future research agenda. *Small Group Research*, 46, 659–699. <https://doi.org/10.1177/1046496415603455>
- Spilka, B., Shaver, P., & Kirkpatrick, L. A. (1985). A general attribution theory for the psychology of religion. *Journal for the Scientific Study of Religion*, 24, 1–20. <https://doi.org/10.2307/1386272>
- Stauner, N., Exline, J. J., Grubbs, J. B., Pargament, K. I., Bradley, D. F., & Uzdavines, A. (2016). Bifactor models of religious and spiritual struggles: Distinct from religiousness and distress. *Religions*, 7, Article 68. <https://doi.org/10.3390/rel7060068>
- Sturrock, P. A. (Dir.) (1998). Physical evidence related to UFO reports: The proceedings of a workshop held at the Pocantico Conference Center, Tarrytown, New York, September 29 - October 4, 1997. *Journal of Scientific Exploration*, 12, 179–229.
- Tart, C. T. (2002). Parapsychology and transpersonal psy-

- chology: “Anomalies” to be explained away or spirit to manifest? *Journal of Parapsychology*, 66, 31–47.
- Tebes, J. K., Thai, N. D., & Matlin, S. L. (2014). Twenty-first century science as a relational process: From eureka! to team science and a place for community psychology. *American Journal of Community Psychology*, 53, 475–490. <https://doi.org/10.1007/s10464-014-9625-7>
- Todeva, E., & Knoke, D. (2005). Strategic alliances and models of collaboration. *Management Decision*, 43, 123–148. <https://doi.org/10.1108/00251740510572533>
- Van Leeuwen, N., & van Elk, M. (2019). Seeking the supernatural: The interactive religious experience model. *Religion, Brain and Behavior*, 9, 221–275. <https://doi.org/10.1080/2153599X.2018.1453529>
- Villani, D., Sorgente, A., Iannello, P., & Antonietti, A. (2019). The role of spirituality and religiosity in subjective well-being of individuals with different religious status. *Frontiers in Psychology*, 10, Article 1525. <https://doi.org/10.3389/fpsyg.2019.01525>
- Wager, E., & Kleinert, S. & on behalf of the CLUE Working Group (2021). Cooperation & Liaison between Universities & Editors (CLUE): Recommendations on best practice. *Research Integrity and Peer Review*, 6, Article 6. <https://doi.org/10.1186/s41073-021-00109-3>
- Wahbeh, H. (2022). Expanding parapsychology research: Learnings from a beneficent funder. *Journal of Scientific Exploration*, 36, 305–310. <https://doi.org/10.31275/20221977>
- Wilkins, C. H. (2018). Effective engagement requires trust and being trustworthy. *Medical Care*, 56, S6–S8. <https://doi.org/10.1097/MLR.0000000000000953>
- Yaden, D. B., Haidt, J., Hood Jr., R. W., Vago, D. R., & Newberg, A. B. (2017). The varieties of self-transcendent experience. *Review of General Psychology*, 21, 143–160. <https://doi.org/10.1037/gpr0000102>
- Zusne, L., & Jones, W. H. (1982). *Anomalistic psychology: A study of extraordinary phenomena of behavior and experience*. Erlbaum Associates.



## JSE AUTHOR GUIDELINES - UPDATED MARCH 2023

Submit to: [journalofscientificexploration.org](http://journalofscientificexploration.org)

JSE publishes Regular Articles, Literature Reviews, Student and Citizen Science papers, Brief Reports, Book and Multimedia Reviews, Essays, and Letters. Invited content in these categories is also published periodically. Please ensure that your submission meets APA Guidelines (7<sup>th</sup> edition) and conforms to the parameters below.

—*There are no strict word limits*, but guidelines for different types of submissions are given below. In all cases, authors should be as clear, direct, and concise as possible in their presentations. The Editor-in-Chief reserves the right to mandate revisions to the lengths of accepted papers in the interest of readability, accessibility, and space.

Contributions can be empirical research, critical or integrative reviews of the literature, position papers, policy perspectives, or comments and criticisms. Studies can adopt diverse methods, including qualitative, ethnographic, historical, survey, philosophical, case study, quantitative, experimental, quasi-experimental, data mining, and data analytics approaches.

