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Experiences of PTSD Sufferers Who Participate in Internet-Based Virtual World Activities in Desktop Virtual Reality Environments

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Abstract

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Colleen M. Crary

BA, San Diego State University, 1994

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Dissertation Submitted in Fulfillment

of the Requirements for the Degree of

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Abstract

Treatments for posttraumatic stress have remained largely static for 3 decades, resulting in low recovery rates, high degrees of retrogression, and noncompliance by patients, calling for new approaches for posttraumatic stress disorder (PTSD) treatment. This qualitative phenomenological study explored the lived experiences of people with PTSD who participate in Desktop Virtual Reality Environments (DVREs). The research questions asked about the lived experiences of adults with PTSD who use the DVRE, and what they perceive as changes in their narratives about PTSD through their use of the DVRE. Twenty-three participants responded to a 10-item, open-ended questionnaire. Findings show that although each participant had their own individual approach, their reported experiences shared commonalities in efforts to establish control over external stressors, create new interpersonal boundaries, explore the self apart from previous self-definitions, connect with others in healthier roles, acquire new skills that gave them newfound confidence, and build resilience to reduce regression when confronted with triggering life events. Implications for positive social change include improved therapeutic outcomes that may curtail the negative personal, interpersonal, and social outcomes prevalent in PTSD, such as antisocial behaviors, substance abuse, and suicidality.

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Chapter 1: Introduction to the Study

Introduction

New technologies in three-dimensional (3D), immersive virtual environments may reduce stress, and I conducted this qualitative phenomenological study to bring science closer to understanding this phenomenon. Desktop Virtual Reality Environments (DVREs) in this study have few rules for the end user. This should not be confused with electronic gaming venues where there are limited, goal-oriented, and limited creative boundaries that focus on accruing points and being guided through scenarios that involve winning or losing. DVREs have no such boundaries, and the users, referred to as *residents,* operate largely on free will. This occurs within the limits of the technology and there are general behavioral rules such as respect for other residents. This is a technology utilized as a social and creative outlet and is reported by users as being "relaxing" and "stress reducing." This may be in part because the DVRE user is physically located in what he or she perceives as a "safe" setting (Figure 1a), and the user can retain anonymity in the DVRE (Figure 1b).

Figure 1. How The Desktop Virtual Reality Environment (DVRE) Is Used.
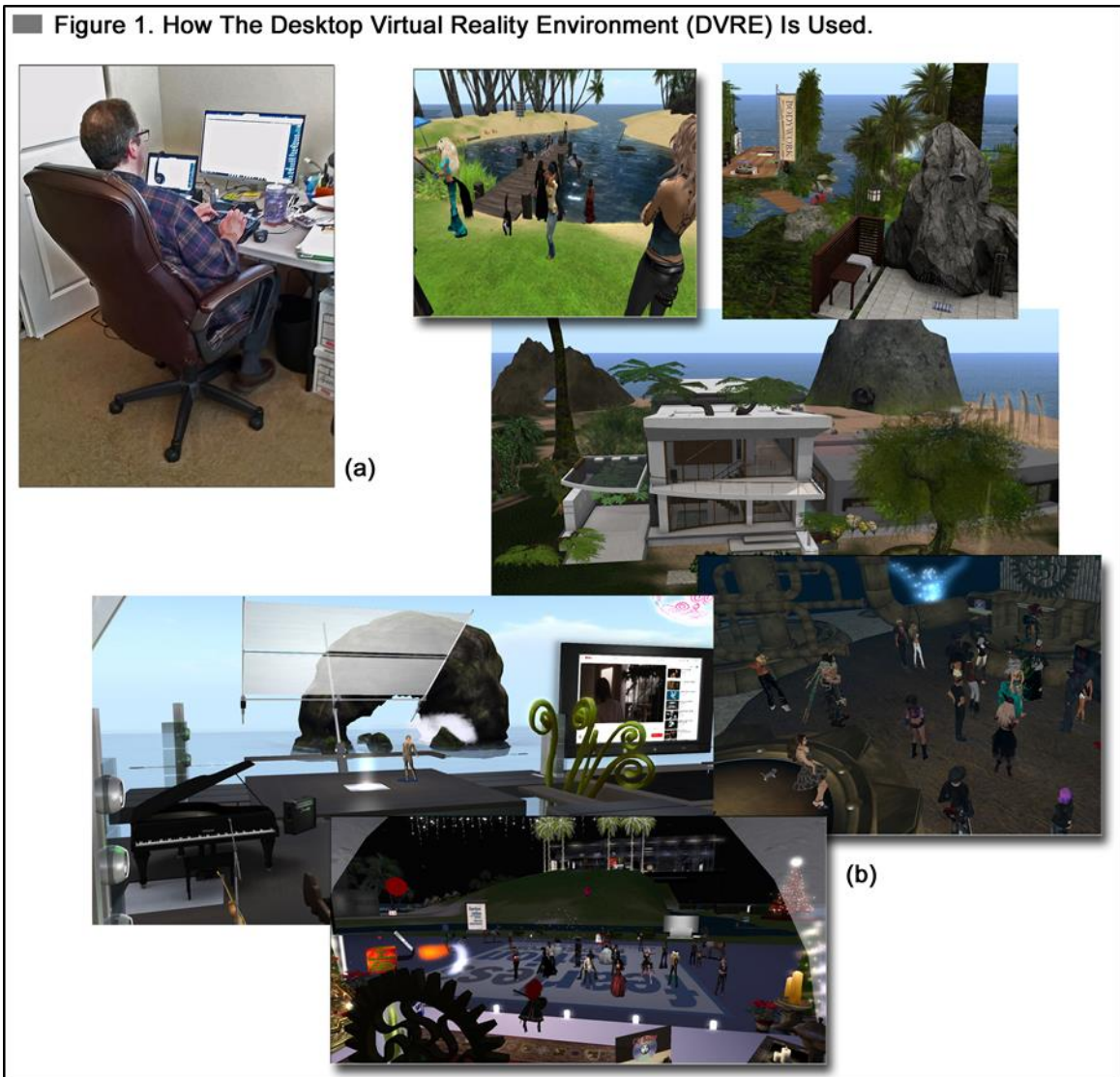
Long-standing users praise the DVRE platform as an empowering venue where "real life" (RL) stresses can be minimized or avoided; people with disabilities, mental or physical, find it empowering because they watch the digital representations of themselves (avatars) engage in activities and interactions with others that are impossible in RL, such as flying, having an idealized avatar, and creating 3D creations within the DVRE that are aesthetically beautiful, functional, and have value to other residents (Green-Hamann, Eichhorn, & Sherblom, 2011; Norris, 2009; Yee & Bailenson, 2007).

