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Human interaction with the divine, the sacred, and the deceased: topics that warrant increased attention by psychologists

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Abstract

Humans have likely been attempting to communicate with entities believed to exist, such as the divine, sacred beings, and deceased people, since the dawn of time. Across cultures and countries, many believe that interaction with the immaterial world is not only possible but a frequent experience. Most religious traditions across the globe focus many rituals and activities around prayer to an entity deemed divine or sacred. Additionally, many people–religious, agnostic, and atheists alike–report communication with their departed loved ones. During highly stressful times associated with natural disasters, war, pandemics, and other threats to human life, the frequency and intensity of these activities and associated experiences substantially increase. Although this very human phenomenon seems to be universal, the empirical literature on the topic within psychology is thin. This paper discussed the topic and reviews what we know from the professional literature about how people perceive communication with these unseen entities. It highlights the perceptual and social cognition evidence and discussed the role of attribution theory, which might help us understand the beliefs, motivations, and practices of those engaged with communication with the unseen. Empirical laboratory research with mediums is discussed as well, examining the evidence for communication with the deceased. Final reflections and suggestions for future research are also offered.

Keywords Prayer · Immaterial communication · Divine · Sacred · Deceased

Although all authors carefully reviewed and thoughtfully edited the manuscript, the primary author and responsibility for the introduction, conclusion, and organization of the paper was Dr. Plante while Drs. Paloutzian, Seitz, and Angel wrote the section, "The Basics of Psychology as Related to Religiousness, Spirituality, and Communication Attempts with the Unseen." Dr. Park wrote the section, "Beliefs about Communication with the Divine and the Deceased."

Dr. Exline wrote the section, "Attributions: Interpreting Events as Messages from the Divine or Departed." Finally, Dr. Schwartz wrote the section, "Is there Laboratory Evidence for Communication with the Deceased?"

Public Significance Statement People have tried to communicate with unseen entities believed to exist, such as the divine, sacred beings, and deceased people, since the dawn of time. During stressful times, the frequency and intensity of communication experiences increase. This paper reviews what we know from the research literature about how people perceive communication with these entities and offers some directions for future research.

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Since the dawn of time, humans have wondered about potential life after death and whether consciousness continues after our physical bodies die (Wolff, 2021). How could humans not ponder this important and universal question–ever since they evolved to realize that no one escapes death and thus we all must come to grips with our own mortality? Religious and spiritual traditions worldwide and throughout history developed detailed theories and perspectives about what happens after one dies, with vivid images of heaven, hell, purgatory, reincarnation, and so forth elaborately detailed in sacred texts (such as the Torah, New Testament, Qu'ran) and other writings as well as frequently represented in the visual arts throughout the centuries (Armstrong, 2011; Moreman, 2017; Pagels, 2013; Segal, 2010). Many people, supported by their religious and spiritual traditions, experience their earthly lives as merely preparation for the afterlife, thinking that belief and behavior determine whether the afterlife will be a good or a bad experience (Dahlsgaard et al., 2005; Moreman, 2017; Segal, 2010; Wolff, 2021). In fact, the Qu'ran (Ch. 3, Verse 185) even suggests that Muslims should not bother to reflect on

whether there is an afterlife or not since they are instructed that there clearly is one. Thus briefly, people seem to have always tried to communicate with or venerate whatever they perceived as divine, whether it be their god (by whatever name), saints or prophets, and even their deceased loved ones (Martin, 2021; Spilka & Ladd, 2012).

Anthropologists, sociologists, historians, theologians, and others have extensively studied the elaborate ways that humans have tried to communicate with the above noted and similar entities which they venerate (Armstrong, 2011; Wolff, 2021). The world's religions developed many prayer traditions and other strategies to communicate with their gods, saints, and deceased, and to ask for intervention favors for themselves and their loved ones who have died (Moreman, 2017; Plante, 2018; Plante & Schwartz, 2021; Segal, 2010). For example, in the Roman Catholic faith tradition, someone may ask particular saints to intercede on their behalf for their particular needs or for those for whom they might be praying (e.g., "Hail Mary…pray for us…now and at the hour of our death. Amen.; Ford, 1994; Galentino, 2006). Islamic believers might ask Allah for shelter, protection, and endurance in the face of trial (Katz, 2013; Martin, 2016). Protestants often address Jesus specifically for interventions for themselves and others (Armstrong, 2011; Luhrmann, 2012).

Although prayer and attempted communication with the divine and departed are common, universal, and longstanding human behaviors, psychologists have generally not researched this fascinating behavior with the kind of depth, scholarship, and enthusiasm that one might expect for such a common, influential, and often life-focused and life-centered human behavior (Plante & Schwartz, 2021). This lack of attention is especially curious given that several of our most notable leaders and founders of the discipline of psychology were interested in this topic, conducted their own rudimentary studies, and wrote about their observations and understandings in now-classic texts. William James is a prime example (James, 1902/2003; Proudfoot, 2004; Taylor, 2003). Other leading figures in psychology and related fields such as psychoanalysis, including Sigmund Freud, wrote much about communicating with the divine and deceased (Buse & Stott, 1999). In fact, Freud even participated in a séance with William James, Carl Jung, and others during his only trip to the United States, when he lectured at Clark University in 1909 (Zeavin, 2018).

