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RESEARCH ARTICLE

Haunted People Syndrome Redux: Concurrent Validity From an Independent Case Study

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HIGHLIGHTS

ABSTRACT

Auerbach et al. (2023) proposed an AECKO model to describe the features and dynamics of a poltergeist-like disturbance they investigated with virtual technology during the COVID-19 pandemic. A two-part exercise nonetheless shows that their findings fundamentally support Laythe, Houran, Dagnall et al.'s (2021) grounded theory of Haunted People Syndrome (HP-S), which was independently developed at an earlier time. HP-S asserts that ghostly episodes recurrently manifesting to certain people are an interactionist phenomenon emerging from individuals with heightened somatic-sensory sensitivities, which are stirred by dis-ease states, contextualized with paranormal belief, and reinforced via perceptual contagion and threat-agency detection. Part 1 of our research identified strong conceptual parallels between the AECKO and HP-S models, whereas Part 2 involved a content analysis by an independent and clinically-trained researcher (with cross-checking by an expert panel) who used standardized measures to compare Auerbach et al.'s case to the phenomenology of 'spontaneous' ghostly episodes and the five recognition patterns of HP-S. The available data suggested this case had below-average 'haunt intensity' that closely approximated baseline scores for Illicit and Fantasy narratives. Likewise, its S/O distribution pattern most resembled accounts with knowingly embellished or false testimony. These results imply that the anomalies considered here were not expressly 'spontaneous.' Content analysis further detected a majority of the HP-S recognition patterns in the case material, as well as evidence that the apparent focus person strongly matched the psychometric profile of poltergeist agents found in prior research. Auerbach et al.'s data, therefore, arguably provide good concurrent validity for the HP-S model. Taken altogether, we assert that ghostly episodes are best conceptualized, researched, and addressed through a biopsychosocial lens and phenomenological approach, irrespective of the potential contribution of putative psi. We discuss these ideas relative to new research directions and clinical applications.

KEYWORDS

Ghostly episodes, interactionism, liminality, poltergeist, psychometrics, systems theory.

INTRODUCTION

It has long been questioned whether some degree of terminological reform might help to counter the lingering negative stereotypes or ideological biases that can hinder research and publication efforts in frontier science (see, e.g., Braude, 1998; Houran & Bauer, 2022; Palmer, 1986). This issue particularly affects parapsychologists who must carefully distinguish between core 'anomalies' (i.e., documented experiences or events) versus percipient or researcher 'attributions' (i.e., assumptions or beliefs about the nature of experiences or events). Therefore, the field should perhaps strive more explicitly for operationalization reform, i.e., the widespread adoption of terms that ideally denote causal mechanisms, or at least, describe reliably measurable constructs for use in hypothesis-testing that promotes cumulative model-building or theory formation (Lange, 2017). For instance, as discussed in the next section, we previously introduced three data-driven operationalizations to advance research and debate on the controversial and often sensationalized subject of 'ghosts, haunts, and poltergeists,' namely: (a) S/O anomalies, (b) ghostly episodes, and (c) Haunted People Syndrome (HP-S) (cf. Houran, Lange, et al, 2019; Houran, Laythe et al., 2019; Laythe, Houran, Dagnall et al., 2021; O'Keeffe et al., 2019).

We explore these constructs via an empirical reanalysis of Auerbach et al.'s (2023) fortuitous case study of poltergeist-like disturbances during the COVID-19 pandemic. Although that investigation was conducted apart from our operationalizations, we argue that its results and conclusions unwittingly provide concurrent validity for tenets of the HP-S model and also important opportunities for their refinement. At the same time, Mayer (2019) rightly cautioned that case studies have major limitations when extrapolated to broader contexts. But these sorts of in-depth examinations nonetheless have a long tradition in science and meaningfully boost our knowledge of highly nuanced or complex systems (Rydberg, 2022). We thus heartily endorse Auerbach et al.'s (2023) approach as part of a broader array of research designs involving mixed or multiple methods that produce more robust and compelling results than single-method studies alone (Morse, 2003). Likewise, our present strategy of reassessing data from prior studies or historical cases using new tools and frameworks is a common research practice in this domain (e.g., Alvarado & Zingrone, 1995; Amorim, 1990; Gauld & Cornell, 1979/2018; Lange & Houran, 2001b; Roll, 1977). We therefore expect the outcomes here can help to refine or rewrite the HP-S model and direct future research on its applicability to different haunt-type cases.

Transcending a Morass of 'Spooky' Concepts with the HP-S Model

The 'anomaly vs. attribution' problem is well illustrated by ongoing proposals and debates about nuances and complexities with the concepts of 'apparitions (or ghosts), haunts, and poltergeists.' For example, Table 1 shows that authors have suggested a myriad of categories or subtypes of similar looking phenomena, whereas other researchers have advocated for a family tree of 'entity encounters' (e.g., spirits, angels, demons, tulpas, folklore-type little people, etc.) involving a common experience that is shaped or interpreted per ideological or sociocultural norms (Evans, 1987; Houran, 2000; Kumar & Pekala, 2001). Apparitions and entity encounters certainly link to haunts and poltergeists in important ways. To clarify from a phenomenological perspective, 'poltergeist outbreaks' involve clusters of unusual psychological or subjective (S) experiences (e.g., apparitions, sensed presences, hearing voices, or unusual somatic or emotional manifestations) and physical or objective (O) events (e.g., object displacements, malfunctioning electrical or mechanical equipment, and inexplicable percussive sounds like raps or knocks with communicative features at times) that occur in presence of certain people called 'focus persons' (for a recent discussion, see Ventola et al., 2019). Similar S/O anomalies that persist over time at particular locations are called 'hauntings' (Houran & Lange, 2001a). Researchers traditionally differentiate haunts and poltergeists, but a firm distinction currently seems arbitrary as both episodes (a) involve reports of similar anomalies, and (b) exhibit focusing effects on certain people and places (or objects) (Dixon et al., 2018; Roll, 1977; Williams & Ventola, 2011). In fact, S/O anomalies in these contexts reliably form a probabilistic and unidimensional factor, i.e., a literal hierarchy comprising outwardly different encounter-type experiences (Houran et al., 2002; Houran & Lange, 2001b; Houran, Lange, et al., 2019). This finding undermines the common assumption that subjective experiences and objective events are fundamentally different phenomena; rather, they ostensibly constitute a continuum (cf. Houran et al., 2021). Moreover, this 'S/O anomalies' construct is quantifiable via a standardized assessment called the Survey of Strange Events (Houran, Lange, et al., 2019), which we describe later (see Table 1 as supplementary material: visit WEB HERE).

Additionally, those with thin or permeable mental boundaries (i.e., hypersensitivities to internal and external stimuli)—as measured by Transliminality or Paranormal Belief—are more likely to perceive various S/O anomalies (Houran et al., 2002; Kumar & Pekala, 2001; Laythe et al., 2018). Such individuals also are more susceptible



to 'dis-ease', i.e., when a person's normal state of 'ease' becomes markedly disrupted or imbalanced (Ventola et al., 2019). This ordered set of unexplained perceptions in people with a distinct perceptual-personality and stress profile strongly implicates a core 'encounter' phenomenon that resembles a biomedical syndrome (Laythe, Houran, Dagnall, et al., 2021). Consistent with research on symptom perception, the interpretation of recurrent S/O anomalies often varies in accordance with the percipient's sociocultural milieu (Evans, 1987; Houran, 2000; Hufford, 1982). Consequently, the term ghostly episode denotes S/O anomalies that percipients regard as 'eerie' or 'unnatural' (Houran, Laythe, et al., 2019). Some evidence also indicates that there are secular forms of ghostly episodes, including 'deep' imaginary companions that exhibit seemingly autonomous personalities or actions (Little et al., 2021) and 'group-stalking' whereby a person claims to be constantly harassed by a covert gang of unidentified people (O'Keeffe et al., 2019).

We think that the various terms and categories in Table 1 are mostly contrived, theoretically premature, or purposeless, or fail to acknowledge the broader context and phenomenology of S/O anomalies. To be sure, a systems theory (or biopsychosocial) perspective is required to properly frame their genesis, interpretation, or perseverance. This approach specifically highlights how people's thoughts, emotions, perceptions, and behaviors are influenced by many interconnected factors like one's physical environment and sociocultural setting (Curtis & McPherson, 2000). A systems view, therefore, provides a more comprehensive understanding of complex psychological phenomena. Laythe, Houran, Dagnall, et al. (2021, 2022) consequently integrated the patterns above to introduce their grounded theory of HP-S—an interactionist model that holistically describes the features and dynamics of ghostly episodes in joint 'person-experience' centered terms. This phenomenological approach agrees with other authors who have urged researchers to directly engage these anomalous experiences (e.g., Hufford, 1982; Luke, 2011; Maher & Hansen, 1992). Specifically, HP-S asserts that all guises of ghostly episodes that recurrently manifest to specific people are an interactionist phenomenon emerging from (a) heightened somatic-sensory sensitivities, which are (b) aggravated by 'dis-ease' states (i.e., when a person's normal state of 'ease' becomes markedly disrupted or imbalanced), (c) contextualized with paranormal belief or other sense-making attributions, and reinforced with (d) perceptual contagion (i.e., diverse or snowballing perceptions) via attentional biases and (e) threat-agency detection. In short, our five-point model equates the psychological drivers of these occurrences to some of the fundamental mechanisms that stoke outbreaks of mass (contagious) psychogenic illness or autohypnotic phenomena (cf. Bell et al., 2021; Houran et al., 2002; Lifshitz et al., 2019; Ross & Joshi, 1992). Recent surveys, retrospective case reviews, and investigations of active events all lend strong credence to the HP-S recognition patterns noted above (Drinkwater, Dagnall, Houran et al., 2022; Houran et al., 2022, 2024; Houran & Laythe, 2022, 2023; Lange et al., 2020; Laythe et al., 2018; Laythe, Houran, & Little, 2021; Little et al., 2021; O'Keeffe et al., 2019; Simmonds-Moore, 2024; Ventola et al., 2019). Preliminary research further suggests that the statistical interrelations among these components or recognition patterns define a psychometrically-robust index of HP-S phenomenology (Lange & Houran, 2024).

PRESENT STUDY AND CASE SYNOPSIS

We conducted a quali-quantitative analysis of Auerbach et al.'s (2023) data and conclusions related to the phenomenology of a recent case involving a series of unusual events. Phenomenology refers to the structures of experience and consciousness (Seamon, 2000), which Laythe, Houran, Dagnall, et al. (2021, p. 198) described as having 'micro' and 'macro' aspects. Micro-phenomenology in this context refers to the contents of S/O anomalies, whereas macro-phenomenology denotes the conditions that mediate the onset or proliferation of the S/O anomalies. Our results are therefore organized in two sections for clarity: (a) Part 1 compares Auerbach et al.'s proposed AECKO model of poltergeist-like disturbances to the five recognition patterns of HP-S, whereas (b) Part 2 aims to corroborate these conceptual parallels with a confirmatory content analysis that applies standardized measures of micro- and macro- phenomenology to their particular spontaneous case. In this way, we can estimate the extent to which Auerbach et al. (2023) provides concurrent validity for Laythe, Houran, Dagnall et al.'s (2021, 2022) HP-S concept. The facts about the events in question were widely disseminated via a conference presentation (Auerbach et al., 2021), magazine article (Auerbach et al., 2022), and journal article (Auerbach et al., 2023). Thus, we only outline key aspects of the case below as complete details are easily found elsewhere.