Herman (1997) outlined three stages of trauma recovery: Establishing safety, remembrance and mourning, and interpersonal reconnection. She further established therapeutic components for adult recovery from trauma, including:

1. Creating an environment in which one feels safe and cared for.

2. Enhancing the capacity to modulate arousal and restore equilibrium following dysregulation of affect, behavior, physiology, cognition, interpersonal relatedness and self-attribution.

3. Engaging in self-reflective processing about past and present experiences, constructing positive self-narratives, and developing skills in planning and decision making (resiliency).

4. Integrating traumatic experiences to transform or resolve traumatic reminders and memories using such therapeutic strategies as meaning-making, traumatic memory containment or processing, remembrance and mourning of the traumatic loss, symptom management and development of coping skills, and cultivation of present-oriented thinking and behavior.

5. Actively pursuing relational engagement to form appropriate attachments and applying this knowledge to current interpersonal relationships, including the therapeutic alliance, with emphasis on development of such critical interpersonal skills as assertiveness, cooperation, perspective-taking, boundaries and limit-setting, reciprocity, social empathy, and the capacity for physical and emotional intimacy.

6. Forming positive affect enhancement by reinforcing one's sense of self-worth, esteem and positive self-appraisal through the cultivation of personal creativity, imagination, future orientation, achievement, competence, mastery-seeking, community-building and the capacity to experience pleasure.

All of these therapeutic components are available to users of the DVRE. This study illuminates how the participants have leveraged this technology to engage in rebuilding self-confidence, form feelings of control and safety, and move beyond dysfunctional behaviors resulting from trauma. Perhaps this digital venue can be utilized to help people cope with posttraumatic stress disorder (PTSD) symptoms. The purpose of this qualitative phenomenological inquiry was to answer the research questions: What are the lived experiences of adults with PTSD who are active in the DVRE, and have these experiences changed their narratives about their PTSD? The intention of this study was to examine participants' understanding and utilization of the DVRE, a novel, portable, and freely accessible venue that may provide a readily available, affordable, complementary technology to reduce posttrauma symptoms. Research using DVREs for learning and social support have indicated DVRE features that may engage PTSD participants with skills-building to alleviate psychological and physical symptoms (Lee, Wong, & Fung, 2010; Travassos et al., 2013).

Although existing research and theories about the effect of the new technology of DVREs is nascent, there is a small, yet robust part of the research that proposes theories such as Yee and Bailenson's (2007) "Proteus Effect." This was further explored by Van der Heide, Schumaker, Peterson, and Jones (2012), who looked more closely at the

discoveries of Yee, Bailenson, and Ducheneaut (2009) and found that when humans create and mentally inhabit their highly personalized avatars, in a "personified presence," and interact with other avatars in a virtual reality environment (VRE), their behaviors also change in subsequent RL physical human face-to-face interactions. Van der Heide et al. (2012) found that impression management and intrapersonal communications by humans inhabiting avatars changed according to the appearance of the avatar. The Proteus Effect in Human-Computer Interaction (HCI) theorizes that humans' digital self-representations, or avatars change their psychological behavior, outside of the immersive VRE, confirming the Proteus Effect (Van der Heide, et al., 2012). Research by Ash (2016); Fox, Bailenson, and Tricase (2012); and Ratan and Sah (2015) expanded the Proteus Effect to demonstrate that DVRE users expressed psychological changes and behavior after interacting with avatars that are designed to represent another race or gender. This indicated that human behavior can be changed or manipulated through social interaction with avatars in immersive VREs. This seemed to be independent of the race, gender, and attractiveness of the avatar, according to Sherrick, Hoewe, J., and Waddell (2014), who found that a variety of avatar designs may explain HCI psychologically and behaviorally in humans. Rosenthal, von der Pütten, and Weiss (2015) asserted that it is how the avatars interact with each other, dependent upon the personalities and experiences of the human users that determined psychological attitudes and emotions.

Mennecke et al. (2010) theorized that the act of building one's avatar and using it in a DVRE can embody a presence that is every bit as real in the mind of the user as in-

person activities (Ann, 2012). Literature on the perception of digital worlds and avatars has shown that reality is experienced during DVRE interactions through simulation, freedom of choice, character involvement, perceptual pervasiveness, subject matter authenticity, character authenticity, and social realism (Ribbens & Malliet, 2010). The relationship that a user has with his or her avatar and other avatars in an immersive VRE social setting may have significant implications for the future design and programming of avatars and robots, the use of DVREs, and how avatar presence and use may affect humans psychologically and behaviorally (Mori, MacDorman, & Kageki, 2012).

"Virtual worlds" were created based upon the technology of social networking and gaming (Heiphetz & Woodill, 2010). Although some people think of DVREs as a fantasy, role-playing world, divorced from reality, using an immersive digital venue, is founded in reality. The DVRE is viewed as a complex environment in which individual experiences can be created and manipulated to reduce stress. Research shows that DVRE interactive activities and education can be as effective as online learning and telework (Green-Hamann et al., 2011; Good et al., 2013).