### A. REGULAR ARTICLES (11K WORDS MAX)

Primary research or interesting and important theoretical papers that foster the diversity and debate inherent to the scientific process. This entails novel or innovative ideas that have some ‘fragmentary’ experimental or empirical support but which can be evaluated with logic and open-mindedness to present academia with provocative hypotheses that would otherwise be rejected by most conventional journals. Additional requirements are as follows:

1. All empirical results that have not been replicated should be called ‘preliminary’ with the findings treated as such. Peer-review and publication priority will be given to studies that are (a) pre-registered or (b) replications. Note that ‘replication’ can involve repeating the research procedure in a (nearly) identical separate study to be reported within the same paper (e.g., ‘Study 2: Replication’). Or, large datasets can be divided randomly into ‘Training’ and ‘Test (or Validation)’ sets, i.e., the research findings presented are those results that replicated in the Test set.
2. To promote stricter transparency and context for readers, all analyses where appropriate should provide effect size statistics in the form of direct percentages of either *association* (correlative analysis) or *mean percentage differences* (ANOVA, *t*-tests, etc.). In the case of correlative analysis, reported results shall report  $R^2$  to provide a covariance percentage estimate. Mean tests shall provide a ‘percentage change’ indicating the actual percentage change between groups (e.g.,  $M = 3.44$  Group 1 versus  $M = 4.02$ , in Group 2, on a five-point scale is calculated by the following:  $ABS [M_1 - M_{2/5} (\text{scale range})] = 11.6\%$  shift or change in means). Standard effect statistics also are allowed, so long as the above percentage techniques are likewise reported. These statistics should be reported in results as ‘percentage effect’ and follow immediately after standard statistical analysis notation. For correlation, ( $r = .43, p < .01$ , percentage effect = 18%), for means tests ( $M_1 = 3.44$  versus  $M_2 = 4.02, t = 3.443, p < .01$ , percentage effect = 11.6%).

### B. SYSTEMATIC, NARRATIVE, AND SCOPING REVIEWS (12 K WORDS MAX)

All meta-analyses and systematic reviews should include a PRISMA flow diagram to clarify for readers how the exclusion/inclusion criteria were applied to create the literature set under consideration: See <http://www.prisma-statement.org/>

### C. BRIEF REPORTS AND RAPID PUBLICATIONS (2K WORDS MAX)

These are usually pilot studies, direct or conceptual replication attempts of previous work, case studies, brief evaluations, reviews, or ‘citizen scientist’ efforts that are unique, first-time reports, with no more than two tables and/or figures and 10 references. This rapid publication option is especially appropriate for graduate-level student studies, pilot or preliminary research, or descriptions of important new methods or instrumentation. These reports are subject



to blinded peer review in the same manner as research articles. Authors should follow all requirements for longer manuscripts when submitting Brief Reports, including that they have not been submitted or published elsewhere.

#### D. BOOK AND MULTIMEDIA REVIEWS (2K WORDS MAX)

Structured for readability and utility in which the content is suitably contextualized and includes links to general model-building or theory-formation in the respective domain(s). Please use the following headers, or otherwise incorporate these themes into the review: (a) Author Disclosures; (b) Content Overview; (c) Pros, Cons, and the Book's Contributions to the Literature; (d) Recommendation; and (e) References (if applicable). For an example, see: <https://www.spr.ac.uk/book-review/poltergeist-night-side-physics-keith-linder>

Multimedia reviews can cover films, documentaries, recorded presentations or symposia, video series and reports, websites that are comprehensive resources, software for scholars, and even peer-reviewed articles in other journals that are pertinent to frontier science. Submissions are now being accepted, and authors should note that these multimedia reviews should include four components: (a) Introduction; (b) Summary of the Media Content; (c) Description of the Value of the Media to the *Journal's* Readership; and (d) Critique of the Media. These components need not constitute major sections, but each issue should be clearly addressed in the submission. We strongly encourage prospective authors to discuss their topic for a multimedia review with the subsection Editor P. D. Moncrief ([pdmoncrief@yahoo.com](mailto:pdmoncrief@yahoo.com)) prior to submission.

#### E. ESSAYS (8K WORDS MAX)

Important conceptual or philosophical commentaries, observations, or arguments to spark constructive discussion or debate relative to theory, methodology, or practice.

#### F. LETTERS TO THE EDITOR (1K WORDS MAX)

Must address substantive issues relative to recently published content in the Journal.