Background of the Afflicted Family

Although alleged haunt-type experiences were not infrequent during the stressful COVID-19 pandemic lockdowns (Sery, 2021), Auerbach et al.'s case seemingly involved a series of events not easily attributable to conventional origins as outlined by Houran (1997). In particular, anomalous physical events occurred in a three-bedroom

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townhouse occupied by a middle-class family living in Silicon Valley, California. The family consisted of Eileen (a 50-year-old stay-at-home mother and wife), Robert (a 56-year-old engineer), and their teenage children, Nathan (16-year-old) and Emma (14-year-old) (all pseudonyms). During the investigation, the researchers considered the family's needs. This involved non-judgmental listening, providing assurances, and producing a mutually agreed action plan. The researchers also obtained informed consent for the investigation and gained permission to arrange additional resources (e.g., counseling). On 22 June 2020, Loyd Auerbach received an e-mail referral. He subsequently made phone contact with Eileen and Robert, who sought an explanation and eradication of the disturbances, which apparently satisfied Auerbach et al.'s selection criteria for a follow-up probe. This occurred during the COVID-19 quarantine conditions that prevented onsite visits, so the researchers devised and implemented a virtual investigative approach via online video conferencing that involved conducting online interviews, a clinical evaluation session, and telehealth counseling sessions with family members.

Anomalous Experiences and Contextual Factors

The disturbances began in mid-June of 2020, although activity might date back to April or May. This was after the mandatory state-wide 'shelter-in-place' COVID-19 lockdown order on 19 March 2020. This forced Nathan, who was visiting the Middle East on a study abroad program, to return home. Subsequently, the family soon found themselves living together in close proximity because of quarantine and severe air quality hazard alerts from wildfires in the Santa Cruz Mountains and Napa Valley (August, September, and October). Another event that preceded the disturbances involved a pet rabbit the family was fostering (February 1 to June 1). Starting in mid-March, the rabbit was housed in a pen that occupied roughly half of the small living room that the family used as a multi-purpose area. The resultant space reduction caused family stress. The need to return the rabbit after fostering strongly affected Emma, who had bonded with

Eileen stated that anomalous events occurred almost daily. On some days, they continued for several hours, whereas other times, the activity was confined to one or two disturbances per day. As the phenomena progressed, Eileen and clinician Beth Hedva (B.H.) produced a written observational log, which Auerbach et al. (2023) offered as Supplemental Material to interested researchers. They noted the 'date, approximate time, witnesses present, and circumstances.' Over 7.5 months of active disturbanc-

es, the family chronicled 295 events (measured in units of days), that were also subdivided by categories to explore symbolic themes. Auerbach et al. (2023, p. 47) reported a significant decline in the number of daily recorded disturbances over subsequent months (r = -0.397, p = .001, two-tailed). With the exception of four days in which disturbances clustered (daily total > 5), the marked drop in recorded disturbances from September onward (when daily totals were < 5) aligned with telehealth session days that began in September (see below). Additionally, the anomalies were consistent with previously published poltergeist-type cases (cf. Houran, Lange, et al., 2019; Houran, Laythe, et al., 2019). They specified 295 disturbances, yet their sections indicated 337. This suggests that the disturbances may have appeared in more than one category; which is probable since phenomena were object and feeling related, though this suggestion was not made clear in their paper.

The investigators created psychological family member profiles from initial clinical evaluation and telehealth sessions. These afforded insights into personal psychosocial dynamics and individual characteristics related to disturbances. Additionally, clinical evaluation and telehealth sessions indicated that multiple stressors during the lockdown period affected the family. These included confining effects (i.e., due to COVID-19 and wildfires), loss of opportunity and fulfillment of expectations (e.g., missed interactions and events), separation effects, project delays, financial burdens, family disagreements, etc. Of these, Eileen linked family disagreements with frustration, anger, and disturbances. Eileen also reported that disturbances occurred in four specific contexts: (a) all family members present, (b) Nathan and Emma present, (c) Eileen and Emma present, and (d) Robert and Emma present. No disturbances occurred when there were just (a) Robert and Nathan and (b) Eileen and Robert. This pattern of interactions implicated Emma as the primary agent or focus person of disturbances. B.H. attributed the disturbances to existential uncertainty (life insecurity). Also, Emma's dislike of authority was central to family issues. The wider socio-political circumstances also contributed to family tensions and anxieties.

Interventions and Outcomes

The initial clinical evaluation session with Eileen and Robert was conducted by B.H. on 4 August 2020. This determined the family's general situation and identified any personal psychological issues they might be facing which could relate in some way to the disturbances. Collaborative family therapy included discussion of family history and dynamics, potential stressors, and desired therapeu-



tic goals. In addition, clinical self-assessment measures were administered. These comprised the Adverse Childhood Experiences Checklist (ACE: Felitti et al., 1998), Los Angeles Symptoms Checklist (LASC; King et al., 1995), Narrative Client Questionnaire (NCQ: Auerbach, 1986), Highly Sensitive Person Self-Assessment Scale (HSPS: Aron & Aron, 1997). The ACE assesses history of trauma, which can evaluate or predict future potential personal issues (e.g., depression, and suicide risk). LASC identified the presence of potential symptoms of general psychological distress and post-traumatic stress disorder. NCQ measures the personal history of psychic experiences. With the exception of the HSP, which was completed by Emma and Eileen, only Eileen and Robert attended and participated in the evaluation session.

Following the evaluation session, the family took part in 18 telehealth sessions conducted by B.H. They were initially scheduled on a weekly basis (between September 14 and November 18) and lasted 50 to 75 minutes. Since the researchers perceived the family was making progress, proceeding sessions were reduced to bi-monthly (December 2 to January 20). This sequence was punctuated by setbacks (February 17-23), which resulted in a brief return to weekly sessions. Participation in telehealth sessions varied across family members. The prime participants were Eileen and Robert, who attended all of the sessions. Although Nathan did not participate in the evaluation session, he typically briefly attended the start of the telehealth session (approximately 10 to 20 minutes). Attendance fitted around his homework schedule. Emma refused to attend sessions. Information on her personality and behavior in sessions was provided by other family members.

The researchers did not consider Nathan's and Emma's lack of engagement as an issue because systemic family therapy regards the family as a singular 'emotional unit.' Accordingly, the individual members participated in a dynamic, intricate, and interrelated system of mutual interactions. Hence, the system is impacted through family member interactions. During sessions, B.H. used a range of psychotherapeutic and intuitive techniques to facilitate issue resolution and achieve therapy goals. Techniques included education (i.e., provided information about poltergeist-type events and parapsychological research) to reduce fears or misconceptions; strategic 'brief' personal therapy techniques/assigning of homework (i.e., basic stress reduction and crisis intervention practices, designed to cultivate calmness and de-escalate tension), and family systems, transpersonal, and clinical parapsychological techniques (i.e., communication skills training, exploration of cultural and transpersonal elements, and intuition training). As no further anomalies

occurred after February 3rd, the family decided that weekly sessions were no longer needed, and only one other session was held on March 9th. This final session closed the therapeutic relationship.

The Proposed 'AECKO' Model

Auerbach et al. (2023) interpreted the reported disturbances within a particular framework they dubbed the AECKO model, which specifies a minimum set of necessary and sufficient features to define a spontaneous case. The A and O in the acronym stand for Anomalous Occurrence. Anomalous is defined as "experiences that do not fit into one's usual understanding of the world," and Occurrence simply denotes that the anomalous experiences must be related, as well as occur in a cluster or group of two or more within a certain time frame or space (p. 60). Episodic (E) indicates that the cluster of AOs will play out to an episode, story, or narrative that connects the AO with the physical and psychosocial aspects of the individuals present in timeframe/space, with a beginning, middle, and (foreseeable) ending. Communal (C), ensures there are "a distinct, identifiable group of people who are witnesses, victims, and reporters of the AO, and who are somehow related as a group," p. 60). Kinetic (K) denotes that some of the AO are "measurably energetic, including percussive sounds and physical effects...that leave physical evidence of having occurred" (p. 61). Further, a sixth component of the model is its reliance on a "systems-theoretic perspective" or "...interrelated parts/factors which combine to produce some outcome of interest which is possibly greater than the sum of its constituent parts" (p. 61).

We understand AECKO to be a clinical model that primarily contextualizes 'poltergeist-like' events in order to help ease the distress of the focus person (or, the 'poltergeist' agent) and their family, which, in turn, presumably decreases the frequency or intensity of the anomalous events. Auerbach et al. were apparently interested in the origins of the disturbances but did not disclose any detailed thoughts about the etiology of this particular case. They nevertheless cited William Roll's (1972/2004, 1977) work on the hypothesis of 'recurrent spontaneous psychokinesis' (RSPK; i.e., involuntary mind-matter interactions by certain living people), which might suggest this was a working assumption in their investigation. On the other hand, Auerbach et al. (2023) boldly asserted that RSPK is a "flawed first step towards building a systematic science," and so the AECKO model does not identify an "RSPK agent" and likewise encourages researchers to abandon the human-PK theory as a key etiological factor (p. 13). Instead, they portrayed AECKO as a versatile, fluid,

and flexible model that can accommodate new evidence irrespective of whether RSPK is involved in these haunt-type cases.

PART 1: CONCEPTUAL EVALUATION OF AUER-BACH ET AL.'S (2023) AECKO MODEL

For convenience and efficiency, we worked as an ex-

pert panel (Bertens et al., 2013) to specify key similarities and differences between the AECKO and HP-S concepts. Each co-author conducted an independent visual inspection of the respective published descriptions and then shared the results with the broader team. One co-author subsequently collated and summarized the areas of collective agreement for our review and approval. We resolved any ambiguities or disagreements about the par-

Table 2. Comparison of key features between the HP-S and AECKO models.

Haunted People Syndrome (HP-S)	Corresponding AECKO Component	AECKO model	
(Laythe et al., 2021a)		(Auerbach et al., 2023)	
Thin Mental Boundary Functioning		Hypersensitivities in Focus Persons	
	Not specified in AECKO Model.		
Transliminality (i.e., hyper-sensitivity to internal & external stimuli), noted in multiple studies to be predictive of anomalous experience and PSI.		Highly Sensitive Person Scale.	
Dis-ease States		Psychosocially Adverse Situations	
Periods of marked psychological disruption or imbalance.	Communal C, as implied by use of word "victim" in definition.	Emotional disruption but not severe mental illness.	
Recurrent Anomalies		Repeated Occurrences	
		'Kinetic' (objective) phenomena.	
Perception of diverse S/O anomalies per the probabilistic haunt hierarchy, applied to diverse forms of 'hauntings', with ability to address type and nature of phenomena, as well as severity.	Anomalous Occurrence (A & O), Episodic (E) , Kinetic (K)	Two or more events, specifically defined as "measurable", and "energetic".	
Perceptual Contagion		Communal	
'Flurries' of anomalous perceptions due to attentional bias or expectancy effects with individuals or groups, noting 'communal interpretation', and lab generated contagion effects.	Communal C & Episodic (E)	Cultural/Spiritual/Religious Orientation (i.e., beliefs, and practices can either help or hinder a resolution of the disturbances.	
		Percipients are part of a social group.	
Threat-Agency Detection			
(i.e., anxiety levels of the percipients relate to the nature, proximity, & spontaneity of the anomalous experiences).	Communal C & Episodic (E)	Cultural/Spiritual/Religious Orientation (i.e., beliefs, and practices can either help or hinder a resolution of the disturbances.	
		Percipients are part of a social group.	
Sense Making Attributions Using Interactionism to Denote Phenomena Witnessed and Interpretation Within Macro and Micro Phenomenology Frame- works		Systems Theoretic Perspective With Gestalt Features	
(i.e., creation of a narrative reality based on the percipient's biopsychosocial context Ideology, Beliefs, Upbringing, and Environment in context of phenomena witnessed).	Underlying Framework	"interrelated parts/factors which combine to produce some outcome of interest which is possibly greater than the sum of its constituent parts." (p. 61).	
Paranormal Belief (i.e., endorsement of supernatural phenomena).		Auerbach's Parapsychological Question- naire (past paranormal beliefs).	
Additional assessment through interviews or measures to address's percipient(s) 'meaning making' of anomalous occurrences.		Clinical interviews and related clinical measures.	

allels between the two concepts via iterative discussions. Accordingly, Table 2 compares the components of the AE-CKO model (Auerbach et al., 2023) to the five recognition patterns of HP-S and their underlying theoretical frameworks (Laythe, Houran, Dagnall et al., 2021). Several, if not all, aspects of the two approaches are strikingly similar despite their independent development and differences in specificity. This assertion derives from the fact that Auerbach et al.'s (2021, 2022, 2023) multiple case presentations neither claimed nor implied that their study linked to Laythe, Houran, Dagnall et al.'s (2021, 2022) grounded theory of HP-S or its foundational research. This includes earlier studies that first specified a 'transliminal dis-ease' view of ghostly episodes (e.g., Houran, 2013; Houran et al., 2002; Ventola et al., 2019) or our wider discussions of these phenomena in terms of systems theory, narrative reality, and immersive experiences (e.g., Hill et al., 2018; Houran & Lange, 1996b; Lange & Houran, 2001a). Thus, Auerbach et al.'s results can be considered 'unintentional data' with respect to the development and validation of the HP-S concept.