Background

PTSD is classified by the American Psychiatric Association as a trauma- and stressor-related disorder in the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 2013). Although widely associated with military combat veterans, it also affects law enforcement personnel, emergency workers, crime victims, accident victims and witnesses of accidents, war zone survivors, natural disaster victims, and survivors of emotional, physical, and mental abuse (Herman, 1996). Those close to

people with PTSD, including their therapists, family, and friends, can also acquire secondary or vicarious trauma (APA, 2013). According to the APA (2013), PTSD places participants at a high risk for suicide and suicidal ideation and can have a profoundly negative effect on the affected individual's vocational, educational, and physical health and social functioning. Plagued with symptoms such as hyperarousal, dissociation, night terrors and sleeplessness, irritability, moodiness, and thrill-seeking or high-risk behaviors, PTSD patients often pose a threat to themselves and others (APA, 2013). Seeking help can be difficult and costly, and there is a stigma associated with PTSD, so patients may not seek help when needed and may self-medicate with alcohol or drugs (van der Kolk, McFarlane, & Weisaeth, 1996).

Developing more effective treatments to alleviate the psychosocial and physical impairment associated with PTSD have included exploration of virtual reality environments (VREs). VREs have been studied by the United States military for use in PTSD testing and healing, focused on exposure therapy and cognitive behavioral therapy (CBT) introduced through VREs (Reger et al., 2011). There is a small body of research about DVREs in non-military PTSD populations, and little that addresses the use of the DVRE as a tool for living with PTSD. It remains unknown whether VREs may be effective for relief from non-military PTSD symptomology. However, studies in DVREs for learning and social support have indicated DVRE features that may engage PTSD participants with activities that may alleviate psychological and physical symptoms of PTSD (Lee et al., 2010; Travassos et al., 2013).

The Statement of the Problem

The research problem that I addressed in this study is whether or not DVREs can help alleviate PTSD symptoms and perhaps be used as a PTSD management tool for therapists. Standard therapies used for PTSD have remained largely unchanged for the last thirty years, and include cognitive behavioral therapy (CBT), prolonged exposure (PE), and eye movement desensitization and reprocessing (EMDR). However, there are indications that these therapies produce low recovery rates, high retrogression, and noncompliance numbers, and there is awareness of comorbid conditions that interfere with the efficacy of these treatments (Cook et al., 2014; Mara, Tufik, & Suchecki, 2006). Bae, Kim, and Park (2016) found that PTSD patients with high levels of dissociation did not respond well to EMDR. Comorbid conditions can include the abuse of alcohol and addictive drugs such as opiates by PTSD patients to control their symptoms (Saunders et al., 2015). Although cognitive behavioral therapies and EMDR have shown positive results for some PTSD patients, discovering other, new pathways to ease PTSD symptoms is essential and perhaps using a DVRE can be one of them (Lancaster, Teeters, Gros, & Back (2016). Although virtual reality has been studied for combat-related PTSD in post-deployment military personnel, the research literature does not include study of the possible therapeutic effects of DVREs in civilians with PTSD (Myers, Radell, Shind, Ebanks-Williams, Beck & Gilbertson, 2016; Waldrop, 2017). In addition, virtual reality environments have been researched using exposure therapy, rather than exploring what other activities in the DVRE can be utilized to alleviate PTSD symptoms (Botella, Serrano, Baños & Garcia-Palacios, 2015; Rizzo, Hartholt, Grimani, Leeds & Liewer,

2014). Therefore, a qualitative study of the narratives of people with PTSD who use the DVRE to ease their PTSD symptoms would address a gap in the literature.

Purpose of the Study

The purpose of this narrative analysis was to explore the experience of DVRE users who have been diagnosed with PTSD. A better understanding of the potential for DVRE use to aid in coping with PTSD can provide knowledge about a readily available, affordable technology to reduce PTSD symptoms. A qualitative inquiry into the DVRE experience may form a basis for understanding how DVREs are utilized by participants to relieve PTSD symptoms (Merriam, 2009).

Research Questions

Research Question 1:

What are the lived experiences of adults with PTSD who are engaged in the DVRE?

Research Question 2:

What do adults with PTSD and DVRE experience, perceive as changes in their narratives about PTSD through their utilization of the DVRE?

Conceptual Framework

The conceptual basis for this study was Yee and Bailenson's (2007) Proteus Effect theory, which proposed that an individual's creation of an avatar results in an idealized, uniquely individual representation of self, and that by using an avatar social reconnection can be initiated and acted upon by the participant, on their terms (Demeure et al. 2011; Lumley, 2013). Yee and Bailenson (2007) suggested that the creation of an

avatar (a digital representation of the self) is empowering, calling this the Proteus Effect, and described this phenomenon as similar to a reincarnation or rebirth, or the act of giving birth to oneself. Mennecke et al. (2010) and Ann (2012) found that the creation of the avatar for use in social and educational interaction creates an embodied social presence that is as real in the mind of the user as physical interaction. Using the avatar as a digital self in a virtual environment offered insight into the meaning of the avatar experience for people with PTSD (Yee et al., 2009).

Theory on the use of immersive, 3D VREs has been focused on three areas of psycho-social study (cyberpsychology): Gaming and its effects on participants, educational and business venues, and VRE-assisted exposure therapy for military patients (Reger et al., 2011). VREs are new technology, and the work of Creswell (2009) suggested that a qualitative approach is best when understanding a phenomenon that has a small supporting body of literature (Reeves, Albert, Kuper & Hodges, 2008).