Although some of the founders of the discipline of psychology studied aspects of religiousness, psychological research on the topic was largely neglected for almost half a century (Paloutzian, 2017; Wulff, 1997). In their efforts to establish psychology as a science, psychologists mostly distanced themselves from even studying religiousness as a putatively important and highly prevalent human behavior. This distancing included doing the opposite of what James

and others did (i.e., not doing psychological research on prayer or on why people might attempt to communicate with gods and people who have died). More broadly, the relationship between psychology and religions has been strained (de Jesús Cortés, 1999; Richardson, 2006). Professional and scientific psychology highlighted empirical evidence, whereas religiousness and spirituality were seen as something that cannot readily be studied in a rigorous, experimental, and empirical manner (Carter, 1977). Additionally, psychologists tended to be highly secular and nonreligious (Shafranske & Malony, 1990), and a number of psychology's earlier leaders and influencers (e.g., Freud, B. F. Skinner, John Watson, Albert Ellis) were antagonistic to religions and spirituality, often dismissing those who find these topics important (e.g., Ellis, 1971; Freud, 1927/1961; Watson, 1924/1983). For example, in *Future of an Illusion*, Freud stated that "religion" (referring to that which was practiced as such in Vienna in the early 1900s) was an "obsessional neurosis" (Freud, 1927/1961, p. 43). Watson said that religion was a "bulwark of medievalism" (Watson, 1924/1983, p. 1). These and other leaders in psychology and human behavior fields asserted loudly that religious interests and engagement were evidence of pathology. It took nearly the first half of the 20th century for psychologists to begin to take those interests seriously and ask, "Where do they come from?" and "What are they good for?" in the same sense as any other important human behavior (Paloutzian & Park, 2005, 2013; Pargament et al., 2013).

In the recent approximately half- century, research on the psychology of religiousness and spirituality has proliferated. Relevant journals are now published by the American Psychological Association, (i.e., *Psychology of Religion and Spirituality* and *Spirituality in Clinical Practice*), and internationally (*The International Journal for the Psychology of Religion, Archives for the Psychology of Religion,* and *Mental Health, Religion, and Culture*). Importantly, several psychologist scholars have dedicated part of their careers to examining more thoughtfully, and with state-of-the-art methodological and statistical rigor, questions regarding communication attempts with the divine and deceased (see Spilka & Ladd, 2012, and Plante & Schwartz, 2021).

This paper discussed the topic of communication and interaction with the divine, the sacred, and the deceased that all involve interaction with the unseen or immaterial world and highlight research findings where available. While the religious and spiritual traditions, especially from the monotheistic traditions, offer much discussion of these issues, we focus primarily on the psychological and empirical research drawn from multiple disciplines and types of evidence. Because the research literature in psychology sparse, we reflect on what is known as of today that may usefully stimulate further research and reflection among scholars moving forward. In the next section, we highlight and review the

basic processes of communication efforts with the unseen from a broad psychological, neurophysiological, and perceptual perspective to set the stage for reflections upon the process of believing; contents of beliefs and attributions; and practices regarding communication with the unseen.

The basics of psychology as related to religiousness, spirituality, and communication attempts with the unseen

It has often been said that scientific psychology ought to study religiousness (and today its along-side relative, spirituality) as a human behavior in the same way it examines any other human cognitive functions or overt behavior (Angel et al., 2017; Paloutzian, 2017; Paloutzian & Park, 2005, 2013, 2021; Pargament et al., 2013). If true, how might we best begin to conceptualize the questions and issues involved? One important human behavior that seems to encapsulate those questions and issues is that many humans say that they talk with God (or Allah, YHWH, spirits, and/ or deceased loved ones – all of which fall into the category of the "Unseen"). Some of these communications are also communal ones involving multiple people and not just one person (e.g., Pangle, 2011; Shanneik, 2022). These claims immediately point to fundamental psychological processes such as sensation, perception, recognition, memory, learning, cognition, motivation, and the production of responses to stimuli. But unlike the processes that mediate most human thoughts and actions, in which the object or entity of communication can be seen, felt, or heard with the physical senses, in this case the objects or entities that are purported to exist cannot be seen, touched, felt, or heard by others. The claimed communications are privy to the experiencer only and thereby fall into the category of the "not ordinary", such as sensing "presences", hearing God's voice, and "seeing" visions. A fundamental concern is thereby raised because of a major difference between perceiving and communicating with a being that all can see and hear (e.g., a living human in front of you) and any of the Unseen entities with which millions of people claim to communicate (Angel & Seitz, 2017; Taves & Barlev, 2022). Thus, we are left with only the (perceiving) person's claim of having communicated with an Unseen entity, and thus can only study people's claims about inner experiences (Paloutzian & Park, 2021; Paloutzian et al., 2021), as well as the behaviors they may manifest when or following said communication (although possible exceptions to this may be evident towards the end of this article).

As to the question of what stimuli might trigger or encourage believing in a divine being, there does not appear to be one specific stimulus that does this. Such believing is probably due to a complex interaction between perceptive or imaginative information, past learning, whether lifelong or only brief, the intricate workings of social identity processes in the context of one's culture (Hogg et al., 2010), and the meaning making mechanisms that are part of the core of all perceptual processes. Perhaps anything that heightens a sense of awe in someone, whether big or small, such as the cosmos, a newborn baby, victory in battle, or hope in the midst of defeat, may suffice so long as it is bolstered by a meaning making process that promotes an attribution to something supernatural (Ihm et al., 2019).

Therefore, should we study claims of first-person perspectives of communicating with the Unseen, or not? Those in the medical sub-field of psychiatry as well as clinical psychologists may take from a third-person perspective human claims of seeing, hearing, talking with, and otherwise interacting with Unseen entities seriously. Observing bystanders might interpret the claims as a sign of psychosis as in schizophrenia or mania, or they might be understood as ways that ordinary people express their deepest hopes, wishes, and concerns (see Exline, 2021, 2021a, and Exline & Wilt, 2022, for further discussion). Both interpretations are probably accurate depending on the specific case.