As a broad comparison, four major comparative themes are evident. First, HP-S relies on transliminality as a central variable among percipients, noting the extensive literature linking thin mental boundaries to anomalous experiences (e.g., Laythe et al., 2022). But, AECKO noticeably lacks explanations with respect to Auerbach et al.'s (2023) use of a parallel measure of 'highly sensitive persons' and how it fits with the AECKO model. Second, both models address anomalous experiences, but AECKO places much more 'definitional emphasis' on the A, E, K, and O components, defining 'anomalous experience' from the paragraph above and noting the requirement of "two or more" anomalous events that are measurable and external via some method. In contrast, HP-S uses a standardized measure that allows for S/O anomalies across different interpretational milieus, and methods for addressing the severity and type of the occurrences (Houran, Lange et al., 2019; Houran, Laythe et al., 2019).

Third, AECKO refers to a Communal component and addresses this aspect in a clinical sense by emphasizing 'psychosocially adverse situations,' whereas HP-S has additional empirically supported predictions about the interaction of individuals and groups in the immediate environment. These include Perceptual Contagion effects and Threat-Agency Detection relative to the percipient's Dis-ease States (equating to psychosocially adverse situations) and, which reinforce or lead to Sense-Making Attributions. Fourth and finally, AECKO relies on a 'systems-theory' view that directly parallels the HP-S model's 'interactionist' (i.e., person-environment interplay) perspective, which also differentiates between anoma-

lous experiences and associated attributions (cf. Lange et al., 2019). Furthermore, HP-S specifies that a percipient's beliefs, sociocultural setting, and immediate environment collectively shape the interpretation of *S/O* phenomena perceived by individuals or groups. Specifically, HP-S highlights the macro- and micro-phenomenology of a ghostly episode in contrast to the AECKO model, which does not specifically guide how systems theory applies to these types of reports.

PART 2: CONTENT ANALYSIS OF AUERBACH ET AL.'S (2023) POLTERGEIST-LIKE EPISODE

Assuming that Auerbach et al. (2023) were blinded to the HP-S model when planning, conducting, or interpreting their fieldwork, the set of correspondences identified in Part 1 represents an example of multiple discovery or simultaneous invention. This is the well-known phenomenon of scientific discoveries or inventions being made independently and more or less simultaneously by multiple scientists or inventors (Lubowitz et al., 2018; Ogburn & Thomas, 1922). However, several case studies demonstrate that specific tools and techniques can reliably map the phenomenology of a ghostly episode and assess the construct validity of HP-S (Houran et al., 2022; Houran & Laythe, 2022, 2023; Houran, Laythe, Little et al., 2023; O'Keeffe et al., 2019). We therefore used a thematic analysis with a narrative lens to evaluate Auerbach et al.'s (2023) case details relative to indicators of 'spontaneous' ghostly episodes and the five recognition patterns of HP-S (Laythe, Houran, Dagnall et al., 2021, 2022). This deductive approach applies existing theory and codes that follow from it to qualitative data (Braun & Clarke, 2006).

Our research design thus parallels a retrospective chart (or medical record) review in which pre-recorded, patient-centered data are used to answer one or more research questions (Vassar & Holzmann, 2013). In particular, an independent analyst used a set of standardized measures to assess for high-confidence indications that (a) Transliminality (or thin mental boundaries), reinforced by Belief in the Paranormal, was a springboard for percipients' anomalous experiences; (b) Dis-ease was a catalyst for the onset of anomalous experiences; (c) Anomalous experiences showed diversity in content and 'event flurries') suggestive of Perceptual Contagion at the individual- or social- levels; (d) Sense-Making Attributions for the anomalous experiences conformed to the percipient's biopsychosocial context, and (e) Arousal or anxiety levels of the percipients related to the nature, proximity, and spontaneity of the anomalous events (i.e., Threat-Agency Detection).

We strived to follow the Journal Article Reporting

Standards (JARS) (Kazak, 2018), so below we describe how we determined our research samples, data exclusions (if any), research questions, applicable manipulations, and all measures and data abstractions used in the content analysis. Our design, analysis, and research materials were not pre-registered but conceptually replicate the procedures used in our prior peer-reviewed research as cited above.

METHOD

Measures

Survey of Strange Events

(SSE: Houran, Lange et al., 2019). This is a 32-item, Rasch (1960/1980) scaled measure of the overall 'haunt intensity' (or perceptual depth) of a ghostly account or narrative via a true/false checklist of anomalous experiences inherent to these episodes. The SSE's Rasch item hierarchy represents the probabilistic stacking of S/O events according to their endorsement rates but rescaled into a metric called 'logits.' Higher logit values denote higher positions (or greater difficulty) on the Rasch scale (Bond & Fox, 2015). Houran, Laythe et al., (2019, 2021) provide more information about the conceptual background and psychometric development of this instrument. Rasch scaled scores range from 22.3 (= raw score of 0) to 90.9 (= raw score of 32), with a mean of 50 and SD = 10, and Rasch reliability = 0.87. Higher scores correspond to a greater number and perceptual intensity of anomalies that define a percipient's cumulative experience of a ghostly episode. Supporting the SSE's construct and predictive validities, Houran, Lange et al., (2019) found that the phenomenology of 'spontaneous' accounts (i.e., ostensibly sincere and unprimed) differed significantly from control narratives from 'primed conditions, fantasy scenarios, or deliberate fabrication.' That is, spontaneous ghostly episodes have a specific structure (or Rasch model) of S/O anomalies that is distinct from the details of narratives associated with other contexts.

HP-S Recognition Patterns Checklist

(Houran et al., 2022b; Houran, Laythe, Little et al., 2023). This template was used to guide the raters' content analyses of the contextual aspects of the present case. It outlines the five recognition patterns of HP-S via seven specific questions that are rated on four-point Likert scales anchored by "Strongly Disagree" (scored '0') to "Strongly Agree" (scored '3'). Raw ordinal scores, therefore, range from '0' to '21' (mean = 14), with higher scores indicating a judgment of greater likelihood that the respective HP-S recognition patterns were present. Table 3 shows the exact wording of the seven items. This coding

sheet likewise refers to the Revised Transliminality Scale (RTS: Lange, Thalbourne et al., 2000) and the Rasch version (Lange, Irwin, & Houran, 2000) of Tobacyk's (1988, 2004) Revised Paranormal Belief Scale (RPBS). Thus, we also provided copies of these two instruments to the coders as important supplementary information.

The RTS is a 17-item, T/F, Rasch-scaled instrument to gauge "a hypersensitivity to psychological material originating in (a) the unconscious and/or (b) the external environment" (Thalbourne & Maltby, 2008, p. 1618). This perceptual-personality variable thus parallels Hartmann's (1991) boundary construct and also the notion of sensory processing sensitivity (Aron & Aron, 1997). In contrast, the Rasch version (Lange, Irwin et al., 2000) of Tobacyk's (1988, 2004) Revised Paranormal Belief Scale (RPBS) is a 16-item, Likert-based measure that comprises two subscales hypothesized to reflect different control issues, i.e., (a) 'New Age Philosophy' (11 items) appears related to a greater sense of control over interpersonal and external events (e.g., belief in psi) and (b) 'Traditional Paranormal Beliefs' (five items) seem more culturally-transmitted and beneficial in maintaining social control via a belief in magic, determinism, and a mechanistic view of the world. Note that the Recognition Patterns Checklist is a tactical worksheet, so no psychometric properties are reported

Haunted People Syndrome Screener

(HPSS; Lange & Houran, 2024) consists of six items to be rated on four-point Likert scales anchored by 'Strongly Disagree' (scored 0) and 'Strongly Agree' (scored 3). These assess the presence of four of the five recognition patterns of HP-S (Laythe, Houran, Dagnall et al., 2021, 2022) relative to recurrent haunt-type experiences—that is: (a) Thin Boundary Functioning (i.e., Transliminality), (b) Disease States, (c) Perceptual Contagion (i.e., event flurries and/or diverse perceptions), and (d) Sense-Making Attributions (i.e., a narrative reality drawing on personal or ideological beliefs). The Rasch-scaled scores (reliability = .87) range from 37.1 to 71.2, with a mean of 50 and standard deviation = 10. Its scores also strongly and positively predict SSE scores (attenuation corrected correlation = 0.78, p < .001).

PROCEDURE

A professional clinician and experienced field researcher (i.e., the second author)—who was familiar with our measures and HP-S model—first independently analyzed the contents of Auerbach et al.'s (2021, 2022, 2023) case materials. This included their supplemental 22-page Full Appendix that presented a "...chronological table of all 295 events recorded in the log" (Auerbach et al., 2023,



p. 35). The analyst used: (a) the SSE to measure the 'haunt intensity' by assessing the pattern of reported S/O anomalies, and (b) the HP-S Recognition Patterns Checklist to initially provide ratings on contextual factors attending the S/O anomalies, which were subsequently applied to the HPSS to obtain a more robust standardized score. No time limit was imposed for the content analysis, and the analyst returned the completed forms approximately 1.5 months later. For convenience and efficiency, the remaining research team (all except the second author) again worked as an expert panel (Bertens et al., 2013) to 'double-check' the reliability, accuracy, and completeness of these primary ratings (Hewitt et al., 2016). This five-person panel encompassed collective expertise across clini-

Table 3. SSE profile of Auerbach et al.'s (2023) poltergeist-like case.

