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From Grief to Growth: Uniting Ancient Wisdom and Cutting-Edge Technology to Probe Grief and Absorption in the Psychomanteum

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ABSTRACT

This study investigated two strategies to induce ostensible experiences of after-death communications on self-reported grief and absorption. The first involved the psychomanteum, a sensory deprivation chamber. The second involved virtual reality (VR) experiences designed to emulate key elements of the chamber. Both interventions involved guided suggestions to experience invisible others, including departed loved ones, spirits, and ghostly sensations. A total of 92 people completed all pre- and post-measures along with either the psychomanteum or the VR experience. The procedure for this study involved pre- and post-interviews and surveys surrounding a psychomanteum chamber or VR experience. There were five principal aims for this study: 1) compare pre- and post-scores on grief and absorption, 2) measure the correlation between grief and absorption, 3) measure differences in the physical chamber and VR during post intervention session, 4) explore language use in terms of pronouns and emotive language, and 5) explore reported experiences in the psychomanteum using a thematic analysis. For Aim 1, a paired samples t-test found a significant effect for absorption pre- and post-assessments ($t(55) = 1.95$, $p = .0568$). No effect was found for grief ($t(55) = 0.330$, $p = .743$). Aim 2 was assessed with a Pearson's r that showed a significant correlation between grief and absorption ($r = -0.243$, $t(90) = -2.382$, $p = .019$). For Aim 3, no significant effect was seen between the physical chamber and the VR experience on absorption or grief scales. For Aim 4, participants used plural pronouns (i.e. 'we' instead of 'I') significantly more than other pronouns. For Aim 5, participants reported a range of experiences pertaining to themes including views of death and the afterlife, identity, and non-verbal communication. This innovative approach to consciousness studies bridges ancient and advanced technologies, providing new avenues for addressing global mental health challenges.

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Introduction

When someone we care about dies, it can create a painful aftermath for those who are left behind. Experiences of the bereaved frequently include grief, sadness, and emotional distress, including depression. Some bereavement states may be resolved in a few months or a year or two, while others may continue for decades (Cleiren, 1993).

Finding ways of connecting to loved ones is a common goal for those in a state of bereavement. As psychologist, Arthur Hastings (2012) noted: "In such situations, the feelings of loss may be punctuated by incidents in which a survivor may feel a sense of the presence of the person who has died" (p. 1). Such after-death experiences (ADE) may take the form of a vivid dream in which the deceased appears. For others, the perceived communication may take the form of hearing the voice of the lost loved one or having conversations with him or her. Still, others have reported spontaneous and unexpected visions or signs that seem to come from the deceased, and which may be experienced by others. In most cases, these are spontaneous occurrences that carry meaning and induce transformative experiences.

Far from being rare experiences, these ostensible communications with "invisible others" (Luhrmann, 2012, 2020) have been reported by many different people from different social and economic sectors. They have been studied in medical, psychiatric, and parapsychological research and surveys have been conducted cross-culturally (Beischel, 2019). An early survey by Rees (1971), for instance, found that widows and widowers in Wales reported contact with the deceased by 50% of the widowers and 46% of the widows. A survey by Kalish and Reynolds (1976) of four ethnic communities (African American, Latino, Japanese American, and Caucasian) in Los Angeles, reported that 44% claimed to have felt a post-death contact. Such experiences have been reported in many countries and locales, including the U. K. (Bennett & Bennett, 2000) India (Osis & Haraldsson, 1977), Iceland (Haraldsson, 1988), the U.S. (Cleiren, 1993; Greeley & Hout, 1999; Klugman, 2006), and Japan (Yamamoto, Okonogi, Iwasaki, & Yoshimura, 1969). A random telephone survey by Klugman (2006), found the most common mode of contact included dreams, sounds, feeling a presence, and having conversations. This is consistent with Elsaesser, Roe, Cooper, & Lorimer's (2021) study, which surveyed participants in 3 languages (English, Spanish, French) and found dreams to be the most common mode of contact for speakers of any of those languages. Elsaesser et al. noted that, while language did not appear to influence the results, the participants all hailed from relatively similar cultures, and that this study alone was not enough to rule out linguistic or cultural relevance.

The connection with invisible others supports the Continuing Bonds Theory, a psychological concept that challenges the traditional notion of grief as a process of detachment and closure. Developed by bereavement scholars like Klass, Silverman & Nickman (1996) and Klass & Steffen (2018), it suggests that after the death of a loved one, individuals can maintain a lasting connection with the deceased. This theory recognizes that people find comfort and healing in various ways, including cherishing memories, engaging in rituals, and carrying on the relationship in a transformed manner. It acknowledges that the deceased person's influence can persist in the lives of those left behind, allowing for a more flexible and enduring approach to coping with loss.

While such experiences may be spontaneous, various techniques have been developed over the millennia to make contact with invisible others. Ancient cultures throughout history have practiced divination and spirit communication by gazing into reflective surfaces or other tools. These practices often aimed to contact the spirit realm, gain insight, or foretell the future. In ancient Babylonia, diviners and priests used a form of divination called "extispicy." This could be conducted by gazing into the livers of sacrificial animals or reflective surfaces such as oil or water to gain insights, messages, or visions. The ancient Egyptians made use of polished bronze or copper mirrors to commune with spirits and receive guidance from those in the afterlife. In ancient Greece, mirrors were used to gain insights from the spirit world through a practice known as "catoptromancy." Likewise, in ancient Rome, gazing into reflective surfaces was used to gain insights into a range of matters, both public and private. Similarly, shamanic cultures have used polished objects or reflective pools to enter a trance-like state and commune with the spirits of the natural world. These practices suggest that the experiences of invisible others through scrying or gazing into a reflective surface can be enacted through an intentional practice.

Previous research in the psychomanteum

To more fully explore the nature of these transpersonal experiences and their psychological impacts, psychiatrist Raymond Moody (1992) began a series of investigations into these ancient practices and how they could be applied in a contemporary clinical setting. He developed a technique that is called the psychomanteum. This procedure is an innovative approach that invites people to have anomalous experiences such as apparitions, or insights from the subconscious mind. The experience is akin to sensory deprivation because it involves creating an environment that limits sensory input, particularly visual and auditory stimuli. It makes use of a simple protocol that occurs in a dark, quiet room with a comfortable chair and a slightly illuminated mirror. The mirror is placed slightly above the person's direct line of sight so that the reflection shows the darkened room with dim candle lighting. This sensory isolation procedure has been shown to trigger sensory experiences that lie outside ordinary awareness. While mainly thought to be subjective, reports by those in the psychomanteum suggest that experiences of invisible others carry great personal meaning. These transpersonal experiences offer a unique window into consciousness and how the mind and matter interact.

The impact of the psychomanteum is associated with absorption, a psychological state that refers to a deep mental focus or engagement with an activity or stimulus (Tellegen & Atkinson, 1974). It involves becoming fully immersed in one's experiences to the point where the individual loses a sense of time and self-awareness. When someone is absorbed in something, they may be completely oblivious to their surroundings and may have an intense, almost trance-like concentration on the task at hand; absorption makes the imagined seem more real (Lifshitz, van Elk, & Luhrmann, 2019; Luhrmann, Weisman, & Smith, 2021). Absorption can be related to sensory deprivation in that when individuals are deprived of external sensory input, they may become more prone to entering states of absorption (Glicksohn, Berkovich-Ohana, Mauro, & Ben-Soussan, 2019). In the absence of external stimuli, the mind may turn inward and focus intensely on internal thoughts, feelings, or

sensations. This can lead to a heightened state of absorption, where individuals may experience vivid imagery, deep contemplation, or altered states of consciousness. In environments of sensory deprivation, such as the psychomanteum, individuals may also become more sensitive to any sensory input that does occur, leading to a more intense experience of absorption. This heightened state of absorption in sensory deprivation environments has been explored in various contexts, such as meditation practices, psychotherapy, and scientific research on consciousness and altered states of consciousness.