According to Yee and Bailenson's (2007) *The Proteus Effect: The Effect of Transformed Self-Representation on Behavior*, the goal-oriented, interactive social nature of DVREs, in conjunction with the creation of an avatar, evokes concepts of individuation in the patient's creation of an idealized, uniquely individual representation of self through which social reconnection is initiated and acted upon by the participant, on their own terms (Demeure et al., 2011; Lumley, 2013). Using the avatar as a digital self in a virtual environment offers insight into the educational nature of desktop VREs, and their possible use in reducing stress (Yee et al., 2009). I will discuss the Proteus Effect further in Chapter 2.

Motivational theories support using the DVRE to motivate people to take control of and embrace stress reduction. Bandura (1993) and Weiner (1985) offered theories that might be helpful in motivating this population. Notably, the encouragement of participants to self-motivate, and set realistic goals in a safe and stable environment (the DVRE) that they have a part in creating. The learned helplessness of PTSD patients means they use maladaptive passivity as an expression of negative self-esteem: He or she learned that it is meaningless to actively engage oneself in building new skills and acquiring knowledge, because failure is a perceived certainty (Peterson & Seligman, 1983). The strength of Weiner's attribution theory is its emphasis on cognitive skills and self-control that can be manipulated to motivate people toward positive change (Weiner, 2010). Bandura and Locke's (2003) self-efficacy theory is strong in respect for the individual, giving the individual the skills to self-assess realistically to establish a clear strategy for life's decisions and choices. In his attribution theory, Weiner (2010) asserted that people can change through a sense of control over one's self-cognition that can be accomplished by working with a self-created avatar. Bandura and Locke (2003) related to this idea in that giving individuals the skills to self-address problems such as PTSD symptoms may empower them to move forward in recovery. I will discuss motivational theories in greater detail in Chapter 2.

Beyond the creation of a digital representation of the self (the avatar), participants can engage in affect control and emotional regulation, even during periods of high stress (Herman, 1996). As explained in Chapter 2, this self-directed pursuit of desired emotional states maps to Maslow's (1943) Hierarchy of Needs explanation of human

motivation (Tamir, 2016). The potential therapeutic applications of DVREs for mental and medical care was explained using the concept of transportation, or the psychological engagement of a person in a virtual setting as resulting in a feeling of being transported into another world (Burrows & Blanton, 2016; Sharar et al., 2008). The idea of transportation embodies complex emotions being expressed during interaction with the digital world, and this may assist PTSD patients in gaining control over symptoms by presenting safe, positive, educational, and supportive environments in which patients can learn to cope with posttrauma symptoms and gather with other participants for support and advocacy (Mahood & Hanus, 2017). Studies have shown that the DVRE can be beneficial in promoting healthy behaviors and easing mental health symptoms by shaping behaviors (Ferrer-García et al., 2010; Girard, Turcotte, Bouchard, & Girard, 2009). Fox and Bailenson (2009) discovered that when subjects experienced presence with their avatars, it encouraged them to change unhealthy weight behaviors. Presence as a compelling factor in DVREs may be key to the therapeutic value of a virtual environment and is explained in detail in Chapter 2 (Fox, Christy, & Vang, 2014).

Nature of the Study

The nature of this study was a phenomenological qualitative inquiry into how participants understand the DVRE experience, and how it affects their PTSD. Using a questionnaire, there emerged, in analysis, patterns of understanding as to how the lived experience by individuals of the DVRE phenomenon have reframed their coping skills with PTSD symptoms (Patton, 2015). Phenomenological reduction in this study consisted of focusing on the lived experiences of individual participants that were common across

the participants in order to illuminate the essences of the DVRE experience that assisted

in coping with PTSD. Examining imaginative variation and eidetic reduction across

individual participants' experiences of the phenomenon illuminated essential qualities of

the DVRE that may be generalized to the larger PTSD population (Patton, 2015).

The participants were asked to engage in answering a questionnaire (Appendix A)

about their lived experiences of the virtual world, and effects, if any, these activities

affected their PTSD (Merriam, 2009). Analyst skills and principles included: Asking

open-ended questions that were clear and focused, and researcher neutrality in the data

analysis (Patton, 2015). The responses of the participants, knowledgeable people who

have considerable experience and skill in the DVRE, as well as their consideration about

their avatars, in-world relationships and their self-created personal environments assisted

in capturing the meaning, essence of the DVRE-PTSD lived experience (Patton, 2015).

Definitions

Lived Experience: According to Patton (2015), the lived experience of the DVRE

phenomenon will capture the essence of the participants' understanding of how the

desktop virtual world might reframe their coping skills with PTSD symptoms, and how

they perceive the real world. This qualitative phenomenological inquiry will address the

research question: What is the lived experience of adults with PTSD who are active in the

DVRE, and have these experiences changed their narratives about their PTSD?" This

may provide insight into the aspects of the DVRE phenomenon that are commonly

experienced across a group of individuals. Examining imaginative variation and eidetic

reduction across individual participants' experiences within the DVRE can tease out essential aspects of the phenomenon that may ease PTSD symptoms.

Virtual worlds: This refers to DVREs in which a participant is seated with a desktop or laptop computer and engaging in operating an avatar of him- or her-self in a 3D virtual setting on the computer screen.

Human-computer interaction: Referred to as HCI, human-computer interaction refers to the relationship between computers and humans. Pan and Steed (2017) found that in virtual environments, the self-avatar can build trust with others' avatars that is close to face-to-face interactions. This is an example of positive or high levels of HCI.

Presence: Sanchez-Vives and Slater (2005) describe presence as "the phenomenon of behaving and feeling as if we are in the virtual world created by computer displays" (p.332). The emotional and psychological engagement of the DVRE user is important because this sense of presence may determine how successful the user can manipulate the virtual environment and the relationships with others in it. Slater, Lotto, Arnold and Sanchez-Vives (2009) posit that presence can be measured through Likert scale questionnaires to gauge the "propensity of people to respond to virtually generated sensory data as if it were real" (p.194). For this study, a high level of presence in the participants will enhance their narratives of the DVRE experience as it relates to coping with PTSD.