How, therefore, do we make sense of these experiences if psychopathology is not at the root of the phenomenon for many people? Let us examine how to proceed conceptually. Because the human claims described above are dependent on multilevel believing processes, we argue that these processes are equally fundamental to how humans function as are perception, learning, cognition, and motivation. In fact, it is the tight interaction of the processes of believing with memory functions (Seitz et al., 2022a, b) that enables the basic functions of belief formation and updating and to communicate their content to other people in order to transmit information to the next level. Therefore, knowledge of the processes of believing ought to be included in our understanding of basic psychological processes.

Basic neuropsychological processes

In normal visual perception, a person focuses on an object, "sees" it, and responds. However, what exactly does "see" mean? We know from neurophysiology that visual perception occurs when electromagnetic radiation in the 400–700 nm. range bounces off the surface of an object enters the eye through the pupil, and strikes rods and cones in the retina. Neural impulses are triggered that travel along the optic nerve to subcortical stations along the visual neural pathway, including the amygdala, which triggers an emotional connotation of the object (Le Doux, 1996). Eventually the neural impulses arrive at the occipital lobe of the brain, from which they are sent to so-called higher cortical areas that contribute to processing the multifaceted visual

information (van Essen et al., 1992). The person becomes aware of the object and believes they "see" it (Seitz et al., 2018). However, the person does not literally see the actual object that is "out there" (Fig. 1). Instead, the person's visual system has received probabilistic information in the form of electromagnetic radiation, transduced it by appropriate receptors into neural signals (also probabilistic), and processed these signals re-iteratively at different neural levels of the brain until other available information that is stored in memory due to prior perception and learning has been incorporated (Seitz et al., 2022a, b). These processes are all occurring pre-attentively. Such a probabilistic neural representation may be called a belief, but it remains flexible and may be updated by new experience (Seitz et al., 2019). That is, the human perceptual system makes meaning out of the barrage of incoming ambiguous information, and in so doing makes sense (or "connects the dots") of its elements to create a meaningful percept. It is that percept, which is a probabilistic, personally- relevant representation of the stimulus, to which humans respond, not the thing "out there." This or analogous processes illustrate how perceptual processes work in all sensory modalities as well as for more complex stimuli.

Verbal processing and imagining

When a person becomes aware of a probabilistic, personally relevant representation or belief, they can verbally describe it. Thus, someone may express personal certainty that an object is "really out there" by stating, "I believe that …" (Seitz & Angel, 2020). In the context of perceiving, this phrase has functional equivalents in normal informal language such as the phrases "I know that …" and "I am sure that …". Importantly, the "object out there" can also be a verbal description inducing visual imagination in a person. Thus, the verbal description can give rise to a concept that a person generates in their mind and in which they may believe (Seitz & Angel, 2014, 2020). Such a concept can be anything that imagination or fantasy may support, so long as it seems realistic upon verbal description. Thus, concepts of the Unseen, as summarized above, may be included in understanding and awareness. In contrast, impairments of belief formation and evaluation, as is evident in neuropsychological and neuropsychiatric patients, may give rise to hallucinations and delusions in which the patients may engage in deviant thinking and behavior (Seitz, 2021). Nevertheless, acknowledging that some people may generate

Fig. 1 Model of human meaning making from incoming ambiguous information
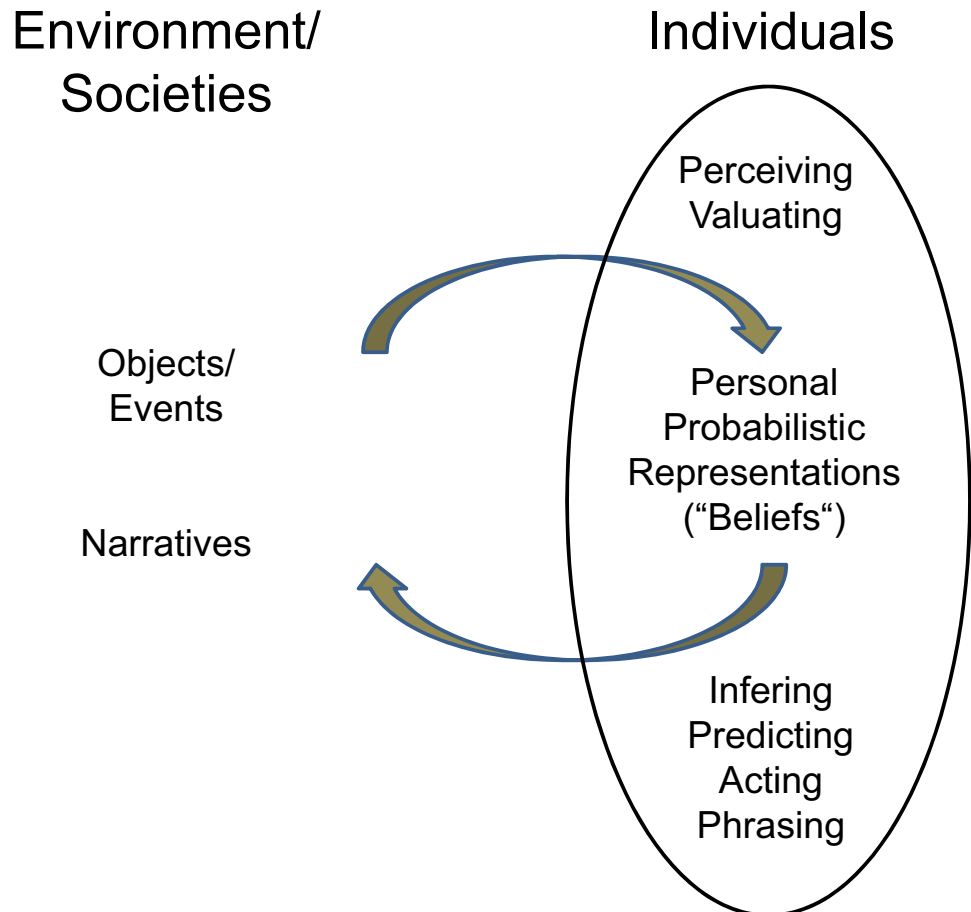
concepts about and believe in entities purported to exist but that have not been seen, people may also know when they are imagining things and not believe in them in the same way they believe in "ordinary reality", even if it is unseen. In either case, it is reasonable to assume that they can also communicate with entities in those realities – be it in self-talk, prayer, or by verbal exchange.