Survey o	f Strange Events (SSE)	Pres- ence	Frequency
1. I saw with my naked eye a non-descri	pt visual image, like fog, shadow or unusual light	0	0
	ghost or apparition – a misty or translucent image with a	0	0
3. I saw with my naked eye an "un-obvi living person	ous" ghost or apparition – a human form that looked like a	0	0
4. I smelled a mysterious odor that was	pleasant	0	0
5. I smelled a mysterious odor that was	unpleasant	0	0
6. I heard mysterious sounds that could (with or without singing)	be recognized or identified, such as ghostly voices or music	0	0
7. I heard on an audio recorder mysteri ghostly voices or music (with or with	ous sounds that could be recognized or identified, such as out singing)	0	0
8. I heard on an audio recorder mysteri	ous "mechanical" or non-descript noises, such as tapping, footsteps or the sound of opening/closing doors or drawers	0	0
	reason, like happiness, love, joy, or peace	0	0
	reason, like anger, sadness, panic, or danger	0	0
11. I felt odd sensations in my body, suc my stomach)	h as dizziness, tingling, electrical shock, or nausea (sick in	0	0
12. I had a mysterious taste in my mouth		0	0
13. I felt guided, controlled or possessed	by an outside force	0	0
14. I saw beings of divine or evil origin, su	ich as angels or demons	0	0
15. I saw folklore-type beings that were people"	not human, such as elves, fairies, or other types of "little	0	0
16. I communicated with the dead or other	er outside force	0	0
17. I had the mysterious feeling of being	watched, or in the presence of an invisible being or force	0	0
18. I had a sense of déjà vu, like somethir or surroundings	g was strangely familiar to me about my thoughts, feelings	0	0
19. I felt a mysterious area of cold		0	0
20. I felt a mysterious area of heat		0	0
21. I experienced objects disappear or rea	appear around me	1	93
22. I saw objects moving on their own ac	oss a surface or falling	1	28
23. I saw objects flying or floating in mida		1	80
24. Electrical or mechanical appliances of flickering lights, power surges or batter etc.)	r equipment functioned improperly or not at all, including eries "going dead" in electronic devices (e.g., camera, phone,	1	51
/	vice captured unusual images, shapes, distortions or effects	0	0
	ets, disposal, toilet) functioned improperly or not at all	0	0
	I them broken), like shattered or cracked glass, mirrors or	1	3
28. I heard mysterious "mechanical" or no ing, crashing, footsteps or the sound	n-descript noises, such as tapping, knocking, rattling, bang- of opening/closing doors or drawers	1	19
	like something invisible was moving near me	0	0
30. Fires have started mysteriously	<u> </u>	0	0
	hreatening manner, like a tap, touch or light pressure on my	1	6
	ntening manner, such as a cut, bite, scratch, shove, burn or	1	17
RAW SUM		8	

cal, cognitive, personality, and social psychologies. Each member independently reviewed the second author's initial ratings and provided commentary to the group. We resolved any ambiguities or disagreements about particular aspects of the case's phenomenology via iterative discussions. Moreover, we re-examined Auerbach et al.'s (2023) Full Appendix for the reported frequencies of different S/O anomalies in order to explore for previously undetected or unreported patterns.

RESULTS

Micro-Phenomenology

Table 3 converts Auerbach et al.'s inventory of reported events in the case to an SSE profile comprising the presence (T/F) and incidence rate (frequency) of particular S/O anomalies inherent to ghostly episodes. The raw sum of '8' equates to a below-average SSE score of 47.3 (SE = 2.9). This result most closely matches the mean SSE score for an Illicit narrative (M = 45.90) as compared to the means for Spontaneous (M = 51.70), Primed (M =52.30), Fantasy (M = 49.43), or Lifestyle (M = 50.60) narratives (Houran, Lange et al, 2019, p. 176). Note that we omitted three events from the coding/scoring due to their vagueness: (a) a string was found loosened, (b) shampoo allegedly changed color, and (c) a candle flame went out. Two of these anomalies might fit the SSE items of either "object movements" or "object (dis)appeared around me," but an appropriate category for the shampoo event is elusive. That said, the SSE score would slightly increase to 48.6 (SE = 2.8), assuming a raw sum of '9' to accommodate this latter anomaly as a new SSE item. This adjusted SSE score best approximates a Fantasy narrative. These results imply that the 'haunt intensity' of the S/O anomalies defining this case might best be construed as something between, or a hybrid of, Illicit and Fantasy episodes.

To cross-check, we correlated the recorded frequencies of each SSE item to the Rasch logit values for the same items across each of the five different haunt conditions in Houran, Lange et al. (2019). Recall that a logit is the unit of measurement in Rasch scaling corresponding to a point along an interval-level continuum where a given item is positioned per its likelihood of being endorsed relative to the other items in the measure. Houran, Lange et al. (2019) found that the logit values of some SSE items shifted by context, i.e., specific anomalies were under or over-reported by survey respondents in Spontaneous, Primed, Lifestyle, Fantasy, and Illicit contexts. Thus, these five narrative-specific 'haunt hierarchies' have some diagnostic value. The S/O anomalies reported most frequently should thus correspond to SSE items with lower logit values in a particular haunt hierarchy (i.e., 'easier' endorsement, or relatively more common experiences). Likewise, the SSE items with higher logit-values (i.e., 'harder' endorsement or relatively rarer experiences) should relate to S/O anomalies with comparatively lower frequencies in a particular haunt hierarchy. In other words, a stronger negative correlation in this exercise indicates stronger compatibility between a given account and a narrative-specific haunt hierarchy. Correlational analysis indicated that Auerbach et al.'s stated frequency distribution of S/O anomalies in this case most closely resembles an Illicit narrative (r = -.24, p = .19), followed by Fantasy (r = -.14, p = .44), Spontaneous (r = -.01, p = .96), Lifestyle (r = .25, p = .17), and Primed (r = .43, p < .01) contexts. Nearly all these associations are not statistically significant, but their directionalities offer important insights for further contemplation.

Lastly, we evaluated the broad structure of the S/O anomalies in the case via Houran, Lange et al.'s (2019, p. 180) decision-tree process. Based on current benchmarks, this statistically-derived classification heuristic suggested that the general structure of the S/O anomalies align with 87% accuracy to an 'Illicit' narrative, i.e., an account containing some amount of false or embellished testimony. This outcome might also fit a Fantasy narrative if self-deception or self-gaslighting was involved due to, for example, expectancy-confirmation effects (e.g., Drinkwater et al., 2019) or efforts to cope with trauma (e.g., Rubinstein & Lahad, 2023). Overall, the present case is estimated to have the haunt intensity of an Illicit-Fantasy narrative with S/O anomalies showing a distribution pattern most similar to accounts benchmarked as knowingly dubious.

Auerbach et al. (2023, p. 53) asserted that several factors mitigated the possibility of a hoax, such as the family's (a) outreach to the local police, (b) resistance to socializing or publicizing the case, and (c) cooperative and anonymous participation with a formal investigation. Yet Auerbach et al.'s (2023) Full Appendix (supplemental material) included hints that pranking sometimes occurred. For instance, Event 282 (p. 20) involved Eileen and Robert hearing the sound of glass falling as they watched a Netflix program on the living room sofa (just in front of the dining room). They discovered that Eileen's full glass of water had moved from the dining room table to the floor, but Event 283 indicates that the glass was picked up and found to have approximately "10-feet of dental floss wrapped around it and tied in a knot." Another time (Events 98-100, p. 6), the family decided to sleep together in the master bedroom to ease their anxiety. During this time, three "water materializations" occurred: (a) water was found spilled on Robert's shirt, bedsheets, and comforter, as well as on Emma's foot after the lights went

out (Event 98); (b) water then appeared on Robert's dry clothes and on Emma's head and shirt after family again turned off the lights to sleep (Event 99); and (c) water again spilled on Emma after the lights had been turned off a third time (Event 100). Later, three crumpled Dixie bathroom cups—discovered under the bed while cleaning the room the following day—were suspected of being involved in these incidents.

We, therefore, conclude from both the psychometric modeling and circumstantial evidence that this ghostly episode was *not* a purely spontaneous event but instead involved the role of active imagination (purposeful or not) as related to Thin Boundary Functioning rather than explicit cuing or demand characteristics exemplified by commercial paranormal tours or ghost hunts. Working from these assumptions, Houran, Laythe, Little et al.'s

(2023: Appendix) simplified process for vetting cases would not have recommended a parapsychological (or proof-oriented) field investigation of this case. Still, this does not mean that the clinical attention Auerbach et al. gave to the family was a misguided or wasted effort. We agree that regardless of the ontological reality of psi functioning in certain cases, the reported phenomena are often idioms of distress that ethically deserve supportive responses from researchers (Hess, 1988; Houran et al., 2002; Rogo, 1982).

Macro-Phenomenology

Table 4 gives the analyst's mapping of contextual details in this case per the HP-S Recognition Patterns Checklist. There were moderate-to-strong ratings on six (or 86%) of the seven nuances of HP-S, namely: (a) Thin

Table 4. HP-S recognition patterns mapped to the Auerbach et al. (2023) poltergeist-like case

HP-S Recognition Pattern	Corresponding Attitudes or Behaviors	Rat- ings (0-3)	Sample Evidence
Transliminality (i.e., permeable mental boundaries) is the foundation for percipients' anomalous experiences, reinforced by Paranormal Belief.	Does the witness/ focus person report experiences consistent with items from the Revised Transliminality Scale?	3	Emma scored '18' on the Highly Sensitive Person Self-Assessment Scale, which classifies her as a highly sensitive (p. 43).
	 Does the witness/ focus person report attitudes or beliefs consistent with items from the Rasch-Revised Paranor- mal Belief Scale? 	2	Family members believed that Emma had psychic abilities and could predict the future (p. 43).
Dis-ease (or psychological dissonance) as a catalyst for the onset of anomalous experiences.	3. Does the witness/ focus person report circumstances of notable distress (negative stress) or eustress (positive stress) immediately prior to the onset of the anomalous experiences?	3	Emma endured prolonged stress, anxiety, and uncertainty throughout the course of the case related to several psychosocial stressors including; confining effects, loss of opportunity and fulfillment of expectations, separation effects, financial burden, insect infestation, personal effect over local/national events. (p. 45)
Recurrent anomalous experiences that exhibit temporal patterns suggestive of perceptual or social contagion.	4. Does the witness/ focus person report an ongoing array of diverse S/O anomalies per the Survey of Strange Events?	3	Auerbach et al. (2021b: Appendix, pp. 2-3): On 6/18/20, the family experienced 19 different anomalous events over the course of 2.5 hours
	5. Does the perception of S/O anomalies clearly occur in "flurries," especially when a group of percipients is involved?	3	Auerbach et al. (2021b: Appendix, pp. 6-8): The family witnessed a series of 32 anom- alous events which occurred from 11pm on 7/18/20 until 7/19/20 at 5am.
Attributions for the anomalous experiences align to the percipient's biopsychosocial context.	6. Does the witness/ focus person interpret the S/O anomalies in a way that is consistent with his/her religious or cultural belief system(s)?	0	It was noted without specifics that the family has "religious beliefs" (p. 43), but no indications in the paper or Appendix that any family member associated the disturbances to their cultural or religious beliefs.
Anxiety levels of the percipients relate to the nature, proximity, and spontaneity of the anomalous experiences.	7. Does the witness/ focus person report greater intensity of fear or anxiety when the S/O anomalies occur (a) suddenly or without warning, (b) within the person's personal space, and/or (c) involve more tangible or physical anomalies?	2	Emma's responses to the anomalous disturbances resulted in psychosomatic aftereffects such as hand trembling and one instance of fainting (p. 43).

Table 5. Comparison of Auerbach et al.'s (2023) focus person to Ventola et al.'s (2019) psychometric profile of poltergeist agents.

Psychological Variables Linked to Focus Persons (Ventola et al., 2019)	Sample Behaviors of Focus Person in the Case Study (Auerbach et al., 2023: Full Appendix)
Imagination/ Magical Thinking/ Fantasy-Proneness	
Rebellious Attitude/ Impulsivity/ Aggression/ Hos- tility	"Several of the issues relating to authority and being judged seem to relate to Emma, who does not like being told what to do and is fearful of being judged for being "different" from the rest of the family, leading to a sense of isolation (i.e., a "black sheep" scenario)" (p. 46).
Somatic Complaints/ Anxiety/ Irritability	Emma was diagnosed with Generalized Anxiety Disorder, started on Zoloft, and participated in individual psychotherapy (p. 44).
Low Self-Esteem/ Self-Concept or Ego-weakness/ Insecurity	Concern with body image. Frequently felt self-conscious about her weight, often asking other family members " if they think she's fat" (p. 43).
Unhappiness/ Shame/ Jealousy	Emma presumably had difficulty with prolonged social distancing and confinement, which resulted in negative psychological effects such as stress, depression, anxiety, loneliness, and boredom (p. 44).
Dissociative Tendencies	
Temporal Lobe Lability	
Introversion	Family and teachers reported to have noted that Emma was "very, very shy" and did not like speaking in class or being called on by the teacher. Also did not like talking with waiters to order food (p. 43).

boundary functioning via high transliminality and reinforced by some degree of paranormal belief; (b) Dis-ease coinciding with the onset of the S/O anomalies; (c) diverse S/O anomalies that manifest in flurries (i.e., possible perceptual contagion); and; (d) percipients' anxiety levels aligned to principles of threat-agency detection. However, the available evidence did not clearly implicate the adoption of sense-making attributions by the afflicted family. The ratings nonetheless summed to an above-average score of '16' on the Checklist. These patterns further yielded a raw score of '14' on the separate HPSS tool, which converts to an above-average Rasch scaled score of 59.3 (SE = 2.5). In other words, the content analysis found reasonably strong and reliable evidence that Auerbach et al.'s (2023) case exhibited HP-S phenomenology.