Transportation: Transportation in the virtual setting refers to the degree of psychological and emotional engagement of the person in that virtual setting, or a feeling of being feeling *transported* into another environment (Burrows & Blanton, 2016).

Mahood and Hanus (2017) studied subjects in virtual environments and discovered that they could feel complex feelings such as guilt and remorse. The concept of transportation therefore is the occurrence of complex emotions evoked by a virtual reality environment, and this may point to its efficacy as a therapeutic tool for PTSD (Mahood & Hanus, 2017). Transportation can also apply to narratives such as television shows, novels, and articles, absorbing the user to a new world (Green & Brock, 2000).

Assumptions

This research was founded on the assumption that a qualitative study would be the most revealing based on the lived experiences of participants, which is a rational expectation despite the absence of empirical evidence (Trafimow, 2012). Another assumption was that using participants with PTSD who also have a deep knowledge of the virtual world would provide clear narratives without the delay that the virtual world learning curve presents for new users. Knowledge about how participants with PTSD utilize DVREs through their narratives informs future use of DVREs in the greater general population as a tool for the treatment of PTSD.

Scope and Delimitations

The scope of this study was limited to and included participants experienced and skilled in using the DVRE software application, also called a "viewer." This meant at least a year or more of frequent (daily or several times weekly) use of the application by individual participants. One reason for this limitation is that subjects will be on a common platform, using the same technology and techniques in the virtual space to avoid confounding variables between various virtual worlds. Populations excluded were people

with PTSD who are not familiar with the DVRE because they did not have experience using the technology to ease PTSD symptoms. Theories concerning exposure therapy were not used in this research, because exposure therapies are based in the study of phobias, and are inappropriate for understanding trauma.

Limitations

Limitations anticipated in this study were first, the ability to choose participants with PTSD who are skilled in manipulating the technology and culture of virtual worlds. Patton (2015) warned that the quality of the narratives and information gathered are only as good as the sample and the skills of the researcher. Reasonable measures to address these concerns meant engaging participants who have a deep knowledge of how to operate in the DVRE, have PTSD, and have created environments and 3D creations within the DVRE as a response to PTSD symptoms. This required a minimum of one year of consistent, frequent use and immersion in the DVRE by each study participant.

The role of the researcher was to negotiate the relationships with the subjects in an ongoing, evolving manner, or to create working research partnerships, to gain intelligence that would answer the research questions ethically through the continuous cultivation of trust and reciprocity (Maxwell, 2013). Learning what the perception of the subjects toward the researcher and the motives of the study must be accomplished through researcher transparency about what the goals and purpose of the study were (Maxwell, 2013). The researcher was available throughout the study, in writing, and through answering any questions by participants before the study commenced to ensure that both parties understood the nature of, purpose and reasoning behind the research.

Also the researcher remained neutral, leaving out preconceived notions of what subjects'

lived experiences of the DVRE were that might bias the resulting information. Miles,

Huberman, and Saldana (2014) suggest thinking in a sampling-frame approach; for

example while negotiating with participants, considering what other subjects might

provide new perspectives and insight into the DVRE phenomenon. Researcher bias was

also controlled by carefully considering the perceptions of potential power differences

between the participants and researcher (Maxwell, 2013). This concern was addressed by

me as a peer, an equal participant in the DVRE lived experience. Not only people, but

settings events and processes will be sampled and aligned with the research questions in

order to be representative of the phenomenon being described (Miles, Huberman, &

Saldana, 2014). Observation and documentation of digital environments and objects

created by subjects can add additional information about the DVRE that complements

and deepens the corresponding results (Maxwell, 2013). By focusing on what the

meaning of the DVRE is to participants through their conscious experiences, created

objects, and rendered environments, and how these express and reflect their manner of

coping with PTSD, shared meanings may be drawn across the sample that can indicate

directions in future research (Patton, 2015).

Another concern about limitation is that the number of the sample ($n = 20$) may

not be representative of the larger population because not everyone with PTSD may wish

to use the DVRE. Reasonable measures to address this would mean limiting the study to

participants with PTSD who utilize the DVRE to alleviate symptoms and if the number of

participants can be increased, the possible future transferability of the DVRE for PTSD

patients. In addition, this study will be done online, within the DVRE due to the geographical distance between subjects and the researcher, and that may cause problems with communications that are clear and sincere. Measures to ensure robust responses and honest responses will be the researcher as the research instrument in this study exploring the lived experiences of the participants (Maxwell, 2013).

Significance of the Study

This research may inform future treatments for PTSD by introducing features of DVRE participation that support recovery from psychological trauma. The lived experiences of participants has provided patterns of understanding that can contribute knowledge to the field of trauma treatment. This has the potential to expand treatments beyond medications, exposure therapy, and cognitive-behavioral therapy. DVREs are immediately accessible and cost-effective for populations with Internet access, increasing the scope of education and support PTSD patients may find beneficial to their recovery.

Implications for Social Change

Suicide is a leading cause of mortality in PTSD patients, and if utilizing the virtual spaces of DVREs can stem the occurrence of suicide among PTSD patients this would contribute good for society (Raines et al., 2017). Boffa, King, Turecki and Schmidt (2018) explored the likelihood that pretreatment hopelessness may contribute to future suicidal ideation; perhaps exposure to positive and creative virtual environments can reduce hopelessness and engage PTSD patients. The negative effects of PTSD on the vocational careers and wage-earning abilities of patients is also a concern: unemployment, homelessness, the impact on spouses and children can create a burden not

just on those concerned, but on society as a whole (Heinz, Freeman, Harpaz-Rotem & Pietrzak, 2016). Heinz, Freeman, Harpaz-Rotem and Pietrzak (2017) found that veterans who developed resilience to traumatic events became more entrepreneurial and owned their own businesses that employ others. Perhaps the technology of the DVRE has a potential for influencing future research into new alternatives to current approaches for PTSD best practices.