Consequently, communicating with unseen entities implies interacting with probabilistic, personally relevant representations of them on the assumption that the representations may reflect counterparts in ontological reality. The neuroscience-based model of the processes of believing summarized here has offered answers to the questions about where such representations come from, how neural representations of "external entities" and concepts of the "Unseen" are created in the human brain, and multilevel perspectives to understanding the psychological and social processes by which they are sustained.

Historical background, cultural processes, and philosophical issues

We emphasize that we are not engaged in a debate about reality. Our understanding is shaped by our own experiences and words used in everyday contexts. No term just appears out of nowhere. Whatever we talk about may have early traces in the dawn of human history (Hurford et al., 1998). This development likely went along with the evolution of humankind (Hauser et al., 2014, Christiansen & Kirby, 2003). To illustrate, etymologists (Daniels, 1996) have revealed many of the first "signals" which, in the course of time, became "words" (Duchin, 1990). Different families of languages started with different symbols, such as cuneiform (Michalowski, 1996), hieroglyphics (Ritner, 1996), letters as used by Phoenicians (O´Connor, 1996; Encyclopedia Britannica, 2021) or drawings in Chinese script (Bolz, 1996; Fazzioli, 2003). What did these symbols mean when people recorded encounters with the Unseen? We do not know. Maybe it was an optical deception, or a bodily reaction produced by hunger or deprivation, or an imagined encounter with a real Unseen. Whatever it was, the people left symbols – which could have been used by others as "terms" to refer to things, behaviors, emotions, and eventually thoughts and beliefs. We have no access to the mode of how people actually experienced things in earlier generations.

Over time, words were passed down that seemed worth deeper reflection; they became the ideas, concepts, and categories of meaning grappled with by philosophers. Plato (428/427—348/347 BCE), for instance, was influenced by the texts of early poets such as Pindar (ca. 522 – ca. 446 BCE) and Xenophanes. Their influences on and rejections of each other's ideas are compelling topics in Plato's texts (Destrée & Herrmann, 2011a). Book X of his *Republic* speaks about the "ancient quarrel between 'it' [i.e., poetry] and philosophy" (Most, 2011, p. 1). The background of the animosities was, e.g., the issue of how poets refer to truth. Or, in the *Gorgias*, Plato`s criticism of the poets targets their lack of knowledge (Destrée & Herrmann 2011b, XV). Yet in the course of these debates, terms and motives came to be understood and have remained present in the history of philosophy. The issue of how the Visible and the Invisible are related to each other became a topic that continues to engage us (Tymieniecka, 2002).

When philosophers discussed such words more broadly, they established landmarks for the further development of philosophical thinking and subsequent psychological and neuroscientific research. Now the debates could uncoil. Differentiations could be discussed: is Unseen identical with Un-heard or Un-experienced? Can one talk about the Unseen without knowing what it is? In his famous letter to the Corinthians, Apostle Paul talked about "what no eye has seen, and no ear has heard and what nobody ever has thought about" (*King James Bible*, 1769/2017, 1 Cor. 2:9. Whatever it might be – it is not a topic for scientific approaches. What the natural sciences can approach are verbal statements and bodily reactions in response to statements such as that by Paul. Correctly understood, the Unseen remain a matter of believing processes.

The ground underpinning social cognition and attribution

In sum, we can make certain points clear: (1) believing is a fundamental psychological process in the same sense as perception, learning, memory, cognition, and emotion; without them, there could be no psychological science, nor could there be living humans or other animals as we know them (Seitz et al., 2017); (2) most believing is non-conscious and not limited to language-based information, and only a small portion of it reaches conscious awareness and can be expressed verbally (Seitz et al., 2018); (3) believing occurs at every point during neural processing in the transmission of information within the nervous system, from the micro to the macro levels, all the way to the conscious level for a small fraction of it (Seitz et al., 2018) (4) believing processes become greatly more complex depending on the complexity of the information "out there", because that information must then work through interpersonal, social, and cultural processes of information transmission, reception, interpretation, meaning making, appraisal, and meaning remaking, by which processes what is believed can be learned in large aggregates of people (Paloutzian & Park, 2014; Seitz & Angel, 2014); (5) what is believed at the fully human level can be either sustained or modified through the social transmission of content including but not limited to child rearing, education, social conflict, intermarriage, inter-general social

and cultural factors, and so forth (see Angel et al., 2017, for fuller elaboration).

Space constraints preclude us from elaborating upon the far reach of the points noted above (e.g., as applied to all research on and knowledge of believing). To briefly illustrate in one simple way, let us ask what processes epistemic strength and identity centrality (van Leewen, 2022), the formation of beliefs and artificial intelligence (Lumbraras, 2022), the myriad causes of supernatural beliefs (van Elk, 2022), so-called unbelief (Jong, 2015), and the formation of worldviews (Taves & Asprem, 2019), have in common? All are underpinned by fundamental believing processes; there is no such thing as human life without them (Paloutzian et al., 2021; see Seitz et al., 2022a, b, for comprehensive overview). This is so whether the scholarship comes from the field of neuroscience, anthropology, sociology, psychology, or history.

Finally, each individual may know (in the intimate sense of "knowing") at most only their own beliefs. All other instances of one person being aware of the beliefs of another person are due to either some form of social communication or the attribution of certain beliefs to others. It is to the process of communication based on beliefs and attributions of meaning associated with that process to which we now turn. In the next section we discuss believing in communication with the divine and deceased highlighting different types and approaches to prayer and believing this type of communication with the unseen impacts potential well being and health outcomes.