Table 5 shows that Emma also exhibited several clinical characteristics that corresponded to Ventola et al.'s (2019) review of the psychometric profiles of focus persons. In particular, prior psychological testing suggests there are eight individual differences observed with poltergeist agents, with each variable positively correlating with transliminality. The content analysis found reasonably strong indications of five (or 63%) of these characteristics. It is difficult to draw firm conclusions about Emma's potential lack of (a) Imagination/ magical thinking/ fantasy-proneness, (b) Dissociative tendencies, or (c) Temporal lobe lability, since absence of evidence is not evidence of absence (for a clinical discussion on this point, see Alder-

son, 2004). However, the overall results align well to Ventola et al. (2019) and thus underscore the likely roles of thin boundary functioning and dis-ease in this case.

CLINICAL ISSUES AND FUTURE RESEARCH DI-RECTIONS

Our audit of Auerbach et al.'s data and observations highlights three important topics for further consideration and exploration. Each could merit its own paper, so we only give synopses below.

Potential Phases or Subtypes of Ghostly Episodes

HP-S is not an omnibus theory but instead pertains to ghostly episodes that recurrently manifest to certain people. However, the content or valence of 'symptom perception' in these cases can alter with different biopsychosocial contexts, such as a percipient's culture, social milieu, psychological profile, or physical environment (Houran, 2000; Houran, Lange et al., 2019). This implies that a core experience or condition can appear outwardly different depending on various factors, and it might be misguided, therefore, to categorize cases based on singular characteristics like presumed source, contents or themes, duration or intensity, or even psychological aftereffects. At this time, we would argue that 'micro/ macro phenomenology' is perhaps the most reasonable criterion for case classification. The SSE and HPSS tools can assist

in this regard, though more research is certainly needed to improve their diagnostic or measurement quality.

Part of that precision involves considering categories or subtypes of ghostly episodes, as exemplified by the competing concepts and terms in Table 1. Moreover, the SSE might need to be expanded to accommodate more types of S/O anomalies or to acknowledge important nuances with certain phenomena. For example, it might prove useful to differentiate among specific classes of focus objects, as in Auerbach et al. (2023), different kinds of apparitions as discussed by Tyrrell (1953), or different physical manifestations as documented by Dullin (2024). SSE scores might also need to accommodate 'symbolic meanings' inherent to certain S/O anomalies within or across cases, though it is unclear how to make these determinations assuming they are unconscious in nature or require psychotherapy to uncover. Labeling in this context might be overly tenuous or vulnerable to suggestion effects. And too, the 'narrative development' of a ghostly episode should be considered (e.g., Houran, 2013) as cases could involve distinct phases or stages with their own nuances in phenomenology (Houran, Massullo, Drinkwater et al., 2024). It is also possible that supposed categories or subtypes of episodes can shift or transform among themselves, as with Dixon's (2016) study of a case in which physically-oriented 'poltergeist' anomalies were seemingly replaced by typical psychologically-oriented 'haunt' phenomena after the focus person was gone. Taken altogether, the question of phases or subtypes of ghostly episodes remains blurred, so Table 1 arguably reflects a vast range of hypotheticals to be tested. Any efforts along these lines should nonetheless help to refine the SSE and HPSS measures.

Finally, there are questions of measurement-equating in terms of (a) the incidence rate of S/O events versus (b) their absolute presence or absence. Consider three scenarios as an example: one case comprises the recurrent perception of a lone apparition vs. a second episode with multiple reports of three apparitions that are always observed simultaneously vs. a third incident involving object displacements (as with the Auerbach et al., 2023). All three cases would yield an SSE score of '1' per the simple presence/absence of particular anomalies. This suggests an equivalent 'depth or intensity' of experience across the scenarios, despite this assumption appearing to be implicitly flawed or incorrect. Thus, the current version of the SSE might need to be revamped for multi-level scaling that accounts for the potential interplay of 'anomaly type × anomaly frequency × episode duration.'

Stigmatization with Ghostly Episodes

People frequently interpret anomalous experiences as paranormal occurrences (Drinkwater et al., 2013, 2017; Drinkwater, Dagnall, Walsh et al., 2022). Blinston (2013) classified potential reactions to such claims. Whereas these were designed for children's encounter phenomena, they generalize well to the vast variety of exceptional human experiences. These responses include (a) pathologizing (labeling the experience as symptomatic of mental ill-health), (b) acceptance (viewing the account as authentic), (c) rejection (ignoring or dismissing the testimony), (d) condemning (criticizing the percipient for fabricating the incident), (e) demonizing (depicting the occurrence as the work of the devil or a demon), and (f) deifying (the narrative is believed and the person is viewed as special). From this perspective, many scholars and practitioners often view paranormal-type experiences as maladaptive or dysfunctional perceptions or behaviors. This trivializes the reported experience, undermines the percipient's acuities, and marginalizes the associated explanations and opinions. At a societal level, this delegitimizes the paranormal and ensures that the predominant scholarly view is one of refutation, rejection, or denial. This leaves little or no tolerance for the notion that paranormal forces or abilities can genuinely exist (e.g., Reber & Alcock, 2020).

In this context, some people have critiqued the HP-S model for allegedly pathologizing percipients via the use of biomedical terminology that sounds derogatory like 'syndrome' or 'dis-ease.' Even the concept of 'narrative reality' strongly parallels that of 'delusional' ideations (Houran & Lange, 2004). Nonetheless, there is no skirting the fact that the HP-S model comprises a 'transliminal dis-ease' view of ghostly episodes. Researchers and practitioners should, therefore, neither minimize nor ignore the clinically relevant facets inherent to many cases for the sake of political correctness that is fashionable in some academic circles (Enkvist, 2018). The psychological dynamics in these occurrences need not be strictly pathological, but they are often dysfunctional given that the anomalous events or their aftereffects can significantly disrupt an individual's daily functioning or that of an entire family. Accordingly, 'normalizing' these cases for percipients must be done in a careful and responsible manner that does not catastrophize the events, while at the same time, acknowledges the important clinical features of the focus person or the family dynamics that are typically at play. This leads to the next issue of parsimony in professional interventions.

Parsimony in Clinical Approaches

Much evidence suggests that emotional reactions

or psychological aftereffects with ghostly episodes are mediated or moderated by an individual's (or family's) interpretation of the S/O anomalies. For instance, Brett et al. (2014) showed that an undiagnosed population (compared to those diagnosed with a psychotic condition) were less concerned about a need for control and further applied more positive and benign interpretations of anomalous experiences compared to percipients with mental illness. Drinkwater and colleagues (2013, 2017) likewise found that percipients' interpretations of their paranormal experiences significantly mediated their perceived anxiety. Drinkwater et al. (2021) also discussed the threat index of S/O anomalies and how the nature of the events and their proximity to one's personal space affects one's threat index of a situation. These results suggest that the narrative process of sense-making might also influence percipients' distress levels in ghostly episodes.

The recommended strategies for clinical relief or sense-making— i.e., reducing either the frequency/intensity of ghostly perceptions, or the anxiety level felt in response to such perceptions — are often rooted in clinical, phenomenological, or transpersonal frameworks that accommodate percipients' belief systems (Laythe, Houran, Dagnall et al., 2021, pp. 201-205). More traditional techniques include traditional religio-spiritistic rites like exorcism, prayers, or so-called spirit-cleaning or spirit-releasement (Tilley, 2002; Tilley & Storm, 2020; Tramont, 2023), although Roll (1977, pp. 403-405) also talked about inconsistent outcomes with such interventions or even when families relocate to new residences. On the other hand, Sersch (2019) discussed several studies that showed exorcisms working as well or better than clinical therapy in cultures that accepted 'spirit possession' as a reality. It is easily presumed that certain rituals induce placebo effects which minimize dis-ease, and, in turn, mitigate perceptions of (or negative reactions to) S/O anomalies. Other interventions might work via the principles of Rational-Emotive Behavioral Therapy (REBT) model (Ellis & MacLaren 1998), which is the original form and one of the main pillars of cognitive-behavioral therapies (CBT) (David et al., 2018). The key feature that separates REBT and CBT from preceding cognitive therapies is that both frameworks target 'beliefs' as the fundamental course of intervention. Albert Ellis' basic idea was that our emotions and behaviors (C: Consequences) are not directly determined by life events (A: Activating Events), but rather by the way these events are cognitively processed and evaluated (B: Beliefs) (Oltean et al., 2017). It is also curious that Ellis adapted liberally from ancient philosophers and Buddhist theology in the creation of his REBT model (Christopher, 2003; Ellis, 2000).

Regardless, calls for mindfulness of 'clinical para-

psychology' are not a new proposal (Coly & McMahon, 1993; Evrard, 2022; Kramer et al., 2012), and augmenting field investigations with trained practitioners who can provide education on these anomalous experiences or facilitate sense-making for percipients should be encouraged as a best practice. Yet, there are also important ethical considerations with interventions that implicitly endorse or reinforce people's unproven or emotion-based belief systems, or otherwise foster cognitive distortions in health-related contexts (Andrade, 2017; Chaet, 2018; Conlin & Boness, 2019; Irwin et al., 2022; Vicente et al., 2023; Zaiden et al., 2023). Moreover, simple counseling approaches do not necessarily advance a scientific understanding of ghostly episodes. Indeed, person-centered designs and clinical interventions need not be mutually exclusive to the critical goals of scientific data collection and hypothesis-testing. Carpenter (2012) spoke to this point with his suggestion to use psychotherapy to gain even deeper levels of understanding about the psychology and parapsychology of ostensibly psi-conducive individuals such as focus persons. This tactic might not be feasible in every situation, as most people will likely be more interested in symptom-relief than investing their time and energy in an ongoing process of intense self-examination. However, we concur with Carpenter's view that the data gathered could provide critical and unique insights that are otherwise unobtainable with psychometric testing alone.

GENERAL DISCUSSION

Academic studies normally include a review of prior and relevant publications to ensure that existing knowledge is recognized and discussed logically relative to current convergences and divergencies (Bordage, 2001; Pautasso, 2019; Webster & Watson, 2002). It is also necessary to uncover gaps that exist in specific research areas, as well as to explore the knowledge needed to make progress in a domain (Snyder, 2019). In these respects, Auerbach et al.'s (2023) case study could have been an opportunity for cumulative model-building and theory formation on ghostly episodes. In particular, a comparison of key features showed that the AECKO framework conceptually duplicates virtually all the core tenets of Laythe, Houran, Dagnall et al.'s (2021, 2022) earlier HP-S model. A content analysis of the spontaneous case in question likewise affirmed a moderate-to-high level of alignment with three of the five recognition patterns of HP-S. However, the extent to which paranormal belief and threat-agency detection played significant roles here was unclear. Separate observations nonetheless agreed on the basic 'transliminal dis-ease' view of these anom-



alous experiences, which was proposed many years ago (e.g., Houran, 2013; Houran et al., 2002; Ventola et al., 2019). But, the HP-S concept goes further to characterize ghostly episodes as narrative realities comprised of *enactive*, *immersive*, and often *performative* events.