The psychomanteum procedure has since been adopted by researchers, providing compelling support for the experiences of invisible others and their therapeutic benefits. Several experimenters have researched to examine psychological, transpersonal, and parapsychological dimensions of altered states of consciousness produced in the psychomanteum (Arcangel,1997; Roll, 2004; Parra, 2011; Root, 2015). Radin & Rebman (1996) noted that psychomanteum participants have reported that "the mirror gradually transforms into a window, swirling clouds appear in the window and then intensely vivid visions are seen through the window. On occasion, visions from the 'other side' of the window extend into the psychomanteum itself. These latter, three-dimensional visions, sometimes taking the form of humanoid apparitions, are often described as 'hyper-real', that is, as more intensely real than the reality experienced under ordinary consciousness" (p. 67). The image is often perceived as autonomous and distinct from the viewer and may be accompanied by physical sensations.

Hastings, Hutton & Braud (2002) conducted a series of studies designed to explore the psychotherapeutic benefit of experiences in the psychomanteum, and participants experiencing bereavement were recruited. As noted by Hastings (2012): "Apparent contacts similar to spontaneous after-death encounters were reported by 63% of the participants. Repeated measures of bereavement showed reductions in feelings of bereavement with decreases in bereavement correlated positively with increased tendencies toward absorption" (p. 1).

The current study offered a conceptual replication of Hastings (2012) by examining the relationship between absorption and grief in the psychomanteum. In the current study, the physical chamber was compared with one designed for a Virtual Reality (VR) environment. Virtual Reality (VR) technology can significantly enhance absorption due to its immersive nature. VR creates simulated environments that users can interact with realistically and engagingly. This immersive quality of VR can facilitate a state of absorption by capturing the user's attention and focus, often to the exclusion of the external environment.

Features of virtual reality technology

VR technology provides users with a highly immersive experience by surrounding them with virtual environments that they can explore and interact with. The sense of presence and realism in VR can captivate users' attention, leading to a state of absorption where they become deeply engaged in the virtual world. VR creates a sense of presence, where users feel as though they are physically present in the virtual environment. While Murray & Pettifer (2007) found no significant correlation between presence and absorption, they found

significant correlations between both presence and dissociation and absorption and dissociation, suggesting that these phenomena, even if not directly linked, are intertwined. This feeling of being "there" (presence) combined with dissociation can enhance absorption by making users more likely to suspend disbelief and fully engage with their surroundings. They may focus their attention on specific tasks, such as those that simulate the physical psychomanteum chamber. Participants can be transported from the real world and into virtual environments that can disconnect them from their immediate environment and concerns. Making use of an emotional prompt, such as communicating with departed loved ones, can deepen absorption as users become emotionally invested in the virtual experience.

Developers have reported that virtual technology helps reduce fear of death (Bourdin, Barberia, Oliva & Slater, 2017). Increased absorption in the experience may lead to a greater chance for the perception of presence to occur in VR and therefore a greater likelihood of subliminal patterns being activated in the study participants, as well as strong emotional reactions through multi-sensory perceptual stimulation (Baños, Botella, Raya & Liano, 2004; Baños, Botella, Rubio & Quero., 2008; Diemer, Alpers, Peperkorn & Shiban., 2015). The visual system and the ability to interpret the surrounding environment are essentially duped into accepting the visual stimuli as real. It is for these reasons that it was decided to utilize a physical psychomanteum chamber and the VR experience, comparing the impact of absorption in both conditions on grief.

Similarities and differences between the two experimental environments

There are several similarities and differences between the physical chamber and the VR experience. Similarities include the following:

1. The guided imagery used to induce a state of absorption can help participants focus their attention inward, facilitating introspection and emotional processing related to grief.
2. The physical chamber and the VR experience provide controlled environments where researchers can manipulate variables and ensure consistency across participants. This control helps minimize external distractions and influences on the absorption process.
3. Both procedures aim to create a realistic and immersive experience for participants. While the physical chamber relies on actual physical space and props to evoke a sense of presence, VR technology simulates environments that can be equally, or more immersive, providing a sense of presence and realism.
4. Both procedures can employ the same measures to assess absorption and grief-related outcomes. This allows for direct comparisons between the effects of the physical chamber and the VR experience on participants' psychological states and experiences of grief.

Several differences between the two conditions include the following:

1. The most obvious difference is the nature of the environment. The physical chamber involves a tangible, real-world space with physical elements such as mirrors, dim lighting, and comfortable seating. In contrast, the VR experience takes place in a virtual environment generated by computer software, offering a simulated reality that may differ in its sensory qualities.
2. In the physical chamber, participants may be aware of the presence of researchers or facilitators in the room, which could influence their experience. In the VR experience, participants may feel a greater sense of privacy and anonymity, as they are typically alone in the virtual environment, although researchers may still monitor the session.
3. In the physical chamber, participants may experience tactile sensations, such as the feeling of sitting in a chair or touching physical objects within the space. In VR, tactile feedback is limited to haptic devices or controllers, which may not provide the same level of sensory realism as interactions with physical objects.
4. Setting up a physical chamber requires dedicated space and resources, whereas conducting a VR study may involve purchasing or renting VR equipment and software. Additionally, participants may need access to VR technology, which could limit the study's accessibility compared to a physical chamber setup. On the other hand, VR technology may offer scalability that is not possible with the physical chamber.
5. While efforts can be made to standardize the physical chamber experience, variations in environmental factors (e.g., lighting, acoustics) may still occur across sessions. In contrast, VR experiences can be precisely controlled and standardized, offering a more consistent experimental environment.

Language use

Schlitz, Schooler, Pierce, Murphy & Delorme (2014) found that people who underwent the afterlife exposure intervention that Schlitz et al. designed wrote about death differently in their pre- and post-session journaling. In the post-session journals, participants used significantly more plural pronouns (i.e. *we* instead of *I*) in their discussion of death. This analysis was conducted using the Linguistic Inquiry and Word Count (LIWC; Pennebaker, Chung, Ireland, Gonzales, & Booth, 2007) software. LIWC was also used in Schlitz et al.'s study to evaluate participants' use of emotive language. They found no significant change in the use of emotion-related language, whether the emotions were positive or negative.

Variables

This study is concerned with evaluating the change in grief and absorption before and after the experience with the psychomanteum or the VR. That is, this study tracks the changes in grief caused by the psychomanteum experience. This change is henceforth called delta-grief. Likewise, the change in absorption will be referred to as delta-absorption.

Hereafter, the term 'psychomanteum' will refer to either a physical chamber or a VR experience. The type of psychomanteum will be specified as relevant.

Aims

1. Measure differences in the physical chamber and VR on grief and absorption.
2. Evaluate the impact of the psychomanteum on delta-grief and delta-absorption.
3. Examine the correlation of delta-absorption and delta-grief.
4. Explore language use in self-reports through content analysis to identify change in pronoun usage and use of emotive language by participants.
5. Explore thematic language use in self-reports to identify types of sensory and transformative experiences reported in the psychomanteum.