Believing in communication with the divine and the deceased

LLittle empirical research has been conducted regarding beliefs about communication with the divine or the deceased. This lack of research is partially due to the difficult challenge of studying beliefs. For example, people may not be aware of or able to report what they believe accurately. Further, few measures of believing in religious and metaphysical constructs are available and those that are tend to be single items that only tangentially get at issues of believing in the possibility of communication with the deceased or a supernatural agent. To date, no standardized measurement instruments tapping beliefs in communication with the divine or deceased have been developed. A further complication of measurement of religious or metaphysical beliefs is that they have both propositional and implicational dimensions, variously referred to as "head" versus "heart" knowledge (Watts & Dumbreck, 2013), explicit versus implicit beliefs (Jong et al., 2013), "reflections" versus "intuitions" (Baumard & Boyer, 2013), and "aliefs" versus "beliefs" (Gendler, 2008). According to dual processing theories, these different types of information processing can operate in parallel and reflect two separate information-processing systems, an analytical-rational one and an intuitive-experiential one. The analytical-rational system is deliberate, slow, and logical while the intuitive-experiential system is fast, automatic, and emotion-driven (Epstein, 2003; Kahneman, 2013; Teasdale & Barnard, 1991).

This distinction is relevant to claims about the possibilities of communication with the deceased or an extra-worldly agent because people tend to hold beliefs with regard to superhuman agents (e.g., gods, spirits) and other metaphysical entities (Baumard & Boyer, 2013; Jong et al., 2013). That is, individuals may have some "gut-level" notions of the reality of their communications with God or with someone who has passed away that are very different from their more rational, reasoned, or culturally transmitted ideas about the possibility of those types of communication. Standard self-report measures of religious or metaphysical beliefs rarely attempt to capture both implicit and explicit aspects (Park & Carney, 2021). Thus, at this point, we know little about either people's implicit or explicit beliefs about the possibility of communicating with God and the deceased, and what we know is based on scant empirical studies that have assessed these beliefs indirectly along with some research from related areas, which we review here.

Believing in communicating with God

Humans hold many different conceptual beliefs about the divine, including about the existence of God or gods and the nature of God or gods (i.e., God representations; Davis et al., 2013), the extent to which a divinity is involved in daily human affairs, and whether humans can communicate with the divine. Belief that communication with God is possible is common and may form the basis of one's relationship with the divine as understood by him or her. Believing that one can communicate with God is predicated on prior beliefs—first, that there is a God with whom one might communicate and second, that the nature of this God is such that God is capable of and open to communication (see, e.g., Exline et al., 2021a, b).

People attempt to communicate with God largely through prayer. In fact, many scholars have defined prayer as "communication with God" (for a review, see Spilka & Ladd, 2012). In one study of prayer among a sample of adults in the United States, participants reported higher self-disclosure to God when engaging in some types of prayer but not others. Further, self-disclosure appeared to be a pathway through which engaging in prayer was associated with better mental health, suggesting that many individuals do perceive their prayer as constituting personal communication with God (Black et al., 2015).

Scholars have delineated different types of prayer, contending that some types (e.g., colloquial, petitionary) involve

more direct and personal interactions with God, whereas other types involve less direct interactions (e.g., ritual). Studies examining associations of different types of prayer with well-being have generally demonstrated that some types of prayer are more strongly associated with mental health and well-being than are others (Poloma & Pendleton, 1991; Spilka & Ladd, 2012). It is important to mention, however, that most research on prayer has used Christian populations (e.g., Poloma & Pendleton, 1991; most research cited in Spilka & Ladd, 2012), so generalizability to other religious traditions may be limited. Curiously, these patterns of mental health do not align with the dimension of directness of communication (with petitionary prayer being the most direct). For example, both colloquial and ritual prayer tend to be related to better mental health (e.g., Whittington & Scher, 2010), whereas petitionary prayer has been related to poorer mental health. However, these studies are generally cross-sectional in attempting to illuminate the long-term patterns of different types of prayer and emotional well-being. For example, the demonstrated association between greater engagement in petitionary prayer and depression or anxiety may simply reflect people turning to petitionary prayer to cope with their distress. Most studies of prayer are of limited value when trying to understand beliefs in communication with God because studies of prayer almost always focus on the behavior of praying (e.g., frequency of prayer; Spilka & Ladd, 2012) rather than the strength of the beliefs of the praying person when she or he is praying (e.g., the extent to which a person believes their prayer is a direct communication with God).

A separate, relatively limited line of research has examined experiences or perceptions of communication with God. Studies on this topic suggest that people—particularly some groups of Protestant Christians–commonly report experiences of communicating with God (e.g., Lee et al., 2013; Luhrmann, 2012). One qualitative study of charismatic Christians in the United Kingdom (Dein & Cook, 2015) found that communications from God were usually said to be received through thoughts within the mind, rather than as an externally audible voice. Most communications concerned mundane matters of their current lives rather than metaphysical insights or future events. Participants reported that they generally found the communications from God reassuring. Two studies with undergraduate students (Park, 2021) found that beliefs that communicating with both God (e.g., God is listening when I talk with Him) and with deceased loved ones and experiences of doing so were common. However, contrary to hypotheses, many of these beliefs and experiences were *positively* associated with higher levels of distress (Park, 2021).