Summary

This phenomenological qualitative study on the efficacy of the DVRE as a symptom-reducing therapy for PTSD sought to capture patterns of meaning in the narratives of long-standing, experienced users of the DVRE who are using this online platform to cope with PTSD. Participants' created and preferred objects and environments were also studied and commented on by their creators to assess their value in constructive approaches to PTSD recovery (Green-Hamann et al., 2011; Norris, 2009; Yee & Bailenson, 2007). If a qualitative examination of the DVRE shows promise as a healing tool for PTSD, it would provide the public with a cost-free, accessible tool to educate, inform, advocate and potentially help heal trauma, psychologically, emotionally, and physically (Lee et al., 2010; Travassos et al., 2013).

Proposed theories such as Yee & Bailenson's (2007) "Proteus Effect" and Van der Heide et al. (2012) show that when humans create and psychologically and emotionally inhabit their highly personalized avatars, a *"personified presence"* effect occurs which can translate to real life personal encounters. Ash (2016), Fox et al. (2012), and Ratan and Sah (2015) have explored further the Proteus Effect showing that DVRE

users express psychological changes and behavior after interacting with other avatars showing that human behavior can be altered positively by in-world social interaction. The effects of the DVRE may have value in curbing PTSD symptoms, and ultimately re-engaging the PTSD patient with him- or herself and society.

Chapter 2: Literature Review

Introduction

Problem and Purpose

Virtual reality has been studied by the military for exposure therapy for PTSD (Gerardi, Cukor, Difede, Rizzo, & Rothbaum, 2010). However, these studies have required headsets and other sophisticated hardware equipment not readily accessible or available to the general public (Reger, Holloway, Candy, Rothbaum, Difede, Rizzo, 2011). In addition, ET has produced low therapeutic value and high noncompliance rates, the idea being that exposure therapy may retraumatize the PTSD patient (Mara et al., 2006). Exposure therapy using virtual reality consists of recreating the trauma scene and immersing military personnel with PTSD into it. Exposure therapy has been touted as a therapy for PTSD by Foa and Kozak (1986), however, ET was created to treat phobias, not PTSD, and therefore may not be appropriate to treat post trauma. Etkin and Wager (2007) found that dissociation (hypoactivation) and panic (hyperactivation) occur simultaneously in the brains of PTSD patients when stimulated with exposure therapy, using positron emission tomography (PET) and functional magnetic resonance imaging (fMRI). When compared under the same circumstances with the brains of people with social anxiety, specific phobias, and fear, only hyperactivation occurs in these patients (Etkin & Wager, 2007). Therefore, exposure therapies, including eye movement desensitization and reprocessing (EMDR) is unlikely to provide therapeutic worth for PTSD patients. Using virtual reality in a different way however may still hold some therapeutic value and that is what will be explored in the review of the literature.

Relevance of the Problem

Psychological dysfunction as a direct result of externally occurring, extreme human experience has been recognized for thousands of years and recorded in historical narratives and witnessed accounts going back before the Greek and Roman empires (Herman, 1992; van der Kolk et al., 1996). Known through the centuries as "soldier's heart," "shell shock," and "battle fatigue," PTSD was recognized by Freud (1896), who named it "hysteria" (Freud, 1962; McOmber, 1996). In 1980, psychological trauma was given a clinical name, "posttraumatic stress disorder" (PTSD), and approved for diagnosis and treatment as a mental illness under the classification of anxiety disorders in *The Diagnostic and Statistical Manual of Mental Disorders*, Third Edition, or *DSM-III* (American Psychiatric Association, 1987; Friedman et al., 2011; Pearson, La Bash, & Follette, 2010).

Refinement of the symptomology and detection of PTSD continued in the *DSM-IV*, and in 2013 was placed in its own category of trauma-origin conditions with the publishing of the *DSM-5* (American Psychiatric Association, 2013). It is important to note that Vietnam veteran advocacy was the driving force behind the inclusion of diagnostic criteria in the *DSM-III*, because PTSD has societal features and implications that differentiate it from other psychiatric conditions: PTSD can act as a mirror to society, pointing out socio-political failings that cause trauma, such as poverty, war, crime, and interpersonal (usually interfamilial) violence (Herman, 1992; van der Kolk et al., 1996). This makes PTSD an uncomfortable reminder of human failings on multiple fronts, from the personal to the global social arenas. PTSD is not restricted to military personnel; the

majority of PTSD sufferers are civilians, who have survived physical, verbal, psychological, and sexual abuse, accidents, natural and man-made disasters, and other life-threatening events.

Preview

A search strategy for this Literature Review was mapped out using key terms concerning PTSD and virtual reality as they relate to the conceptual framework. Literature by pioneers in PTSD research was reviewed, forming a basis for the purpose of this study. Defining PTSD and the forms the condition takes as well as description of likely PTSD patients is explored here, including the psychological, physical, and spiritual consequences of the PTSD condition. The negative social and community impact of PTSD is examined in detail. Then the DVRE is explored as a possible treatment for PTSD patients. The immersive and social nature of DVREs connect to concepts concerning PTSD and self-concept and the avatar and self-concept.