We thus appreciate Auerbach et al.'s (2023) de-emphasis of the 'paranormality' question in favor of our shared attributional perspective that draws on systems theory. Some research has even strived to classify the various psychodynamics underlying various exceptional human experiences (Fach, 2011), which further supports the viability and usefulness of a phenomenological approach. Similarly, we have repeatedly stated that our model neither negates nor requires parapsychological influences such as the speculative concepts of discarnate agency (Betty, 1984) or RSPK (Roll, 1977), It is nonetheless possible that there is more to these phenomena than can be described by standard principles in the social, biomedical, and physical sciences. Particularly, research indicates that the published incidence rates of many (entity) encounter experiences and spiritistic anomalies are not fully explained by the known effect sizes of fraud, environmental factors, measurement error, mental illness, susceptibility to perceptual aberrations, the influence of suggestion (e.g., placebos or perceptual contagion), or even ostensible 'living-agent' psi (Rock et al., 2023). Furthermore, indices of putative psi show overall positive correlations with transliminality (Ventola et al., 2019, pp. 157–160) and various other cognitive-affective variables related to creativity (Carpenter, 2012). Like Auerbach et al. (2023), we are therefore open to the idea of putative psi contributing to some or all of the harder cases in this domain. However, we make no firm judgment about Auerbach et al.'s (2023) account apart from our assertion that the reported events should not be taken at face value because it seems likely that some of them involved causal factors unrelated to psi. Indeed, many experiences in this particular case seemed 'weak' from an evidential standpoint, such as a donut that reportedly 'disappeared' in a house with two teenagers. That said, an account infused with imaginal, misinterpreted, embellished, or performative events does not automatically exclude the possibility of genuine parapsychological events in some instances (Cox, 1961; Brookes-Smith, 1973; McClenon, 2024).

Several limitations temper our conclusions. For instance, content analyses always involve a level of subjectivity and bias (Creswell & Poth, 2016), and the generalizability of our psychometric approaches and benchmarks has likewise been criticized (e.g., Solfvin, 2020). Additionally, the present results follow solely from our team's ratings of Auerbach et al.'s case information versus input or 'member-checking' from the afflicted family or origi-

nal investigators (McKim, 2023). Our research likewise considered only HP-S related variables despite the potential for other mediators or moderators. Future studies should, therefore, seek evidence that contrasts and supports the HP-S theory. For instance, artificial intelligence (AI) language programs could be efficient tools to conduct rigorous content analyses using inclusion-exclusion criteria aligned to competing hypotheses (cf. Morgan, 2023). Moreover, we were unable to assess whether the S/O anomalies here linked to the spatial features of the family's setting (Houran, Laythe, Lange et al., 2023) or physical fluctuations in their ambient environment (Dagnall et al., 2020). A comprehensive systems theory approach using mixed methods and fieldwork investigations should certainly explore these and other potential influences.

Lastly, we concede that the idea of multiple discovery of the HP-S recognition patterns in this instance could be overstated. It is indeed possible that Auerbach et al.'s (2021, 2022, 2023) approach and suppositions were not fully blinded to the HP-S model, its core components, or our previously published discussions of ghostly episodes relative to the mainstream concepts of systems theory, narrative reality, and immersive experiences. Particularly, their lead author wrote the Afterword (Auerbach, 2022) to Laythe et al.'s (2022) text summarizing the transliminal dis-ease perspective and broader HP-S model. Auerbach et al. (2023) also cited their prior Letters to the Editor and magazine articles that implicitly recognized our HP-S related work. We assert nonetheless that a lack of absolute independence does not seriously undermine the premise that the AECKO-based observations from their case study offers concurrent validity for the recognition patterns and systems approach of the HP-S model.

On the flip side, our argument for concurrent validity largely rests on Auerbach et al.'s (2021, 2022, 2023) declared operationalizations, data, and conclusions—all of which have shortcomings. For instance, their fieldwork arguably constituted more of a clinical intervention along the lines of Tilley's (2002; Tilley & Storm, 2020) work than an empirical evaluation of the family's anomalous experiences. Moreover, they neither explained their emphasis of certain psychological constructs in their probe nor their use of specific questionnaires that certainly varied in psychometric quality. Thus, their approach was apparently not designed as cumulative science that connected to or extended prior literature. Auerbach et al. also did not vigorously vet the veracity of the reported anomalies, although we sympathize with the challenge of establishing authenticity in such cases. Accordingly, the roles of fraud (e.g., malingering or attention- and sensation-seeking behaviors) or self-deception with the

afflicted family cannot be ruled out. Still, it is noteworthy that our two teams with different research orientations showed closely parallel thinking on the phenomenology of ghostly episodes.

IMPLICATIONS AND APPLICATIONS

Heeding the wisdom of mathematician Alfred Korzybski (1931), we recognize that the HP-S model is only a 'map' and not the 'territory.' That is, a description of a phenomenon does not necessarily equate to an explanation (cf. Schurger & Graziano, 2022). While we can leverage biopsychosocial principles and statistical models to describe several aspects of ghostly episodes, this does not mean that we have identified or solved all relevant questions and equations. But, we do not need complete solutions to draw some important conclusions about these occurrences from their apparent properties. Ghostly episodes seem to be an interactionist phenomenon ("the right people in the right settings:" Laythe et al., 2018, p. 210) with consequently 'emergent' properties, i.e., the collective behavior of a set of variables is qualitatively different from the behaviors of the variables separately. Accordingly, we think that the greatest strides in this domain will come from multidisciplinary team science that leverages hypothesis-testing with mixed methods whenever possible. Moreover, researchers should use validated assessments for data-equating and cumulative learning. This has been an ongoing problem with ghostly episodes (Houran et al., 2021; Houran, Laythe et al., 2019), as well as in parapsychology and consciousness studies more broadly (Lange, 2017; Lange et al., 2019). This circumstance, in part, has spurred our efforts with operationalization reform in this domain. Quality science ultimately follows from quality measurement (Kornbrot et al., 2018), so we urge researchers to leverage the foundational psychometric work and burgeoning literature that supports S/O anomalies, ghostly episodes, and the HP-S recognition patterns as reliably quantifiable con-

This is all probably easier said than done. Different ideological camps appear more interested in promoting their pet theories or tactics than participating in cumulative science (Hill et al., 2019). These rivalries can likewise be understood and modeled as products of systems theory (Drinkwater et al., 2019; Hill et al., 2018, 2019), but we find that participatory team science (including adversarial collaborations) can effectively counter groupthink, low intellectual humility, ignorance or omission of key literature, and the use of outdated, limited, or poor methodologies. Note that our call for more cooperative and cumulative science extends beyond parapsychology

to include mainstream fields as well. For instance, Houran (2022) explained that the core anomalies and broader phenomenology of ghostly episodes are routinely studied across the biomedical and social sciences through using different labels and theoretical groundings. This harkens to psychology's problem of having too many constructs and measures (Anvari et al., 2024), along with an over-emphasis on internal validity rather than construct and external validity, which leads to theories that often fail to replicate in the field and thus cannot be used to understand or address the phenomena in question (cf. Mitchell & Tetlock, 2022). Operationalization reform, including the constant refinement of constructs and measures (Arnulf et al., 2024; Bringmann et al., 2022; Trafimow, 2023), should, therefore, help parapsychology to overcome these and other hurdles that too often thwart scientific knowledge and its potential clinical application.

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REFERENCES

Alderson, P. (2004). Absence of evidence is not evidence of absence. *The BMJ, 328, 476–477.* https://doi.org/10.1136/bmj.328.7438.476

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, 385–397.

Amorim, M.-A. (1990). The Guarulhos poltergeist: A reassessment of Andrade's (1984) monograph. *Journal of the Society for Psychical Research*, 56, 193–207.

Andrade, G. (2017). Is past life regression therapy ethical? Journal of Medical Ethics and History of Medicine, 10, Article 11. https://jmehm.tums.ac.ir/index.php/jmehm/article/view/292

Anvari, F., Alsalti, T., Oehler, L., Hussey, I., Elson, M., & Arslan, R. C. (2024, March 22). A fragmented field:



Construct and measure proliferation in psychology. PsyArXiv Preprints. https://doi.org/10.31234/osf.io/b4muj

- Arnulf, J. K., Olsson, U. H., & Nimon, K. (2024). Measuring the menu, not the food: "Psychometric" data may instead measure "lingometrics" (and miss its greatest potential). Frontiers in Psychology, 15, Article 1308098. https://doi.org/10.3389/fpsyg.2024.1308098
- Aron, E. N., & Aron, A. (1997). Sensory-processing sensitivity and its relation to introversion and emotionality. *Journal of Personality and Social Psychology*, 73, 345–368. https://doi.org/10.1037/0022-3514.73.2.345
- Auerbach, L. (1986). ESP, hauntings, and poltergeists: A parapsychologist's handbook. Warner Books.
- Auerbach, L. (2022). Afterword. In B. Laythe, J. Houran, N. Dagnall, K. Drinkwater, & C. O'Keeffe (Authors), Ghosted! Exploring the haunting reality of paranormal encounters (pp. 232–237). McFarland & Co.
- Auerbach, L., Hedva, B., Solfvin, G. F., & Williams, B. J. (2021, July 23–31). A virtually facilitated investigation of ostensible RSPK disturbances during the COVID-19 pandemic. *Paper presented at the SSE-PA Connections Conference*. https://www.youtube.com/watch?v=IK-8LiftMzQ&list=PLCKy9V0XEosbX-4GeQ73Qc-qvBI0at0HOM&index=17
- Auerbach, L., Hedva, B., Solfvin, G. F., & Williams, B. J. (2022). Investigating and resolving "poltergeist" disturbances in the midst of a pandemic: A case study from the COVID-19 quarantine. *Mindfield: Bulletin of the Parapsychological Association*, 14(2), 13–17.
- Auerbach, L., Hedva, B., Solfvin, G. F., & Williams, B. J. (2023). A virtually facilitated investigation of anomalous household disturbances reported during the COVID-19 pandemic. *Journal of Parapsychology*, 87, 33–65. http://doi.org/10.30891/jopar.2023.01.04
- Bertens, L. C. M., Broekhuizen, B. D. L., Naaktgeboren, C. A., Rutten, F. H., & Hoes, A. W. (2013). Use of expert panels to define the reference standard in diagnostic research: A systematic review of published methods and reporting. *PLOS Medicine*, 10, Article e1001531. https://doi.org/10.1371/journal.pmed.1001531
- Betty, L. S. (1984). The Kern City poltergeist: A case severely straining the living agent hypothesis. *Journal of the Society for Psychical Research*, 52, 345–364.
- Blinston, I. (2013). Disclosure of childhood spiritual encounter phenomena. *Journal of Transpersonal Research*, 5, 58–64.
- Bordage, G. (2001). Reasons reviewers reject and accept manuscripts: The strengths and weaknesses in medical education reports. *Academic Medicine*, 76, 889–896. https://doi.org/10.1097/00001888-200109000-00010

Braude, S. E. (1998). Terminological reform in parapsychology: A giant step backwards. *Journal of Scientific Exploration*, 12, 141–150.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101. https://doi.org/10.1191/1478088706qp063oa