Aims 4 and 5 are exploratory features of this study; they are not examined as in-depth as the first three aims are. They simply begin what will be explored further in future research.

Methods

Participants

A total of 108 participants (adults aged 18-85) were selected for the study through various recruitment methods, including online advertisements and community outreach, with 92 completing all assessments and so included in the final analyses. 56 of these participants would experience the psychomanteum; the rest, the VR. The participants were recruited based on their experiences of grief over the loss of a loved one, as well as a more general interest in transpersonal experiences. Each person who was selected reported the loss of a loved one. Persons volunteering for the study were given a screening interview that asked about the individual who died and screened to exclude persons if they reported being diagnosed or hospitalized with a major mental or physical illness. Participants were usually asked to wait six months after death before going through the research process and their grief began no more than five years in the past. Accepted participants received a digital package containing a consent form, the pre-questionnaire, and the assessments. To reduce risks to the participants that may be triggered in the grief experience, they were provided with the phone number for the local mental health hotline; no such experiences were reported.

Facilitators

The study was carried out in collaboration with 11 graduate students at the lead author's university and with researchers from the NeuroMeditation Institute. They were required to be in a master's or Ph.D. program or to have at least a Marriage and Family Practice license. Facilitators were asked to review a Facilitator Guide prior to the start of their data collection (Appendix A).

Design

The study utilized a repeated measures design with two conditions: the psychomanteum chamber condition and the Virtual Reality condition. The measures were repeated before and after each session.

Psychomanteum chamber

The chamber was a darkened room covered in black velvet cloth. A mirror was angled towards the ceiling and placed before the participant and a battery-powered candle provided a slight illumination into the mirror.

VR Experiences

Two virtual reality experiences were designed for the study: a tethered condition that connected the headset and the computer and the Oculus un-tethered condition. Both conditions offered a 360-degree immersive experience. In the tethered condition, participants experienced a virtual avatar that led them into the mirror and invited them to engage with invisible others. In the Oculus condition, participants were immersed in an experience of a flowing stream near sunset while led through a guided meditation (Appendix B). Due to COVID-19 restrictions, most sessions were conducted using the Oculus, as it allowed data collection while maintaining social distancing protocols. The guided imagery was the same for all conditions, inviting the participants to engage their creative imagination and engage with departed loved ones.

Procedure

Experiential process

In crafting the experience, it was hoped that researchers could retain individualized support and personal attention in the experience. In attempting to create a facilitative experience, several steps incorporated (a) remembering the deceased with memories, thoughts, and mementos of the person; (b) activating the feelings of loss, longing, and other emotions of grief; (c) awareness of unfinished issues and connections; and (d) nonverbal levels of feeling.

The guided imagery was designed to induce a trance-like state in the chamber and VR conditions. The participant sat in a comfortable chair and was fitted with an audio headset or the VR headset. The audio track invited participant to utilize their creative imagination to open themselves to potential contact with invisible others. In time the visual and audio experience faded into wispy clouds and the participant was told that they would be their own guide and that the experimenter's voice would return when the session was over. At the end of both the chamber and the VR sessions, each participant was debriefed. They were asked to complete the battery of assessments, engage in a recorded interview with the facilitator, and write a short response to two mortality salience prompts (Rosenblatt, Greenberg, Solomon, Pyszezynski, & Lyon, 1989). The language data was transcribed and subjected to a thematic analysis. Only one session for each participant was used for data analysis.

This was not a mechanical process but required careful facilitation and respect for the person participating. The intention of the carefully sequenced protocol was to create an opportunity for a state of mind that allowed a shift in perception, feelings, thoughts, and behavior, which came in response to the participant's own unique needs. Following the work of Hastings (2012), the study was based on a model of Continuing Bonds (Klass, et al, 1996, 2018), in which the person in grief acknowledges that the relationship will be different, but can continue despite the death of the loved one.

The process involved six stages, as per the Facilitator Guide (Appendix A):

Stage 1: Initial pre-questionnaires

Before beginning the session, participants completed initial pre-questionnaires that assessed their feelings and reactions related to the bereavement experience. This questionnaire included a Likert scale to rate the intensities of 20 effects of bereavement and the Tellegen Absorption Scale (Tellegen, et al. 1974). While several completed these assessments before coming to the lab, most completed the tasks at the time of the session.

Stage 2: Initial interview

Upon arrival at the research facility, participants were briefly interviewed in a consultation room by a facilitator. This was a non-structured interview. The facilitator encouraged participants to discuss memories, feelings, and intentions related to the bereavement process. The facilitators employed active listening and empathic questioning techniques to facilitate participants' remembrance and expression. Interviews were recorded.

Stage 3: Psychomanteum or VR experience

Participants were led to a room where they were seated in a recliner chair and encouraged to relax. The psychomanteum experience was provided either through the use of an illuminated mirror in a sensory deprivation chamber or through a VR headset, depending on the condition. A guided meditation was played through headphones to enhance the altered state. Participants were instructed to gaze at the reflective surface (or VR environment), adjust the lighting to their comfort, and reflect on their feelings, memories, and thoughts about the deceased. The facilitator remained in an adjacent room but was available if needed.

The experimental sessions lasted approximately 25 minutes each. This length of time was selected to keep people alert and because it is advised by the makers of the VR headset to limit the time of exposure. Some people have reported becoming dizzy or nauseous if they are exposed for too long. Participants were seated in a comfortable chair. For the VR experience, they were fitted with the appropriate VR headset for the corresponding experience. Assignment of condition was counter-balanced based on a pre-established set of sealed assignments. Due to restrictions surrounding COVID-19, however, more people were run in the VR condition in the later phase of the study due to the closure of the university. A guided imagery audio soundtrack was played through headphones or the Oculus headset, inviting participants to utilize their creative imagination to open themselves to potential contact with departed loved ones. The audio and visual experience gradually transitioned into wispy clouds, and participants were informed that they would be their own guide for the remainder of the session, with the experimenter's voice returning at the end.

Stage 4: Post interview

After 25 minutes, the facilitator the participant back to the consultation room. The facilitator prompted the participant to discuss their experience and how it had affected them. A set of predefined questions were used as prompts for the recorded interviews. The questions for the interviews are listed below:

1. Do you feel a connection to someone/something? Alternatively, do you feel something?
2. How do you know it is a connection? Did you have some sensory information?
3. Who was he/she/it? What is your relationship? How do you feel them/it?
4. What is the emotion you feel about them?
5. What are the sensations associated with that? Images, past experiences/memories, insight, or whatever?
6. Do you think it is meaningful?
7. Did you feel a release?
8. Did you say something or want to say something for that one?
9. Did you want to say something to yourself? (self-dialogue)
10. Did you think the whole experience procedure is complete?
11. Would you do it again?
12. Did this experience meet your expectation or intention?

Stage 5: Post-questionnaire

Participants completed the Likert ratings of bereavement-related feelings from the initial pre-questionnaire and Tellegan Absorption Scale (TAS). Initially, participants could fill out the post assessments from home and return them to the research team, but later they were asked to complete them at the culmination of the study, due to poor compliance. They were asked to answer two mortality salience prompts (Rosenblatt, Greenberg, Solomon, Pyszezynski & Lyon, (1989) that asked, "what do you see happening to their body at the time of death" and "what emotions arise when you think about what will happen when you die?" The language data from the interviews were transcribed and all language data were analyzed using a qualitative thematic analysis.