Search Strategy

The search strategy for this literature review used was to look for literature that encompassed PTSD and virtual reality. Key words included those such as *trauma, virtual worlds, posttraumatic stress disorder, PTSD,* and *avatar*. I searched peer-reviewed articles by PTSD experts such as Bessel van der Kolk, Judith Herman, Matthew Friedman, Terence Keane, and Edna Foa. I searched for virtual worlds and virtual reality in the literature using psychology, sociology, and medical databases in the Walden Library. *Terms that were used in the iterative search process include posttraumatic stress disorder or PTSD, virtual reality, virtual worlds, exposure therapy, eye movement*

desensitization and reprocessing (EMDR), depression, dissociation, hypervigilance,

military, crime victims, sexual abuse victims, psychological abuse victims, verbal abuse

victims, and physical abuse victims, and *police psychology.* The databases of peer-

reviewed literature, explored through several years, include the Thoreau Multi-Database

Search, PILOTS (Published International Literature on Traumatic Stress), ProQuest

Central, PsycARTICLES, PsychiatryOnline, Psychology Databases Combined Search,

PsycINFO, PsycTESTS & Health and Psychosocial Instruments Combined Search, and

PubMed.

<div align="center">**Conceptual Framework**</div>

The Pioneers of PTSD Diagnoses and Research

The pioneers in the field of psychological trauma include Judith Herman, Bessel

van der Kolk, and Babette Rothschild, all of whom studied the phenomenon and

developed the first descriptive diagnostic and psychosocial literature on the scope and

effect of traumatic experience on behavior and perception. As van der Kolk (2007)

observed, the most remarkable feature of the history of PTSD is its interconnection

between "cultural, social, historical, and political conditions, and the ways that people

approach traumatic stress" (p. 32).

Judith Herman's seminal book, *Trauma and Recovery: The Aftermath of*

Violence—From Domestic Abuse to Political Terror, approaches PTSD from a

sociopolitical standpoint, but her key tenets for trauma recovery are firmly based in years

of work with traumatized civilians (1992). She asserted that recovery occurs in stages,

starting with the establishment of trust, safety, and stability, which form a solid platform

upon which the patient can process and mourn the trauma and its outcomes, followed by

relearning how to connect with other humans, and then developing an understanding of

oneself as part of a larger narrative that includes the traumatic events.

Bessel van der Kolk, Herman's colleague, has contributed a large body of

empirical research to the trauma psychology field, and has written and edited several

fundamental manuals about PTSD (van der Kolk et al., 1996). A driving force behind

PTSD research, and in league with the growing field of neuroscience and the concept of

brain plasticity, he founded The Trauma Center of the Justice Resource Institute. He also

conducted trials for the PTSD DSM committees III, IV, and 5. His work started in the

1970s as a clinician caring for Vietnam veterans, and then extended his studies of trauma

into clinical research. His work emphasizes the need to develop treatments that work with

the PTSD-injured brain and physiology, such as helping patients develop skills to correct

thoughts and behaviors, impaired by PTSD damage to the medial prefrontal cortex (van

der Kolk, & Najavits, 2013). Van der Kolk has also pointed out the stalling of recovery

through the widespread use of practices that do not address the whole-body nature of

PTSD, the fallacy of exposure and immersion techniques, and the lack of recovery

regimens that deal with post-trauma dissociation, numbness, anxiety, and panic.

Another researcher involved with the combined mind-body effects of PTSD,

Babette Rothschild, was the first psychologist to observe and report on the physical

effects of trauma and non-verbal traumatic memory in her book, *The Body Remembers:*

The Psychophysiology of Trauma and Trauma Treatment (2000). Going further into the

neurobiological nature of PTSD, Peter Levine studied why PTSD patients recurrently,

involuntarily experienced re-living the traumatic event in a whole-body way, physically re-enacting the trauma event while in states of either hyperarousal or complete dissociation. Levine studied the how animals in their natural settings "shake off" stress immediately after a life-threatening encounter and developed through his findings several key techniques for humans to release trauma, often trapped in nonverbal areas of the brain during the "fight or flight" state of the brain during traumatic events (2005). The techniques Levine developed stem from ancient yoga practices, he asserted that yoga helps address both hyperarousal and dissociation by making the conscious mind aware of the physical self, and research by Yadav et al. (2012) and other mind-body researchers have shown significant results in yoga training as a method to train PTSD patients to stay present and calm while dealing with post traumatic symptom management.

Literature Review Related to Key Concepts

Posttraumatic Stress Disorder Defined

Posttraumatic stress disorder or PTSD is classified in the Diagnostic and Statistical Manual 5 as a trauma- and stressor-related disorder, and has diagnostic criteria for adults that include: (a) experiencing threat of death, critical injury, or sexual violence; (b) intrusive memories after the trauma or flashbacks of the trauma; (c) avoidance of any stimuli that reminds one of the trauma; (d) mood and cognitive alterations as a result of the trauma; and (e) alterations in reactivity, such as irritability and marked startle responses.

These symptoms must exist for more than one month, cause discomfort or impairment in social, interpersonal, and occupational functioning, and cannot be

associated with comorbid conditions or substance abuse (American Psychiatric

Association, 2013). Prevalence in the United States is a projected lifetime risk is 8.7% for

the population, using the age of 75 according to the DSM-IV (1997). The DSM-5 differs

in its PTSD criteria from the DSM-IV in that it changed the classification of PTSD from

an anxiety disorder to a trauma- and stressor-related disorder (APA, 2013; APA 1997).

PTSD now has four symptom clusters: Avoidance, enduring negative changes in mood

and cognition, dissociation and hyperarousal, whereas the DSM-IV only recognized three

symptom clusters: re-experiencing, avoidance/numbness, and hyperarousal (APA, 2013;

APA 1997).

Types of PTSD

Some researchers suggest that there are different types of PTSD, depending on the

specific trauma type, the length of the trauma, the proximity of the trauma, and even the

gender of the trauma victim. For example, Weinberg and Gil (2016) found that PTSD

types vary according to objective and subjective variables in the trauma event, such as

PTSD being significantly more intense in face-to-face encounters such as sexual assault.