These above-mentioned studies have documented experiences of prayer and of perceived communication with God, but very few have actually examined beliefs about the possibility of communicating with (or being heard by) God while praying. This question of how people come to beliefs about whether communication with God is possible, whether through prayer or otherwise, appears to be an important area for future inquiry. The impact of individuals' beliefs regarding their ability to maintain direct, reciprocal communication with God likely depends on their beliefs in the nature of that God. For many, it means remaining connected to someone with potentially infinite love, power, and protection, which would seem to be an important determinant of general levels of comfort and mental health for those believers (Ellison et al., 2009). Future work is needed to identify the potential determinants of the impact of beliefs in communication and to better understand the pathways through which beliefs in communication with the divine and the deceased influence well-being. Greater understanding of the effects of beliefs in communication with God may lead to future clinical interventions. In the next section, we move from belief in communication with the Unseen to research and conceptual work on the attributions associated with this style of communication.

Attributions: interpreting events as messages from the divine or departed

If people believe that communication with God or deceased persons is possible, they may take things a step further: They might view a specific event through a supernatural lens (Exline & Wilt, 2022; Exline, 2021, 2021a), seeing it as a message from God or a deceased loved one. Research suggests that people may interpret many types of events as divine messages (Wilt et al., 2021), ranging from spontaneous thoughts (cf. Luhrmann, 2012) to meaningful life events to acts of kindness from others (Harriott & Exline, 2017). People also interpret a wide array of events as after-death communications (ADCs; Guggenheim & Guggenheim, 1995). Some are dramatic: People might report seeing or hearing a deceased person, or they might have a dream so vivid that they believe the deceased person was actually present (Kamp et al., 2020; Woollacott et al., 2021). People may also interpret many types of natural events as indirect messages from a departed person, like animal encounters, electrical activity, or weather events such as storms or rainbows (Arcangel, 2005; LaGrand, 2005).

What would cause someone to interpret a particular event as a message from God or a deceased person? This is an important practical question to address, because tendencies to interpret reports of supernatural activity in terms of psychopathology (mental illness lens), normal psychological processes (psychological/psychotherapy lens), or actual encounters with God or a deceased loved one (supernatural lens) could lead to very different approaches to assessment and treatment (Exline, 2021, 2021a). Granted, some

supernatural attributions have been linked with mental illness, such as schizophrenia, dissociative disorders, and post-traumatic stress disorder (see Exline & Wilt, 2022, for a review); however, our focus here is primarily on cases that do not involve serious psychopathology. As summarized in several recent papers (Exline & Pait, 2021; Exline & Wilt, 2022; Exline, 2021, 2021a), we propose that people should be more likely to interpret events as messages from God or a departed person if such an explanation is readily accessible, plausible, and motivating. We will briefly consider each of these empirically testable ideas in turn.

Accessibility: Does the idea of a message come easily to mind?

To start an attributional process, a given explanation must come to mind for consideration. Events that are unusual and attention-grabbing (e.g., disembodied voices, repeated sightings of rare animals, spontaneous healings) might seem to demand an explanation, and people may wonder about supernatural explanations–especially if natural explanations do not come readily to mind. Strong beliefs that God or spirits exist should set the stage for causal attributions to them, as has been shown in research with undergraduates (Wilt et al., 2022). Supernatural explanations should also be accessible when people are on the lookout for messages from the divine or departed, perhaps because they have asked God for help, because others have suggested that they watch for "signs," or because the pain of bereavement has left them seeking reassurance that their loved one—and the relational bond—lives on. Some people may also form habits of making supernatural attributions for certain types of events (e.g., "When I get chills, I know that God is speaking to me,"), which could make supernatural explanations highly accessible for certain types of experiences.

Plausibility: Does it seem rational to see the event as a message?

Even if people make supernatural attributions "on faith" to some degree, they should be more likely to embrace such explanations if they seem at least moderately plausible. For some people, powerful events such as near-death experiences, reincarnation memories, or intense after-death communications may provide strong evidence for belief in an afterlife (see Exline et al., 2021a, b, for a review). However, even in less dramatic cases, when potential messages from God or deceased people come through indirect, often symbolic pathways, people may still find it logically reasonable to make supernatural attributions. Many people believe that supernatural explanations for events can coexist with natural explanations; one does not rule out the other (Legare et al., 2012). As suggested by work on

supernatural operating rules (Exline et al., 2021a, b), people will be more likely to embrace supernatural explanations if they not only believe in the entities in question, but if they also see these entities as having sufficient power and intention to send messages to people—and if they are believed to send such messages often, to many people, via many different modes. Along these lines, one recent study (Exline et al., 2021a, b) showed that undergraduates saw God as having much more power and intent to communicate with people than did human spirits. They also saw God communicating with people more often than ghosts/spirits did, and through more modes. Thus, people who believe in both God and spirits can be expected to attribute a wider range of events to God than to human spirits. On average, however, participants did believe that human spirits had moderate power to influence events and to send messages.

Motivation: Does a person want to see the event as a message?

People often believe what they want to believe, as suggested by work on motivated reasoning (Kunda, 1990). This logic applies to supernatural entities as well, with research on undergraduates showing that desires to believe in God and ghosts/spirits are closely linked to actual beliefs (Wilt et al., 2022). When trying to explain events, people should also be more likely to embrace explanations that are rewarding in some way—ones that bring positive emotions, that tell an interesting or meaningful story, or that fit conveniently with prior beliefs, for example. People should also navigate away from explanations that seem distressing or confusing. Many ADC experiences do yield strong positive emotions, bringing comfort, hope, and a deep sense of ongoing connection (Arcangel, 2005; Guggenheim & Guggenheim, 1995; LaGrand, 2005); but some are disorienting or distressing (Sabucedo et al., 2021). It seems likely that a scary or upsetting experience, such as seeing a menacing ghost or a vision of a loved one in Hell, would make people want to steer away from supernatural explanations. Some supernatural attributions might also threaten existing beliefs. For instance, a committed atheist might not want to frame an amazing physical healing as a miracle because doing so would lead to disorienting worldview shifts—and possibly even major social and lifestyle challenges. In the next section we turn to empirical laboratory research that attempts to document communication with the Unseen, highlighting research attempting to communicate with the departed by using mediums. While both provocative and controversial, this research emphasizes using the highest standards of methodological design and statistical techniques.