Measures

The Tellegen Absorption Scale (TAS)

Changes in the sense of embodiment were measured across conditions and in a pretest-posttest design using The Tellegen Absorption Scale (TAS) (Tellegen & Atkinson, 1974). The TAS indicates a person's fluidity of internal and external perceptual boundaries in areas such as imagery, synesthesia, intuitive senses, and absorbed attention. It was hypothesized that a higher score on the TAS would correlate with a reduction in bereavement and that there would be a significant difference in these correlations in the physical chamber and VR conditions. This prediction was made based on an assumption that absorption would lead to a greater depth of experience.

Bereavement scale

The effects on bereavement were measured by changes in the ratings of 20 items taken from previous research (Hastings, et al., 2002), using a Likert scale of 1–7, with 7 indicating the most intense level. Five of these included sentences referring to reactions over time in the pre

and follow-up questionnaires. Fifteen brief items were repeated in all three questionnaires. Of the 20 items, 16 assessed distressful emotional conditions, such as grief, sadness, and anger. Four assessed positive effects, such as love and peace, for which a 7 rating indicates a positive emotional state.

Personal information form

Each participant completed a short information form including demographic information, such as age, gender, and contact information.

Results

Of the 108 participants initially enrolled in the study, 92 completed all data collection. Only complete data sets were used for data analysis. Data from the study were analyzed using a combination of qualitative and quantitative methods. Thematic analysis was conducted on the journals written by participants, and language use analysis was performed to explore expressions of emotions and personal identity (Schlitz, Pierce, Schooler, Murphy & Delorme, 2014). As stated above, there were five principal aims of this study:

1. Measure differences in the physical chamber and VR on grief and absorption.
2. Evaluate the impact of the psychomanteum on delta-grief and delta-absorption.
3. Examine the correlation of delta-absorption and delta-grief.
4. Explore language use in self-reports through content analysis to identify change in pronoun usage and use of emotive language by participants.
5. Explore thematic language use in self-reports to identify types of sensory and transformative experiences reported in the psychomanteum.

For Aim 1, no significant effect was seen between the physical chamber and the VR experience. This was the case for both grief (chamber (M = 0.143) versus VR (M = -.139), t(73.347) = -0.4, p = .6903) and absorption ((M = 1.143) versus control (M = 2.333), t(85.327) = 1.429, p = .1567).

Aim 2 was tested using a paired samples t-test and found a significant effect for absorption pre- and post-assessments (mean difference = 1.14), t(55) = 1.95, p = .0568. No effect was found for grief across the study (t(55) = 0.330, p = .743), which suggests that something besides grief may have been part of the participants' experiences as it relates to absorption. Supporting this, a Pearson's r (visualized in Figure 1) was performed to analyze Aim 3 which showed a significant correlation between grief and absorption (r = -0.243, t(90) = -2.382, p = .019).

Aim 4 was evaluated quantitatively with t-tests. The pre- and post-experiment survey responses were run through LIWC, looking at the following categories: the use of pronouns, the use of 'I', the use of 'we', affect, positive tone, negative tone, emotion words, positive emotion words, negative emotion words, anxiety-related emotion words, anger-related emotion words, and sadness-related emotion words. A paired one-tail t-test was run to compare the pre- and post-session surveys for each category (i.e. a test compared the use of 'I' before and after the experiment). For nearly all categories, there was no significant

difference between the pre- and post-surveys. However, participants did use the pronoun 'we' significantly more in the post-surveys than in the pre-surveys ($t(47) = 1.68$, $p = .049$). Furthermore, participants used words with more positive tone in the post-surveys ($t(47) = 1.82$, $p = .037$).

Qualitative results for Aim 5 are developed in the following section.

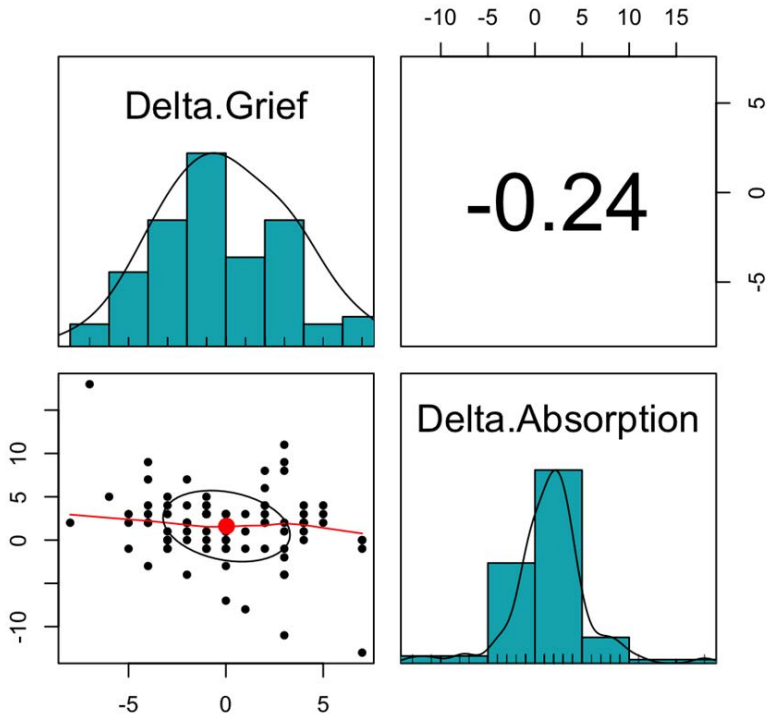

Figure 1. Significant negative correlation between DeltaGrief and DeltaAbsorption for psychomanteum & VR.

Thematic analyses

During this study, researchers encouraged participants to self-reflect through semi-structured interviews and short journaling. Reflections were obtained upon intake and completion of each session. A pre-set of interview questions were asked in a semi-structured fashion.

All qualitative data were prepared for analysis by discussing the results with the researchers, transcribing the interviews with participants, coding and organizing the codes and identifying central themes. Both journaling and interview responses were included in this exploratory stage. The thematic analysis followed the methods outlined by Braun & Clarke (2006) and Miles, Huberman & Saldana (2014). A more detailed report of the qualitative data will be forthcoming in a future paper.

As noted in Figure 2, the participants' responses were organized under an overarching theme involving "Death Awareness and Experiences of Invisible Others." This theme was

based on how the study was presented to participants in the recruitment phases and through the interview and journal prompts. This thematic mapping illustrates the interconnectedness and hierarchy of themes within the analysis, providing a clear representation of how each theme relates to the others.