#### SUBMISSIONS (A) TO (C) AND (E) AS APPROPRIATE, MUST ALSO INCLUDE THE FOLLOWING SECTIONS:

1. **Highlights (i.e., lay summary) (50 words max).** Placed at the beginning of the article before the scientific abstract, this is a short—1 to 3 sentences—bottom-line description of the paper. Avoid technical terms and prepare the comments akin to a published quote to a non-specialist or uninformed journalist or student about the researchers' interpretation of the main results.
2. **Implications and Applications (~150 words max).** Placed immediately after the Discussion section to succinctly summarize or suggest how the study's methods or findings can potentially inform the study of other issues, anomalies, or fields of study, including interdisciplinary and multidisciplinary approaches.
3. **Author Contributions (Contributor Roles Taxonomy).** Please include this information within or following the Acknowledgments section. Follow standard guidelines such as this one from Elsevier: <https://www.elsevier.com/authors/policies-and-guidelines/credit-author-statement>. Also, please include ORCID numbers for authors where possible (on the online submission page).
4. **Data-sharing requirements.** Primary (raw) data (redacted for confidential or personally identifying information) must either be (a) uploaded to a freely accessible repository for independent verification or analysis by qualified researchers and the URLs shared in the paper and in a section called Data Availability under the Acknowledgments section (the *Journal* can provide such space), or (b) otherwise provided to qualified researchers on formal request.

# JOIN THE SOCIETY AS A MEMBER

## The Society for Scientific Exploration Has Four Member Types:

### **Associate Member (\$85/year with online Journal; \$145 includes print Journal)**

Anyone who supports the goals of the Society is welcome. No application material is required.

### **Student Member (\$40/year includes online Journal; \$100/year includes print Journal)**

Send proof of enrollment in an accredited educational institution.

### **Full Member (\$125/year for online Journal; \$185/year includes Print Journal)**

Full Members may vote in SSE elections, hold office in SSE, and present papers at annual conferences. Full Members are scientists or other scholars who have an established reputation in their field of study. Most Full Members have: a) doctoral degree or equivalent; b) appointment at a university, college, or other research institution; and c) a record of publication in the traditional scholarly literature. Application material required: 1) Your curriculum vitae; 2) Bibliography of your publications; 2) Supporting statement by a Full SSE member; or the name of Full SSE member we may contact for support of your application. Send application materials to SSE Secretary Mark Urban-Lurain, scientificexplorationsecretary@gmail.com.

### **Emeritus Member (\$85/year with online Journal; \$145/year includes print Journal)**

Full Members who are now retired persons may apply for Emeritus Status. Please send birth year, retirement year, and institution/company retired from.

All SSE members receive: online quarterly *Journal of Scientific Exploration (JSE)*, *EdgeScience* online magazine, *The Explorer* online newsletter, notices of conferences, access to SSE online services, searchable recent *Journal* articles from 2008–current on the JSE site by member password, and for all 25 years of previous articles on the SSE site. For additional new benefits, see World Institute for Scientific Exploration, [instituteforscientificexploration.org](http://instituteforscientificexploration.org).

Join Online At:

<https://www.scientificexploration.org/join>

# MAHARISHI INTERNATIONAL UNIVERSITY IS NOW OFFERING A MASTERS OF SCIENCE IN PHYSICS

## TOWARD A PHYSICS OF CONSCIOUSNESS

- Advance your knowledge of cutting-edge theoretical and experimental physics
- Unify consciousness and material existence in a profound, meaningful way
- Study with leading researchers as your professors
- Become an expert in quantum mechanics, quantum field theory, quantum computing, general relativity, and string theory

### **Bridge the gap between scientific comprehension**

The graduate program in physics emphasizes the relationship between consciousness and the physical universe, with a focus on the achievements and outstanding problems in advanced physics:

- Explore the unity of existence: Discover how consciousness and material existence are profoundly connected, opening new horizons in scientific thought.
- Address the ultimate questions: Explore the hard problem of consciousness through a unique lens, using the precision of theoretical physics combined with philosophical insight to unravel the underlying mysteries of science and life.
- Pursue cutting-edge research: Engage with innovative theories and state-of-the-art experimental techniques that place you at the forefront of contemporary physics.
- Enhance your skills: Deepen your understanding of theoretical and experimental physics, guided by a curriculum emphasizing precision and insight.
- Learn from the experts: Study under the mentorship of researchers and professors who are leaders in the field of consciousness-based physics.

**INTERESTED IN ENROLLING?  
LEARN MORE AT:  
<https://www.miu.edu/ms-in-physics>**