Is there laboratory evidence for communication with the deceased?

An issue at the heart of the above account of the psychological processes involved in attempting to communicate with beings that cannot be seen comes in the form of the (timeless) question of whether such entities exist. Do we view accounts of such communications as signs of mental illness, normal psychological processes, or real spiritual phenomena (cf. Exline, 2021, 2021a)? As psychologists, our focus here is primarily on the mental, emotional, cognitive, and behavioral processes of the individual perceiver. Yet the fundamental metaphysical issue is always present – believers arguing for a greater spiritual reality, nonbelievers arguing against it, and everybody else either not addressing it or claiming no knowledge. In attempting to examine this issue, the focus necessarily shifts from trying to understand the psychological processes that mediate purported communication with unseen entities to trying to examine whether claims about the reality of the "Unseen" – e.g., agents such as gods, demons, or spirits of dead people – are or are not actually "out there" in an ontological, greater spiritual reality.

Typically, psychologists are trained to examine people's personal beliefs and experiences without addressing the supernatural themselves. As we consider how supernatural beliefs develop and persist, it is meaningful to consider the types of psychological and associated physical events that could persuade some people to adopt supernatural explanations. For example, one might examine the types of experiences that some people view as providing evidence for the existence of God, human spirits, or an afterlife (see, e.g., Exline et al., 2021a, b, for a review focused on afterlife beliefs). In regard to beliefs about and communication with the Unseen, we offer the following brief review of research by one of our co-authors, who has explored communication with deceased people in controlled experiments.

Among the challenging research endeavors to address the imaginary versus real debate concerning human interaction with other-worldly beings are laboratory experiments focused on communication with the deceased. Controlled psychological research investigating claims of people who purport to communicate with the deceased (termed mediums) complement and extend research discussed previously that highlights the psychological processes involved in communication with the deceased, whether imagined or real.

This research approach is not new in the psychology field as, for example, William James had a distinguished (and controversial) history of conducting research investigating the potential legitimacy of certain mediums and psychics of his day (reviewed in Alvarado & Krippner, 2010)). Trained in both philosophy and medicine and raised in an intellectual home where his family admired the spiritual writings of Emmanuel Swedenborg — one of Sweden's most renowned scientists and mystics — it is perhaps not surprising that James would endeavor to employ his intellect, curiosity, and creativity toward integrating his overarching scientific and spiritual interests (Schwartz, 2010a). Blum (2006) has provided a comprehensive review of the history of the work by James and others of his day.

Is there credible, methodologically controlled evidence for the existence of a metaphysical reality that justifies believing in communication with someone who has died? Over the past two decades, laboratory research testing science-minded individuals who claim to speak with the deceased – typically referred to as evidential (or evidence-based) mediums – has employed ever more controlled, multi-masked experimental designs.

Sarraf et al. (2021) recently reported the results of a meta-analysis of all available experimental evidence from 2001 to December 2019 investigating the accuracy of apparently anomalously received information provided by research mediums about deceased individuals. Fourteen papers passed their selection criteria for a total of 18 experiments. Both Bayesian and frequentist random effects models were used to estimate the aggregate effect size across studies. The overall standardized effect size (proportion index) yielded a value of 0.18 (95% C.I. = 0.12—0.25) above the chance level. These estimates also passed the control of two publication bias tests. The authors cautiously concluded that the findings "support the hypothesis that *some* mediums can retrieve information about deceased persons through *unknown* means" (p. 400, italics added).

In typical laboratory mediumship experiments, mediums are kept masked to the identities of the living family members and friends (referred to as "sitters" if they are present at the readings) as well as the deceased. Additionally, experimenters who interact with mediums and conduct the sessions (referred as "readings") are kept masked to the identities and details about the lives and histories of the deceased. Finally, "absent sitters" (who are not permitted to be present at the readings) are kept masked to the identities of the mediums, do not witness their readings in real time, and later score at least two readings in a masked manner (i.e., they are not told which reading involves their deceased loved one (s) versus a matched control reading or readings).

Such designs typically attempt controls for fraud (e.g., potentially perpetrated by fake mediums or deceptive experimenters), conscious or unconscious experimenter effects (e.g., sensory cueing of the mediums), and rater bias (i.e., since any biases of a sitter would be equally applied to the masked transcripts of the readings), as plausible

explanations of the findings. However, these designs do not completely rule out more speculative explanations (see Baruss, 2003; Cardeña, 2018, Cardena et al., 2000).

Experimental designs have become quite sophisticated. For example, Beischel and Schwartz (2007) conducted a triple-masked study to examine what they termed "anomalous reception of information" (p. 23) about deceased individuals by evidential research mediums that controlled for fraud, experimenter effects, and rater bias. To optimize potential identifiable differences between readings, each deceased parent was paired with a same-gender deceased peer. As explained above, sitters were not present at the readings; an experimenter masked to information about the sitters and deceased served as a proxy sitter. The mediums, masked to the sitters' and deceased's identities, each attempted to receive communications from a deceased pair; each deceased pair was read by two mediums.

Each masked sitter then scored a pair of itemized transcripts (one was the reading intended for them; the other, the paired control reading). Individual items were scored for degree of accuracy using a standardized degree of fit rating scale (from obvious fit to no fit), and each masked sitter chose the reading more applicable to them. The findings included significantly higher ratings for the sitter's readings versus control readings ($p = 0.007$, effect size $= 0.5$) and significant correct reading selection ($p = 0.01$).