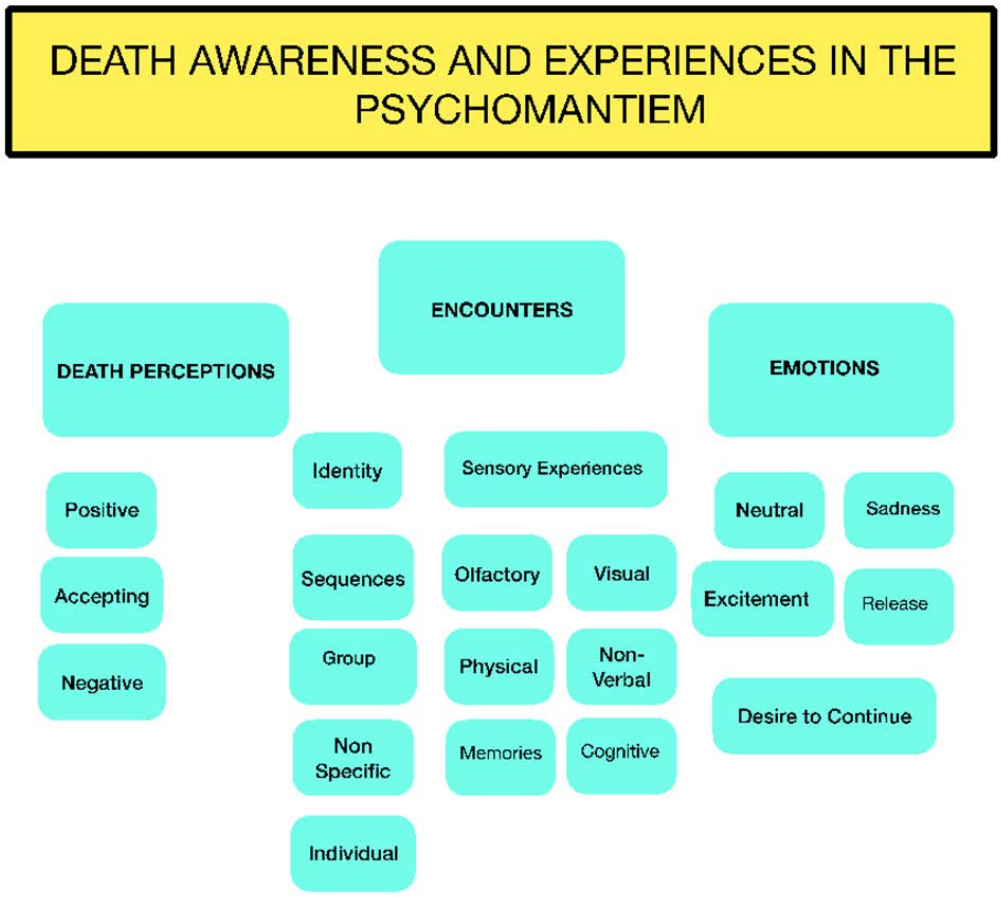

Figure 2. Thematic analysis.

Views of death and the afterlife

Views of death and what happens when we die were based on responses to the two journaling prompts. These were combined for purposes of this analysis. These responses were grouped under the theme labeled "Views of Death". Within this theme, there were a range of responses, both negative and positive.

One participant (P: 15) noted "I'm very accepting of death. I don't have fear around it, I just want to make sure that I live as fully as possible. The fear, if any, is around making the best use of the time that I have. Death itself doesn't bother me… that I will become 'worm food'." (P: 13). For another, "I think my body will know exactly what to do. I have watched so many people die. I have literally watched and seen their energy kind of beautifully and gently moved through, up and out of their physical form. And then, it, kind of just turns off.

It just slowly turns off. It makes its way through the last of its physical functioning and then rest." (P: 34).

Another participant (P: 105) shared what they think about death: "I think like, it was crazy, but the feeling that came up was like excitement because I felt like this is a new experience. I never had it before. And like, death will probably open different doors that I have no idea what it is.

"I remember I had dreams in the past. In the dream I was going to the point that I was about to die, and the feeling was like, oh, I'm excited, I just wanna see what happens next…And then as soon as that thing happened, I woke up. So, it never happened, but it was just like that part that, okay, that's a different door that I can get open and it's a different world."

For another participant, (P; 106), the study reminded them of an experience with the Hemi-Sync®, a procedure that provides binaural beats in each ear that are thought to synchronize brain waves and induce altered states of consciousness. As the participant noted: "I think of your soul, right? Just an easy explanation. It's your soul in your body, and your soul wants to leave your body. That's what an out-of-body experience is. So, you can call it consciousness, you can call it awareness, your soul, whatever; your mind is basically leaving. But like it's playing tricks for you to understand what's leaving. So, you might think if I say 'soul', it might connect to you more. If I say 'consciousness', it might connect to you more. So, there's a point where it wants to leave and your body wants it to stay because it's freaking out. It doesn't know it can leave. It's okay. So, it's like a death experience where you are like, there's a lot of like 'vibe'. There's no vibration in reality, but in your mind, there's like this feeling of like a vibration, some sort of energy of like detachment. You know, you're trying to like stretch a rubber band. You're trying to like peel something that's glued together. Have you ever tried to like peel off a label? You know, that kind of feeling? So there's like this scariness that it feels like almost dying.

Encounters in the psychomanteum

Identity

In this theme, we explore the experiences that people reported in the post-session interviews. The issue of identity was used as a label for a range of experiences. For some, the experience was non-specific. Either they reported nothing beyond relaxation or a very neutral experience. In these cases, no particular person was described and no sense of connection was reported. For some, there were sensations more than a specific recognition (see below). Several people reported a sequence of people with whom they felt a connection: P: 105 described the experience in the following way:

> "It felt like a connection to a group of people, to tell you the truth. I've lost many people in my life and felt like they came into my consciousness one at a time, which was very nice… I didn't feel like I was summoning them. I felt like different people were appearing, not visually, but like their presence. I

could feel it. …You know that sense of recognition. That's what it felt like to me. And then I had trouble after I had felt like I had connected with different people, I then realized there was somebody that I hadn't connected with, and then I tried to make that connection and I could not…The first connection was with my brother, whom I lost when he was 25. I was 29. It felt good. Like I did different things that came to mind that I had always worried about that, you know, was he was gonna become an alcoholic or because it was such a big part of his alcohol was such a big part of his life, even at 25. And I felt like letting it go. You know, you let that go. And the next one was my brother's lover. And I felt like I had a chance to be in his presence and apologize to him. I felt like when he was dying of AIDS and we had visitors from the East Coast, and they felt very strongly that, you know, you shouldn't go to this person's home. This person has AIDS. And we had done a lot of, over the year that he was diagnosed, we had done a lot of education, but no matter what we said, we couldn't get it through. So, we saw him, but we didn't see him as much. So, I wanted to say that to mm-hmm. <affirmative>. I've always wanted to say to him how much he meant to me and that, you know, he's, he was a person who helped me connect with my body, and there I was connecting Bodiless. He was nice. Sweet. Very nice… I felt his presence and, and, but that's who he was, like flitting on. And my brother Jeff also, I mean, we lost all four of our brothers over the last years that we've been together. But it was my father in the end with whom I had a very complicated relationship.

"…But it made me smile...I mean, he had so many dear things about him, in addition to him being very obnoxious... So yeah. I felt, but when you say, where did I feel it, I felt like I was in it, you know, in that space. So, I didn't feel like it was separate, it felt more body-less than feeling somewhere in my body... And then when the screen, when the clouds no longer appeared, and it was a basic white, I felt I didn't want it to stop. I want it to continue. I think that it's a very interesting thing to be able to do, to be in touch in a way that you're never in touch." (P; 30).

Another participant (P: 104) felt a very veridical sense that there was a group of people talking. When the session was over, they asked the experimenter if there had been visitors to the lab, just outside the chamber. When the experiment assured them that no one had been there, she described a sense of wonderment at how real it had seemed.