BRETT ET AL 2014

- Bringmann, L. F., Elmer, T., & Eronen, M. I. (2022). Back to basics: The importance of conceptual clarification in psychological science. *Current Directions in Psychological Science*, 3, 340–346. https://doi.org/10.1177/09637214221096485
- Brookes-Smith, C. (1973). Data-tape recorded experimental PK phenomena. *Journal of the Society for Psychical Research*, 47, 69–89.
- Carpenter, J. C. (2012). First sight: ESP and parapsychology in everyday life. Rowman & Littlefield Publishers.
- Chaet, D. H. (2018). AMA code of medical ethics' opinions related to false beliefs in health care. AMA Journal of Ethics, 20, 1049–1051. https://doi.org/10.1001/amajethics.2018.1049
- Christopher, M. S. (2003). Albert Ellis and the Buddha: Rational soul mates? A comparison of rational emotive behaviour therapy (REBT) and Zen Buddhism. *Mental Health, Religion & Culture, 6,* 283–293. https://doi.org/10.1080/1367467031000100975
- Coly, L., & McMahon, J. D. S. (Eds.). (1993). *Psi and clinical practice*. Parapsychology Foundation, Inc.
- Conlin, W. E., & Boness, C. L. (2019). Ethical considerations for addressing distorted beliefs in psychotherapy. *Psychotherapy*, *56*, 449–458. https://doi.org/10.1037/pst0000252
- Cox, W. E. (1961). Introductory comparative analysis of some poltergeist cases. *Journal of the American Society for Psychical Research*, 55, 47–72.
- Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage Publications.
- Curtis, D., & McPherson, R. (2000). The clinical utility of systems theory in counseling practice. *TCA Journal*, 28, 50–62. https://doi.org/10.1080/15564223.2000. 12034564
- Dagnall, N., Drinkwater, K., O'Keeffe, C., Ventola, A., Laythe, B., Jawer, M. A., Massullo, B., Caputo, G. B., & Houran, J. (2020). Things that go bump in the literature: An environmental appraisal of "haunted houses." Frontiers in Psychology, 11, Article 328. https://doi.org/10.3389/fpsyg.2020.01328
- David, D., Cotet, C., Matu, S., Mogoase, C., & Stefan, S. (2018). 50 years of rational-emotive and cognitive-behavioral therapy: A systematic review and meta-analysis. *Journal of Clinical Psychology*, 74, 304–318.

- https://doi.org/10.1002/jclp.22514
- Dixon, J. (2016). A case of ostensible poltergeist phenomena resulting in lingering haunt phenomena. Australian Journal of Parapsychology, 16, 7–39. https://search.informit.org/doi/10.3316/informit.099423978859352
- Dixon, J., Storm, L., & Houran, J. (2018). Exploring ostensible poltergeist vs. haunt phenomena via a reassessment of spontaneous case data. Australian Journal of Parapsychology, 18, 7–22. https://search.informit.org/doi/10.3316/informit.700648376257557
- Drinkwater, K., Dagnall, N., & Bate, L. (2013). Into the unknown: Using interpretative phenomenological analysis to explore personal accounts of paranormal experiences. *Journal of Parapsychology*, 77, 281–294.
- Drinkwater, K., Dagnall, N., Grogan, S., & Riley, V. (2017). Understanding the unknown: A thematic analysis of subjective paranormal experiences. Australian Journal of Parapsychology, 17, 23–46. https://search.informit.org/doi/10.3316/informit.910852610745784
- Drinkwater, K., Dagnall, N., & Houran, J. (2021). A conceptual matrix for mapping encounter experiences. *Academia Letters*, November, Article 3955. https://doi.org/10.20935/AL3955
- 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*. OnlineFirst Article 332941221123235. https://doi.org/10.1177/00332941221123235
- Drinkwater, K. G., Dagnall, N., Walsh, S., Sproson, L., Peverell, M., & Denovan, A. (2022). Self-ascribed paranormal ability: Reflexive thematic analysis. Frontiers in Psychology, 13, Article 845283. https://doi.org/10.3389/fpsyg.2022.845283
- Drinkwater, K., Laythe, B., Houran, J., Dagnall, N., O'Keeffe, C., & Hill, S. A. (2019). Exploring gaslighting effects via the VAPUS model for ghost narratives. Australian Journal of Parapsychology, 19, 143–179. https://search.informit.org/doi/10.3316/informit.829750547449829
- Dullin, E. (2024). A detailed phenomenology of poltergeist events. *Journal of Scientific Exploration*, 38, 427–460. https://doi.org/10.31275/20243263
- Ellis, A. (2000). Can rational emotive behavior therapy (REBT) be effectively used with people who have devout beliefs in God and religion? *Professional Psychology: Research and Practice, 31,* 29–33. https://doi.org/10.1037//0735-7028.31.1.29
- Ellis, A., & MacLaren, C. (1998). Rational emotive behavior therapy: A therapist's guide. Impact Publishers.
- Enkvist, I. (2018). Political agendas hinder the university's real mission. *Göteborgs-Posten*. https://portal.research.lu.se/en/publications/politiska-agendor-hin-

- drar-h%C3%B6gskolans-verkliga-uppdrag Evans, H. (1987). Gods, spirits, cosmic guardians: A comparative study of the encounter experience. Aquarian.
- Evrard, R. (2022). Clinical parapsychology. In *Psi encyclo-pedia*. The Society for Psychical Research. https://psi-encyclopedia.spr.ac.uk/articles/clinical-parapsychology
- Fach, W. (2011). Phenomenological aspects of complementarity and entanglement in exceptional human experiences (ExE). *Axiomathes*, 21, 233–247. https://doi.org/10.1007/s10516-010-9143-7
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. American Journal of Preventive Medicine, 14, 245–258. https://doi.org/10.1016/S0749-3797(98)00017-8
- NOT IN TEXT Franco, V. R., Heene, M., Domingue, B., & Jiménez, M. (2023, December 21). An uncomplicated introduction to measurement theory. *PsyArXiv Preprints*. https://doi.org/10.31234/osf.io/cm4he
- Gauld, A., & Cornell, A. D. (2018). *Poltergeists*. White Crow Books. (Original work published 1979)
- NOT IN TEXT Green, C., & McCreery, C. (1975). Apparitions. Hamish Hamilton.
- Hartmann, E. (1991). Boundaries in the mind: A new psychology of personality. Basic Books.
- Hewitt, T., Chreim, S., & Forster, A. (2016). Double checking: A second look. *Journal of Evaluation in Clinical Practice*, 22, 267–274. https://doi.org/10.1111/jep.12468
- Hill, S. A., O'Keeffe, C., Laythe, B., Dagnall, N., Drinkwater, K., Ventola, A., & Houran, J. (2018). "Meme-spirited":
 I. A VAPUS model for understanding the prevalence and potency of ghost narratives. Australian Journal of Parapsychology, 18, 117–152. https://search.informit.org/doi/10.3316/informit.121958501701505
- 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. https://search.informit.org/doi/10.3316/informit.416415346494840
- Hess, D. J. (1988). Poltergeists and hauntings as idioms of distress: Intervention strategies and their psychocultural contexts. Proceedings of Presented Papers: The 31st Annual Convention of the Parapsychological Association, 274–290.
- Houran, J. (1997). Ambiguous origins and indications of "poltergeists." *Perceptual and Motor Skills*, 84, 339–



344. https://doi.org/10.2466/pms.1997.84.1.339

- Houran, J. (2000). Toward a psychology of "entity encounter experiences." *Journal of the Society for Psychical Research*, 64, 141–158.
- Houran, J. (2013). Anomalous experiences as transliminal drama: The case of Wasney De Almeida Ferreira. Australian Journal of Parapsychology, 13, 169–185. https://search.informit.org/doi/10.3316/informit.799338389554736
- Houran, J. (2022). "Haunted house" research in the mainstream. *Parascientifica*, 1, 4–14. https://www.ppri. net/wp-content/uploads/2022/09/PARASCIENTIFI-CA-ISSUE-1-SEPT-2022.pdf
- Houran, J., & Bauer, H. H. (2022). "Fringe science"—A tautology, not pariah [Editorial]. *Journal of Scientific Exploration*, 36, 207–217. https://doi.org/10.31275/20222527
- Houran, J., Kumar, V. K., Thalbourne, M. A., & Lavertue, N. E. (2002). Haunted by somatic tendencies: Spirit infestation as psychogenic illness. *Mental Health, Religion & Culture, 5*, 119–133. https://doi.org/10.1080/13674670210141061
- NO DIRECT CITATION Houran, J., & Lange, R. (1996a). Diary of events in a thoroughly unhaunted house. *Perceptual and Motor Skills*, 83, 499–502. https://doi.org/10.2466/pms.1996.83.2.499
- Houran, J., & Lange, R. (1996b). Hauntings and poltergeist-like episodes as a confluence of conventional phenomena: A general hypothesis. *Perceptual and Motor Skills*, 83, 1307–1316. https://doi.org/10.2466/ pms.1996.83.3f.1307
- Houran, J., & Lange, R. (Eds.). (2001a). Hauntings and poltergeists: Multidisciplinary perspectives. McFarland & Co.
- Houran, J., & Lange, R. (2001b). A Rasch hierarchy of haunt and poltergeist experiences. *Journal of Parapsychology*, 65, 41–58.
- Houran, J., & Lange, R. (2004). Redefining delusion based on studies of subjective paranormal ideation. *Psychological Reports*, *94*, 501–513. https://doi.org/10.2466/pr0.94.2.501-513
- 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
- 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., & Laythe, B. (2023). Phenomenology of AI-generated "entity encounter" narratives. *Journal of Anom-*

- alous Experience and Cognition, 3, 335–368. https://doi.org/10.31156/jaex.25124
- Houran, J., Laythe, B., Lange, R., Dagnall, N., O'Keeffe, C., & Drinkwater, K. (2021). Ghostly episodes in modern psychometric perspective. *Mindfield: Bulletin of the Parapsychological Association*, 13(2), 30–40.
- Houran, J., Laythe, B., Lange, R., Hanks, M., & Ironside, R. (2023). Immersive study of Gestalt variables in uncanny geographies. *Journal of the Society for Psychical Research*, 87, 65–100.
- Houran, J., Laythe, B., Little, C., & Houran, D. J. (2023). Rethinking a ghostly episode in the legacy literature. *Journal of Anomalistics*, 23, 77–102. http://dx.doi.org/10.23793/zfa.2023.77
- Houran, J., Laythe, B., O'Keeffe, C., Dagnall, N., Drinkwater, K., & Lange, R. (2019). Quantifying the phenomenology of ghostly episodes Part I: Need for a standard operationalization. *Journal of Parapsychology*, 83, 25–46. https://doi.org/10.30891/jopar.2019.01.03
- Houran, J., Little, C., Laythe, B., & Ritson, D. W. (2022). Uncharted features and dynamics of the South Shields poltergeist. *Journal of the Society for Psychical Research*, 86, 129–165.
- Houran, J., Massullo, B., Drinkwater, K., & Dagnall, N. (2024). Team analysis of a help-seeking "haunted person." Australian Journal of Parapsychology, 24, 155–202.
- Hufford, D. (1982). The terror that comes in the night: An experience-centered study of supernatural assault traditions. University of Pennsylvania Press.
- Irwin, H. J., Dagnall, N., & Drinkwater, K. G. (2022). The ethics of belief in paranormal phenomena. *Journal of Anomalous Experience and Cognition*, 2, 49–79. https://doi.org/10.31156/jaex.23514
- Kazak, A. E. (2018). Journal article reporting standards [Editorial]. *American Psychologist*, 73, 1–2. https://doi.org/10.1037/amp0000263
- King, L. A., King, D. W., Leskin, G., & Foy, D. W. (1995). The Los Angeles Symptom Checklist: A self-report measure of posttraumatic stress disorder. *Assessment, 2*, 1–17. https://doi.org/10.1177/1073191195002001001
- Kornbrot, D. E., Wiseman, R., & Georgiou, G. J. (2018). Quality science from quality measurement: The role of measurement type with respect to replication and effect size magnitude in psychological research. *PLOS ONE, 13,* Article e0192808. https://doi.org/10.1371/journal.pone.0192808
- Korzybski, A. (1931). A non-Aristotelian system and its necessity for rigour in mathematics and physics. Proceedings of the American Mathematical Society at the New Orleans, Louisiana, Meeting of the AAAS, December 28, cf. Supplement III (pp. 747–761). http://esgs.free.