The Beischel and Schwartz (2007) multi-masked findings were replicated and extended by Beischel et al. (2015). The masking procedure was even more complex (expanded to quintuple masking to further rule out concerns of fraud, experimenter effects, and rater effects). Accuracy and specificity of the information were assessed through individual item accuracy scores, overall reading scores (using a 7-point scale), and forced-choice (binary) reading selections provided by masked sitters. The primary findings included significant differences between the masked target and decoy readings regarding the accuracy of reading items. This research replicated and extended previous findings appearing to demonstrate the phenomenon of reception of "anomalous" information, the reporting of accurate and specific information without prior knowledge, in the absence of sensory feedback, and without using deceptive means. The authors cautiously concluded that, "because the experimental conditions of this study eliminated normal, sensory sources for the information mediums report, a non-local source (however controversial) remains the most likely explanation for the accuracy and specificity of their statements" (Beischel et al., 2015, p. 136).

Complementary experiments on the possibility of survival of consciousness after death have employed advanced technology to detect predicted info-energetic effects of the presence of "hypothesized spirit participants" (HSP). In a series of three non-masked experiments, measurements of single photons of light in a fully dark chamber were obtained using a silicon photomultiplier system (see Schwartz, 2010b for details). A research medium invited specific HSPs to enter the chamber on "presence of spirit" (POS) trials. An equal number of matched, no POS control trials were also collected.

In addition, trials were included to assess whether experimenter awareness and intention could achieve results comparable to POS via a potential paranormal mechanism (see Baruss, 2003; Cardeña, 2018, Cardena et al., 2000). The average number of photon sums was found to be significantly higher in POS trials compared to non invited (i.e., non-POS) control trials. In addition, the matched control trials as well as explicit experimenter intention trials showed no effects (Schwartz, 2010b).

To further rule out possible physical presence of experimenter effects as well as experimenter conscious intention effects, two replication and extension experiments were performed employing a low light CCD camera system in a controlled dark room (Schwartz, 2011). Experimental sessions were computer automated, and instructions were given to HSPs when to enter and leave the fully dark chamber (POS trials) via audio files and PowerPoint slides. The POS and matched no-POS control trials were run in the absence of experimenters (during the quiet of the night). The images generated by the low light camera were analyzed via Fast Fourier Transforms (FFTs). Compared with pre baseline and post baseline images, the POS trials were associated with significant increases in the average brightness of the FFT images. POS effects were not observed for the matched no-POS control trials.

The need for large scale, independent replications that are published in mainstream psychology journals is clearly indicated. It is now possible to conduct large scale advanced technology experiments employing the multi-center, multi-masked, randomized control trial (RCT). In clinical trials, the large scale RCT is termed a Phase III clinical trial. Schwartz (2021) has outlined core goals and RCT methods developed to investigate computer automated spirit presence and communication. The goals include using reliable and affordable technology, automating data collection, and encouraging multi-site collaboration.

Advanced technology RCT research, especially when combined with the contemporary laboratory experiments with research mediums, can provide evidence for claims of communication with the deceased. The research is designed to satisfy the most stringent skeptical concerns and meet a standard employed in the legal system of "beyond reasonable doubt" (e.g., Bourey & Schwartz, 2020). Schwartz has argued that the advanced technology RCT paradigm meets a phrase popularized by Carl Sagan: "Extraordinary claims require extraordinary evidence" (as cited in Schwartz, 2020, p. 3).

Conclusion and future directions

Claims of communication and interaction with the divine, the sacred, the deceased, and even the demonic have been made by many people across the globe and over centuries of time. Prayer, for example, is a remarkably universal and common experience and behavior with diverse strategies and techniques based on culture, language, faith traditions, and so forth. Communication with the immaterial or Unseen world in whatever forms it may exist offers meaning, purpose, and attributions about life and living. It is not uncommon that people believe they have perceived or engaged in an encounter with something in the immaterial world. This is true not only for those who are religious and/or spiritual, but also for nonbelievers. Although some instances are indicative and diagnostic of psychopathology (e.g., psychotic illness), many of these experiences are not. While some quality empirical research has been conducted in this important and common area of human experience reviewed and reflected upon here, the literature is thin, with numerous questions remaining unanswered. It is possible that researchers may be hesitant to conduct research in this area, perhaps concerned about seeming unscientific or even "flaky." However, we believe that high quality science must ask difficult and controversial questions allowing the data, methodology, and statistical analyses before determine what is and what is not scientifically supported. Good science means asking hard questions and being scientifically neutral about where the data might lead.

Future research should use the highest level of state-of-the-art technology, methodology, and statistical approaches to empirically evaluate the evidence of communication with the Unseen. Research should also be mindful of the evidence not only of mediums but also from the communication efforts of clerics or other spiritual and religious leaders who claim to be skillful in prayer and communication with the Unseen. Research should also more closely examine both the psychological and health benefits, and difficulties, with prayer and communication with the Unseen to further understand both the pros and cons of engaging with the immaterial world. This style of communication exists across the globe in numerous environments yet empirical research on this behavior is sorely lacking. Future researchers may also wish to use Online Photovoice (OPV) to conduct experiments on similar topics. OPV provides opportunities for participants to express their own experience with as little manipulation as possible compared to traditional quantitative methods (e.g., Doyumğaç et al., 2021; Tanhan & Strack, 2020).

Many psychologists and other behavioral science researchers may have doubts about the worthwhileness of conducting research that examines attempts at communication with gods and people who have died. And certainly, research monies are rarely available for this area of inquiry. Nevertheless, given the claims that such communication is common, these efforts have enormous implications for how people experience and live their lives. Thus, high quality research is desperately needed. Science advances when questions are asked and researchers are willing to go where the data lead them, even to surprising, unexpected, and controversial places. Conventional wisdom is not science, but being bold in our questions and methods is likely to move our understanding of this human phenomenon forward.

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