Sensory experiences

Sensory experiences in the psychomanteum were identified under a separate sub-theme. People expressed different experiences while in the psychomanteum, both in the chamber and in the VR conditions. For example, one participant reported a strong olfactory memory of her grandmother's home that gave her an insight into how what we do now impacts the generations to come. In her words: "There was almost a moment of like, I didn't even know

where I was until I came back and I was like, huh. And I was really trying to recall the space that I was in, because it felt like a strong message; it was so deep. I can't put my finger on it but that smell, God, I haven't smelled that in a long time. It took me right back to my grandmother's house, you know, like, but I haven't thought about that in a long, long, long time." (P: 52).

Many people reported visual impressions. As one participant noted: "The first image that I saw here was a lion that kind of went across my peripheral. It kind of floated across…and that was clear as day…don't know what it means. I'm not gonna try and analyze it. I just kind of let it come, let it happen… I did try and summon, uh, through my thoughts, uh, my subconscious, some deceased family members, my dad and my grandma. Some things began to take shape, but they would kind of fluff away in like clouds of dust almost." (P: 20)

Another participant described faces that came and then faded away. "But I didn't recognize any of them. They were perfectly depicted faces. About 15 of them. And they just started coming in and going, coming in and going…" (P: 48).

Several people described physical sensations. As one noted, they kept feeling that their arm was being pulled over. And then "something warm pressed against my face and it was hot. Like a really hot light bulb. Like an instant boom for 2 seconds and then it was gone. It's like someone was messing with me in there." (P 6). Metaphors of energy were evoked for several participants while others reported feelings of heat and vibration.

For others, the experience was more cognitive. As noted by P: 14: "It was mainly this thought…what is ego and why it's so important for us knowing that we are just a very small piece of the whole world. I was thinking, thinking about serving other people…

"It's interesting for myself to repeat it. So, it says, our egos want us to think only of ourselves. Instead let us think of others and serve them to serve others is worship. It was really interesting, like mm-hmm. <affirmative> kind of like stuck in my head and I took a picture… There's an element, there's something in like, so much benefit in like having that boredom and like not doing anything…and just like staying sitting in silent or like just observing thoughts mm-hmm. And I'm just like trying to observe my own thoughts that there are parts of it that is just day, day to day, which is not important. Sometimes go back, sometimes it goes future. But like, uh, observing those was really interesting."

Non-verbal communication

Several people reported a kind of direct knowing, rather than clear communication. For example, P: 30 reported: "It felt like words were not necessary. That's how it felt. Like we were sharing a consciousness. So, I didn't need to verbalize, in fact, I don't think I verbalized anything…It felt like we were communicating, but not by talking."

Expressed emotions

A range of emotions and experiences were identified under another theme in Figure 1, as people reported a range of reactions to the psychomanteum experience. In general, the reactions can be seen as neutral, positive, and negative. One participant referred to their experience in the psychomanteum as "celebratory" (P: 34). Another is leaving them with a

sense of peace. The participant continued: "Like if I spent time looking past them, I would see kind of the things that remind me of them…beautiful things."

Another described fear and resistance (P:29) while another reported sadness. "I grew up with my grandma and we lived together. I felt her presence. We were very close. She passed away 15 years ago. I became sad. But this wasn't the only time."

One participant (P: 30) recalled a "terrible memory of having a broken a very special glass and then having difficulties finding a replacement. But it was, it was so brief and it also felt warm, like no matter, you know, but that didn't just come from feeling like the person was telling me. No matter it felt like we were communing…Isn't that odd?"

Several people expressed a desire to repeat the experience. One (P: 5) described it as a kind of "transformative practice." For another (P: 99), "the time went by so quickly. I was only starting to make the connection." When asked if people would repeat the study, most were very affirmative. As one participant (P: 100) noted: "Absolutely. Yeah… It was lovely. And I thought…I felt very safe. And I also felt like the words in the meditation, in the beginning, they gave me permission to not pay attention to myself in the chair. You know, gave me permission just to be here, and that's where I was….I think it exceeded my expectations. I think that I expected, you know what, I don't know what I expected. Now that I think about it. I expected to have some sort of visualization experience. That's what I signed on for, I think. But the idea that I could be transported was not on my expectation list."

Discussion

No distinction was found between the physical chamber and the VR experience. This, combined with the second aim, which found that experience in the psychomanteum resulted in positive change for absorption but not for grief, offers insight into our understanding of absorption. That is, this study provides evidence that VR experiences can work as well as physical chambers for attaining a state of absorption.

The third aim found a significant negative correlation between grief and absorption. That is, as absorption increased, grief decreased. Thus, this aim was accurate. This finding suggests that absorption can be used to help one deal with grief.

The fourth aim was partially accurate: participants used 'we' more than 'I' significantly more in the post-session surveys, but there was little difference in the use of emotive words. However, participants did use significantly more positive tone in their post-session responses.

Thematic analysis found language discussing non-verbal communication, emotions, sensory experiences, and identity.

Aims 4 and 5 were not able to be explored in as much depth as we would have liked – future studies may examine language use by looking at pre- and post-session interviews, which will provide more language data (specifically data in more complete sentences, which will facilitate the observing of pronoun usage and other linguistic markers).

While the psychomanteum is a unique and relatively obscure concept in the field of psychology, it sheds light on our understanding of the human psyche, spirituality, and interconnectedness. It can be used as a tool for personal healing, as people seek to integrate

their grief and loss through a perceived communication with deceased loved ones. It also offers potential answers to people as they seek answers to profound existential questions.

This method holds promise as a tool for management and leadership in all domains. The psychomanteum offers insight for individual creativity and innovation. Likewise, it offers a passage into social and emotional intelligence, allowing people to ponder their own death awareness or as a tool for deep reflection. Ultimately, the quest for meaning is a shared aspect of human experience.

Psychomanteum experiences may vary across cultures, reflecting the influence of cultural beliefs and practices (Luhrmann, 2012; 2020). Examining these variations can contribute to an understanding of how different societies approach and integrate experiences related to death, potential afterlives or spiritual dimensions (Schlitz, 2015). This cultural diversity can be linked to discussions about global consciousness, emphasizing the need for intercultural dialogue and understanding. These factors can fruitfully be applied in any area of management or leadership where transpersonal psychology plays a role in enhancing human performance. It speaks to a shared phenomenon of mystical or transcendent experiences within the psychomanteum, such as feeling a sense of unity or interconnectedness, that can be tied to discussions of global consciousness. These experiences are part of a broader human narrative where people sometimes describe a sense of unity with the cosmos or all living beings (Vieten, Amorok & Schlitz,. 2006). The psychomanteum can be considered as part of the broader tapestry of human experiences and beliefs related to the afterlife, the mysteries of existence, and the search for meaning. As noted in the thematic analyses, it elicits curiosity, excitement, and questioning for many people. In this way, discussions of the psychomanteum can be integrated into conversations about interconnectedness, empathy, and the shared human experience that contributes to global consciousness. In each case, such insights may be useful in management, where unity within the workforce can lead to positive social relations and sense of shared purpose. Further, it may enhance breakthroughs at individual and group levels as people share their deep human beliefs and experiences.

The transpersonal experiences reported in the psychomanteum can be transformative and may have powerful potentials for aiding people in their times of suffering. As one participant noted, it felt "celebratory." Rather than finding a need to get over the loss, the Continuing Bonds Theory (Klass, et al. 1996; 2018) suggests that finding ways to sustain a connection with the departed can be therapeutic. Further, developing ways to reproduce these experiences opens a door for systematic research and therapy. This study offers a highly innovative approach to bereavement and the application of the psychomanteum to health and healing.