- fr/uk/art/sands-sup3.pdf
- Kramer, W. H., Bauer, E., & Hövelmann, G. H. (Eds.). (2012). Perspectives of clinical parapsychology: An introductory reader. Stichting Het Johan Borgman Fonds.
- Kumar, V. K., & Pekala, R. J. (2001). Relation of hypnosis-related attitudes and behaviors to paranormal belief and experience: A technical review. In J. Houran & R. Lange (Eds.), Hauntings and poltergeists: Multidisciplinary perspectives (pp. 260–279). McFarland & Co.
- LANGE, IRWIN ET AL., 2000
- 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., & Houran, J. (2001a). Ambiguous stimuli brought to life: The psychological dynamics of hauntings and poltergeists. In J. Houran & R. Lange (Eds.), Hauntings and poltergeists: Multidisciplinary perspectives (pp. 280–306). McFarland & Co.
- Lange, R., & Houran, J. (2001b). Power laws and autoregressive catastrophes: The dynamic properties of poltergeist episodes. *Technical report to the Institut* für Grenzgebiete der Psychologie und Psychohygiene (IGPP), Freiburg i. Br., Germany.
- Lange, R., & Houran, J. (2021). Replicable survey evidence for an "enchantment-psi" loop. *Journal of Transpersonal Psychology*, 53, 140–156.
- NOT IN DOCUMENT Lange, R., & Houran, J. (2024). Development of the Haunted People Syndrome Screener (HPSS). Journal of Transpersonal Psychology, 56, 6–26.
- Lange, R., Houran, J., Sheridan, L., Dagnall, N., Drinkwater, K., O'Keeffe, C., & Laythe, B. (2020). Haunted people syndrome revisited: Empirical parallels between subjective paranormal episodes and putative accounts of group-stalking. *Mental Health, Religion, & Culture, 23,* 532–549. https://doi.org/10.1080/13674676.2020.17 67552
- NOT IN DOCUMENT Lange, R., Laythe, B., & Houran, J. (2023). Preregistered field test of an 'enchantment-psi' loop. *Journal of Parapsychology*, 87, 11–32. https://doi.org/10.30891/jopar.2023.01.03
- 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 ET AL. 2018 CITED.
- 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., Dagnall, N., Drinkwater, K., & O'Keeffe, C. (2022). Ghosted! Exploring the haunting reality of paranormal encounters. McFarland & Co.
- 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. https://doi.org/10.30891/jopar.2021.01.07
- Lifshitz, M., van Elk, M., & Luhrmann, T. M. (2019). Absorption and spiritual experience: A review of evidence and potential mechanisms. *Consciousness and Cognition*, 73, Article 102760. https://doi.org/10.1016/j.concog.2019.05.008
- Little, C., Laythe, B., & Houran, J. (2021). Quali-quantitative comparison of childhood imaginary companions and ghostly episodes. *Journal of the Society for Psychical Research*, 85, 1–30.

LITTLE ET AL. 2023

- Lubowitz, J. H., Brand, J. C., & Rossi, M. J. (2018). Two of a kind: Multiple discovery aka simultaneous invention is the rule. *Arthroscopy*, *34*, 2257–2258. https://doi.org/10.1016/j.arthro.2018.06.027
- Luke, D. (2011). Experiential reclamation and first-person parapsychology. *Journal of Parapsychology*, 75, 185–199.
- Maher, M. C., & Hansen, G. P. (1992). Quantitative investigation of a reported haunted location using several detection techniques. *Journal of the American Society for Psychical Research*, 86, 347–374.
- Mayer, G. (Ed.). (2019). N equals 1: Single case studies in anomalistics. LIT Verlag.
- McClenon, J. (2024). Online group PK experiments: Hypothesis testing and theory development. *Journal of Scientific Exploration*, 38, 299–316. https://doi.org/10.31275/20243089
- NOT IN DOCUMENT McCue, P. A. (2002). Theories of haunting: A critical overview. *Journal of the Society for Psychical Research*, 661, 1–21.
- McKim, C. (2023). Meaningful member-checking: A structured approach to member-checking. *American Journal of Qualitative Research*, 7, 41–52. https://www.ajqr.org/article/meaningful-member-checking-a-structured-approach-to-member-checking-12973
- Mitchell, G., & Tetlock, P. E. (2022). The internal validity obsession. *Behavioral and Brain Sciences, 45*, Article e83. https://doi.org/10.1017/S0140525X21000637
- Morgan, D. L. (2023). Exploring the use of artificial intelligence for qualitative data analysis: The case of ChatGPT. *International Journal of Qualitative Methods*, 22,1–10.https://doi.org/10.1177/16094069231211248
- Morse, J. (2003). Principles of mixed methods and multimethod research design. In C. Teddlie & A. Tashakkori

(Eds.), Handbook of mixed methods in social and behavioral research (pp. 189–208). Sage Publications.

- Ogburn, W. F., & Thomas, D. (1922). Are inventions inevitable? A note on social evolution. *Political Science Quarterly*, 37, 83–98. https://doi.org/10.2307/2142320
- O'Keeffe, C., Houran, J., Houran, D. J., Drinkwater, K., Dagnall, N., & Laythe, B. (2019). The Dr. John Hall story: A case study of putative "haunted people syndrome." *Mental Health, Religion, & Culture, 22, 910–929*. https://doi.org/10.1080/13674676.2019.1674795
- Oltean, H. R., Hyland, P., Vallieres, F., & David, D. O. (2017). An empirical assessment of REBT models of psychopathology and psychological health in the prediction of anxiety and depression symptoms. *Behavioral and Cognitive Psychotherapy*, 45, 600–615. https://doi.org/10.1017/S1352465817000133
- Palmer, J. (1986). Terminological poverty in parapsychology: Two examples. In D. H. Weiner & D. I. Radin (Eds.), Research in parapsychology 1985 (pp. 138–141). Scarecrow Press.
- Pautasso, M. (2019). The structure and conduct of a narrative literature review. In M. Shoja, A. Arynchyna, M. Loukas, A. V. D'Antoni, S. M. Buerger, M. Karl, & R. S. Tubbs (Eds.), A guide to the scientific career: Virtues, communication, research and academic writing (pp. 299–310). Wiley. https://doi.org/10.1002/9781118907283. ch31
- Reber, A. S., & Alcock, J. E. (2020). Searching for the impossible: Parapsychology's elusive quest. *American Psychologist*, 75, 391–399. https://doi.org/10.1037/amp0000486
- NOT IN DOCUMENT Ritson, D. W. (2021). *Poltergeist parallels and contagion.* White Crow Books.
- Rock, A. J., Houran, J., Tressoldi, P. E., & Laythe, B. (2023). Is biological death final? Recomputing the Drake-S Equation for postmortem survival. *International Journal of Transpersonal Studies*, 42, 9–26. https://doi.org/10.24972/ijts.2023.42.1.9
- NOT IN DOCUMENT Rogo, D. S. (1974/1976). An experience of phantoms. Taplinger Publishing Co.
- Rogo, D. S. (1982). The poltergeist and family dynamics. Journal of the Society for Psychical Research, 51, 233–237.
- Roll, W. G. (1972/2004). *The poltergeist*. Nelson Doubleday, Inc./Paraview Special Editions.
- Roll, W. G. (1977). Poltergeists. In B. B. Wolman (Ed.), Handbook of parapsychology (pp. 382–413). Van Nostrand Reinhold.
- 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

RUBINSTEIN AND LAHAD 2023

- Rydberg, A. (2022). Epistemics of the soul: Epistemic logics in German 18th-century empirical psychology. Journal of the History of the Behavioral Sciences, 58, 383–403. https://doi.org/10.1002/jhbs.22205
- NOT IN DOCUMENT Sarracino, D., Dimaggio, G., Ibrahim, R., Popolo, R., Sassaroli, S., & Ruggiero, G. M. (2017). When REBT goes difficult: Applying ABC-DEF to personality disorders. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 35, 278–295. https://doi.org/10.1007/s10942-016-0258-7
- Schurger, A., & Graziano, M. (2022). Consciousness explained or described? *Neuroscience of Consciousness*, 2022, Article niac001. https://doi.org/10.1093/nc/niac001
- Seamon, D. (2000). A way of seeing people and place: Phenomenology in environment-behavior research. In S. Wapner, J. Demick, T. Yamamoto, & H. Minami (Eds.), Theoretical perspectives in environment-behavior research: Underlying assumptions, research problems, and methodologies (pp. 157–178). Kluwer Academic Publishers.
- Sersch, M. J. (2019). Demons on the couch: Spirit possession, exorcisms and the DSM-5. Cambridge Scholars Publishing.
- Sery, E. (2021, November 2). Investigator says paranormal calls went up during pandemic. *Spectrum News* 1. https://spectrumlocalnews.com/nc/triangle-sand-hills/news/2021/11/02/paranormal-spike
- Simmonds-Moore, C. A. (2024). Exploring the correlates and nature of subjective anomalous interactions with objects (psychometry): A mixed methods survey. Frontiers in Psychology, 15, Article 1365144. https://doi.org/10.3389/fpsyg.2024.1365144
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. https://doi.org/10.1016/j.jbusres.2019.07.039
- Solfvin, G. (2020). Letter to the editor. *Journal of Parapsy-chology*, *84*, 335–337. http://doi.org/10.30891/jop-ar.2020.02.21
- CITED AS TILLEY AND STORM? Storm, L., & Tilley, R. (2020). Haunt and poltergeist clearing in Australian residences: A retrospective survey. Australian Journal of Parapsychology, 20, 21–55.
- THALBOURNE AND MALTBY 2008
- Tilley, R. (2002). Poltergeist disturbances and hauntings brought to a lasting successful conclusion (some failures too). Australian Journal of Parapsychology, 2, 127–160.
- NOT IN DOCUMENT Totton, N. (2007). Funny you should say that: Paranormality, at the margins and the

centre of psychotherapy. European Journal of Psychotherapy & Counselling, 9, 389–401. https://doi.org/10.1080/13642530701725890

TOBACYK, 1988/2004

- Trafimow, D. (2023). A new way to think about internal and external validity. *Perspectives on Psychological Science*, 18, 1028–1046. https://doi.org/10.1177/17456916221136117
- Tramont, N. S. (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. https://doi.org/10.31275/20232825
- Tyrrell, G. N. M. (1953). Apparitions. Gerald Duckworth.
- Vassar, M., & Holzmann, M. (2013). The retrospective chart review: Important methodological considerations. Journal of Educational Evaluation for Health Professions, 10, Article 12. https://doi.org/10.3352/jeehp.2013.10.12

VENTOLA ET AL. (2019)

- Vicente, L., Blanco, F., & Matute, H. (2023). I want to believe: Prior beliefs influence judgments about the effectiveness of both alternative and scientific medicine. *Judgment and Decision Making*, 18, Article el. https://doi.org/10.1017/jdm.2022.3
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. MIS Quarterly, 26, 13–26. https://web.njit.edu/~egan/Writing_A_Literature_Review.pdf.
- Williams, B., & Ventola, A. (2011). Poltergeist phenomena: A primer on parapsychological research and perspectives. *Public Parapsychology.org*. http://publicparapsychology.org/Public%20Parapsych/Poltergeist%20Phenomena%20Primer%20Final.pdf
- Zaiden, F., Mahfar, M., Senin, A. A., & Fakhruddin, F. M. (2023). Global research pattern of cognitive distortion: A bibliometric analysis. *SAGE Open, 13,* 1–19. https://doi.org/10.1177/21582440231219658