The task in the creation of the psychomanteum VR experiences is accessing states of consciousness through internal neural integration changes; this could be an out-of-body experience (OBE), or a near-death experience (NDE) (Bourdin et al, 2017; Slater, Spanlang, Blanke, & Sanchez-Vives, 2010). It can be achieved by co-locating the virtual body with the participant's real body and therefore providing a match between the visual and proprioceptive information perceived by the participant (Slater et al, 2010). Both the psychomanteum and VR may offer useful directions for future research in transpersonal

psychology. Likewise, they may be a useful tool for creativity, management, and mind/body healing, as people are encouraged to engage their creative imagination to achieve their intentions through self-reflection and personal inquiry.

The experience of connecting with invisible others offers a way of framing collective consciousness. Rather than viewing our experiences as isolated beings, we can begin to see ourselves as part of an interconnected web that transcends both space and time. Luhrmann (2012, 2020) offers a theory of mind that draws on the intersection of culture, belief systems, and spiritual experiences. Recognizing that subjective experiences differ in different contexts, Luhrmann's cross-cultural work suggests that experiencing invisible others offers a kind of permeability between the inner and outer worlds and between subjective and objective experiences. How people interpret their mental experiences may be situated in specific cultural settings and perceptions. Different cultures may experience global consciousness in different ways, based on their worldviews and meaning systems.

Considering the prevalence of experiences of invisible others in diverse cultures may shed light on how people from different cultural backgrounds may come together in a sense of global interconnectedness and appreciation for diverse worldviews as they engage in their own spiritual experiences. Understanding how individuals are situated in diverse culture frameworks may help people to perceive and relate to one another and the world, leading to shared values, empathy, and global well-being. Communication through language use offers an essential means of understanding psychological processes (Pennebaker, 2017). This was made possible through self-journaling and the verbal sharing of the experience with researchers.

In this way, the psychomanteum offers a useful tool that can bring this awareness of shared human experiences to the fore. In the context of the VR experience, this makes an awareness of interconnectedness something that is scalable and replicable in ways that can be called upon on demand (Anderson, Rothbaum & Hughes, 2001; Bailenson, 2018) and applied in various settings. Direct experiences of invisible others offer a gateway to a shared understanding of our place on earth at this unique moment in human history and of our connection to those who have gone before us.

The lack of significant differences in the two conditions suggests that the chamber and VR led to experiences that are relatively isomorphic. This supports the interchangeability of the approaches in terms of the participants' reports. This suggests further that the VR psychomanteum can be scaled for use in various settings, including intention setting, creativity, emotional, social, and spiritual intelligence in all aspects of human engagement, including business, leadership and management environments.

Many of the participants in this study felt that they wanted more time in the psychomanteum. They expressed an interest in gaining greater depth and insight. As such, future research will focus on examining talent (absorption) and training (repeated exposure to the VR experience) to gain further understanding of the potential applications of the psychomanteum in clinical applications (Glantz, Rizzo & Graap, 2003), transpersonal psychology, consciousness studies, management, leadership, and human development.

Conclusion

This study set out to identify links between grief and absorption. It found a negative correlation between these two phenomena. Furthermore, this study sought to compare the effects of a physical psychomanteum and a virtual reality experience. There was no significant difference between these experiences. The implications of this study include that absorption can help with dealing with grief, and that VR is a tool that may be implemented for that purpose.

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Appendix A: An Exploration of the Transformative Nature of the Psychomanteum Comparing Physical Chamber and Virtual Reality: Facilitator's Guide

Marilyn Schlitz and Dorote Lucci

Introduction

To more fully explore the nature of transpersonal experiences and their psychological impacts, psychiatrist Raymond Moody (1992) began a series of investigations into the psychomanteum. The psychomanteum is an innovative sensory deprivation approach that leads to experiences of consciousness after bodily death, near-death experiences, and other anomalous experiences such as apparitions. The work aimed to reduce suffering from grief. Psychologists and parapsychologists, providing compelling support for experiences of apparitions and their therapeutic benefit, have since adopted the procedure. This project aims to explore two conditions of the Psychomanteum experience, one in the physical chamber and one using Virtual Reality technology. This facilitator guide outlines the protocol to be used in the study.

Sampling and participant selection

Recruitment

The randomized selection process allows researchers to seek potential participants for the study through processes of networking and distribution of the study information flyer. The participant solicitation flyer for the study (See Appendix A—Participant Solicitation Flyer) can be distributed to locations such as universities and colleges, displayed on message boards at local grocery stores, in newsletters, and in organizations and businesses such as yoga or exercise studios. Enlisting interest in the study from therapist referrals and groups formed to overcome grief, colleagues, co-workers, and friends represent additional avenues to locate participants in the Southwest Bay area. Participation increases with individuals who reside in areas within convenient travel distance to the study location.

Selection criteria

The selection criteria for participants include both men and women over the age of 18 who identify with the study's focus on transforming grief. Participants in the study must meet the following requirements:

1. Age: At least 18 years of age, male or female.
2. Health: Must be in good physical and mental health.
3. Availability: Must be willing, able, and available to commit to participate in the study.

Screening

The screening process to choose participants will reveal individuals interested in participating in the study without the inclusion of remuneration for time and effort. Researchers will also conduct a brief phone interview to further determine each candidate's qualification to participate, as well as to assess participants' willingness and ability to fulfill the time requirements necessary for participation in the study.

Informed consent form

One step in the process of determining individuals' capacity to participate in the study is the completion of an informed consent form (ICF; see Appendix B: Informed Consent Form—Participant). Researchers email this form to potential participants and schedule a time to review the form with each participant to ensure clarity in understanding of the potential risks and benefits of participating in the study. Each participant in the study must complete and sign this form before participation.

Demographics questionnaire

Once an individual has completed and signed the ICF, the researcher collects basic demographic information from the participant. Demographic information provided fundamental details regarding further specifics from each participant, such as gender, and age. (See Appendix C: Demographic Information Form—Participant)

Data Collection

Following selection of the participants, completion of consent forms, and demographic questionnaires, researchers send the participant a connecting link to the pre-study assessment forms by email. Researchers contact each participant to ensure completion of the pre-study assessment forms and to coordinate the scheduling time for the session. Researchers apprise participants of the approximate allotted time of 15 minutes to complete these pre-study assessment forms (See Appendix D: Pre-Study Assessment Forms—Participant). These forms include:

- Tellegen Absorption Scale (TAS)
- Beck's Anxiety
- Grief Experience Questionnaire
- Journaling
- Myers-Briggs Type Indicator
- Field Effects

Appropriation of time for study elements includes time for the individual's introduction and preparation to begin the session. The amount of time scheduled for the psychomanteum session comprises approximately 1 to 1 ½-hours. Data generation from participants occurs through participants' completion of pre-study assessment materials. Data is also generated from material transcriptions of participant interviews following the psychomanteum session. One week following the psychomanteum session, participants also provide information and post-study feedback by completing written responses to the post-study questions (See Appendix E: Post-Study Forms—Participant). Further, participants agree to record and share any additional insights realized during the interim time between the psychomanteum session and the completion of the post-study questions.

Each participant commits to engage with the research processes for a total of approximately 2 to 2 ½ hours. Researchers will collect data by these three distinctive means: participants' completion of pre-study assessment forms and post-study questions; recorded

post-study interview with researcher following participant's experience of the psychomanteum session; through participants' sharing of any further insight with the researcher one-week following the psychomanteum session and the completion of the post-study questions.

Researchers schedule the psychomanteum session with a time allotment to facilitate the appropriate tone and space to adequately prepare participants before the session. The written instructive form outlining elements of the study includesdetailed descriptions for each specific practice to ensure consistency in the presentation of the psychomanteum for every participant (see Appendix F: User Experience Guide). A written copy of this document provides researchers with a chronicled checklist to follow and the directives for each step required for the psychomanteum session. Participants received verbal instructions from the researcher aligned with this checklist in preparation for the session.

Researcher's process

This study evaluates participants' experience of the psychomanteum in two distinct settings. Participants are randomized into an experience with the physical psychomanteum chamber or enlisted to participate in an experience facilitated through a Virtual Reality (VR) software program design and in use with a headset. Prior to the arrival of the participant, the researcher consciously prepares the surrounding space relevant to the participant's individual session. The researcher follows the appropriate procedure for the physical chamber or adheres to the protocols for the processes using VR psychomanteum. In processes designed to adequately facilitate this contemplative activity for participants in the physical psychomanteum chamber, the researcher adheres to the preparation protocols outlined in the study checklist for the physical chamber.

Physical psychomanteum chamber

Preparation for participant arrival:

- Ensure the suitable temperature for the psychomanteum chamber
- Check the physical elements of the psychomanteum chamber, including light permeation, chair, and mirror placement, and candle
- Check instruments within the chamber including speaker and connection to instruction device, and battery charge.
- Placement of quiet signs, light adjustment, and hallway door closure

Following the participant's arrival, the researcher will:

- Warmly greet participant
- Invite the participant to be seated in a prepared sitting room
- Play recorded psychomanteum session instruction
- Outline details of the study
- Ensure participant completion of signed consent form and pre-study assessment forms
- Offer the participant the opportunity to use the bathroom facilities prior to the session
- Accompany the participant into the psychomanteum chamber

- Assure the participant of researcher's close proximity to the chamber
- Apprise the participant of the potential to verbalize any discomfort with the process at any time during the session and assure the participant of the researcher's responsiveness
- Inform participant that researcher will return to escort participant to post-study interview a few moments following the ending of the session indicated by recording
- Ensure closure of outside drapes
- Maintain a calm, quiet surrounding space during the participant's psychomanteum session

Following participant's completion of the psychomanteum session, the researcher will:

- Slowly open the door of the chamber and quietly greet the participant
- Quietly lead the participant to the sitting room
- Maintain calm, quiet demeanor aligned with the meditative space
- Turn on the recording device
- Follow post-chamber interview questions to guide participant's response (see Appendix G: Post-study Interview Questions)
- Following completion of the post-chamber interview, participants are thanked for their participation, offered a gift,and accompanied to the exit
- Participant's data is transferred and saved to files
- Devices are charged
- Chamber room checked and locked
- Researcher's send post-study link to participants one week following

The researcher will adhere to the preparation protocols outlined in the VR study checklist designed to facilitate participants' preparation for the VR chamber.

Virtual reality psychomanteum

- Ensure the suitable temperature for the psychomanteum chamber
- Check the technology elements of the psychomanteum program, including headset and check placement of the participant's chair.
- Placement of quiet signs, light adjustment, and hallway door closure

Following participant arrival, the researcher will:

- Warmly greet participant
- Invite the participant to be seated in a prepared sitting room
- Play recorded psychomanteum session instruction
- Outline details of the study
- Ensure participant completion of signed consent form and pre-study assessment forms
- Offer the participant the opportunity to use the bathroom facilities prior to the session
- Accompany the participant into the psychomanteum room

- Read VR assimilation text
- Perform additional checks on technology and adjust the headset on the participant to ensure a comfortable fit
- Assure the participant of researcher's close proximity to the chamber
- Apprise the participant of the potential to verbalize any discomfort with the process at any time during the session and assure the participant of the researcher's responsiveness
- Inform participant that researcher will return to escort participant to post-study interview a few moments following the ending of the session indicated by recording
- Ensure closure of outside drapes
- Remain with the participant until the mirror-gazing portion of the program becomes visible on the computer screen
- Following an unobtrusive departure from the room the researcher sets a 30-minute timer
- Maintain a calm, quiet surrounding space during the participant's psychomanteum session

Following participant's completion of the psychomanteum session, the researcher will:

- Slowly open the door of the chamber and quietly greet the participant
- Assist participant in headset removal
- Allow the participant to re-acclimate to physical experience
- Quietly lead the participant to the sitting room
- Maintain calm, quiet demeanor aligned with the meditative space
- Turn on the recording device
- Follow post-chamber interview questions to guide participant's response (see Appendix G: Post-study Interview Questions)
- Following completion of the post-chamber interview, participants are thanked for their participation, offered a gift and accompanied to the exit
- Participant's data is transferred and saved to files
- Devices are charged
- Chamber room checked and locked
- Researcher's send post-study link to participants one week following

Participants' process

In the first phase of the study, as the participant arrives at the study location, the researcher individually guides the participants in instructions through each stage of the psychomanteum process.

Treatment of data

Following the reception of data, researchers organize and save the presentation of participants' submission of pre-study assessment forms as well as post-study responses to questionnaires in individualized, password-protected files, and hold all physical data and voice-recordings of interviews in locked files on computers. Researchers record and

transcribe participants' individual recorded interviews, and verify the transcripts for accuracy with each participant. After finalizing transcriptions of the final interviews and verifying the interview content with each participant, the researcher proceeds to review the content of the transcripts. Researchers then enter the next phase of analysis through processes to bring participants' responses to pre-study assessment forms and post-study questionnaires into a correlative integration with the text from each participant's interview.

Throughout the analysis phase of the study, the researcher's focus in inquiry follows each participant's integrative trajectory. Researchers use a qualitative approach to consider participants' experience through processes of examination and integration of all material data. The emphasis of thematic analysis in this study centers on revelation from participants of their experience of the psychomanteum session. The processes of analysis included an integration with the data obtained from participants' responses in the pre-study assessment forms and post-study questionnaires. Researchers seek to obtain, through these processes, an understanding of participants' encounters and inner experiences in the psychomanteum session and the expressed recognition of insights and experiences received during and following the session. Researchers explore the results discovered through the integration of the material data received from participants' identification of experiences.

Ethical considerations

The Belmont Report presented by the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research (1978) established three ethical principles to administer as guiding decisions in research with human beings. These principles are (a) creating benefit while minimizing harm; (b) maintaining treatment of participants with respect; and (c) assuring care, consideration, and benefit to participants in the application of procedures. This study aligns form and application of processes outlined by these principles. Sofia University's Research Ethics Committee reviewed and approved the guidelines set forth for this study. Researchers screen participants through written consent forms and interviews preceding any engagement in the research process.

Researchers employ the screening process to exclude those who did not fulfill the requirements in the selection criteria, specifically, any participants who were currently experiencing any emotional or health challenges that could create vulnerability and those who may have physical limitations that could preclude participation. Researchers safeguard participants' identities through the use of pseudonyms throughout the study. The researcher informs participants of the processes used to manage and ensure the protection of data obtained in the study and draws their attention to this in the consent form.

Validity considerations

Researchers gather participants' pre-study assessment forms and post-study responses along with transcriptions of interviews as material data in this study. Researchers gather and examine data to discover thematic content, specifically to uncover substance and patterns related to all participants' experience of the psychomanteum session through the use of qualitative analysis.