Lee, Furnham and Merritt (2017) assert that the Mental Health Literacy (MHL) of PTSD

should be expanded and deepened to a discussion of different types of PTSD depending

upon the character of the trauma, such as sexual assault, combat, and man-made or

natural disasters. They suggest an "under-recognition" of PTSD because of non-

differential consideration of the type of trauma (p. 257).

Complex PTSD

The need for an expanded body of diagnoses for PTSD has been suggested by clinicians for quite some time (Herman, 1997). There are diagnostic differences between individuals that have suffered a single traumatic even and those that have experienced prolonged traumatization (Complex PTSD or CPTSD) and this calls for different approaches to treatment than single-event PTSD (Palic, Zerach, Shevlin, Zeligman, Elklit & Solomon, 2016). These patients would include hostages, prisoners of war, concentration-camp survivors, survivors of religious cults, survivors of domestic abuse, and victims of physical abuse, verbal abuse, psychological abuse or sexual abuse (Herman, 1997). Those affected with CPTSD suffer chronic problems in affect regulation, such as preoccupation with suicide and self-destructive behavior, extreme dissociation, including depersonalization and derealization, and preoccupation with re-living the trauma (Karatzias, Shevlin, Fyvie, Hyland, Efthymiadou, Wilson, Roberts, Bisson, Brewin, & Cloitre, 2016). Alterations in self-perception that include guilt, shame, self-blame, a sense of defilement and a deep feeling of separation from other humans also mark CPTSD, leading to self-isolation and withdrawal and persistent distrust of others (Herman, 1997). Proponents of inclusion of CPTSD into the DSM-5 did not achieve their goal, and one looks toward an expansion of types of PTSD, including CPTSD, in the future DSM-6 (Sar, 2010). Exposure to repeated and prolonged traumatic events, especially in childhood while the brain is developing results in more complicated PTSD symptoms, and this often leads to misdiagnosis, and consequently mistreatment by clinicians (Taycan & Yildirim, 2015).

Who Acquires PTSD?

According to the American Psychiatric Association's DSM-5 (2013), risk factors for pre-trauma include pre-traumatic emotional and psychological problems such as panic disorder and depressive disorder. Environmental risks for developing PTSD after a trauma include low socioeconomic status and education, witnessing trauma, loss of attachments such as parents in childhood, and a familial history of psychiatric problems. Gender issues include a higher incidence of PTSD in females, however this may because of inequality issues and a higher exposure to rape trauma (APA, 2013). Also, the younger the patient at the time of the trauma, the higher the chance of developing PTSD (APA, 2013). Pre-traumatic factors for PTSD tend to be environmental, according to the APA (2013), and can consist of the intensity of the trauma, length of trauma, the perception of personal injury, witnessing the death of another, interpersonal violence and verbal abuse, witnessing atrocities or living in war zones, imprisonment, witnessing genocide or hostage situations, and the amount of dissociation during the event in the victim will determine the development of PTSD. Post-traumatic features that will determine the severity of PTSD acquisition include lack of social support, silencing the victim, denying the victim's event and reality, poor coping mechanisms, subsequent negative life events, reminders of the trauma, and substance abuse (APA, 2013).

The Moral and Spiritual Injury of PTSD

Loss of faith in a higher power and fellow humans is a hallmark of PTSD. The sense of nihilism, loss, and despair often overwhelms the trauma survivor. As Judith Herman (1997) observes, people with PTSD are fundamentally affected with loss of

belief in themselves, other people, and in a higher power and that their self-esteem and sense of belonging in society is damaged

In a study on the connection between spiritual distress and relationships, Harris, Meis, Cheng, Voecks, Usset and Sherman (2017) found that the moral and spiritual injury of trauma disrupted spousal relationships and families. Tick (2012) describes traumatic events as a separation of the soul from the physical self. A longitudinal study by Harris, Erbes, Engdahl, Ogden, Olson, Winskowski, Campion and Mataas (2012) suggests that PTSD patients with higher levels of spiritual loss after trauma also reported "a longer and more severe course of PTSD symptoms" (p. 230). The relationship between psychological health and spirituality has been established in a cross-sectional study by Peres, Kamei, Tobo and Lucchetti (2017) that evaluated the role of meaning, peace, faith, and quality of life, and found that spirituality or religion resulted in a higher quality of life. Studies on spirituality and PTSD point to the occurrence of spiritual distress, such as inability to spiritually cope with trauma and estrangement from a higher power results in more severe PTSD symptoms and therapy outcomes (Harris, Erbes, Engdahl, Olson, Winskowski & McMahill, 2008).

The Social and Relational Ripple Effect of PTSD

The ripple effect of PTSD on family, partners, spouses, children, parents, friends and the community is felt keenly by those close to the PTSD patient. Herman (1997) asserts that the PTSD patient alternates between withdrawal from others as a result of mistrust, and an anxious clinging to others out of fear and a sense of isolation. As one rape victim describes, "I was terrified of being with people and terrified of being alone"

(p. 56). Society at large wishes to believe that only good things happen to good people and tend to shun or silence the trauma victim (McFarlane & van der Kolk, 1996). Culturally, the West tends to believe that the individual can control his or her destiny, and this may make PTSD harder to cope with after trauma than in Eastern cultures, where one's fate is not under his or her control (deVries, 1996).The negative effect on marriage and partnerships is noted among spouses when one or both have PTSD, causing dissolution of families and further isolation of the PTSD patient (Foran, Wright & Wood, 2013). In addition, the negative impact on vocational functioning in PTSD patients must be noted, as studies on combat veterans have shown problem with re-acclimating to civilian life and workplaces (Salisbury & Burker, 2011).

PTSD and Suicidality

The spiritual negativity and social isolation brought on by trauma can result in a high suicide risk for PTSD patients. Brake, C. A., Rojas, S. M., Badour, C. L., Dutton, C. E., & Feldner, M. T. (2017) examined the PTSD-associated feelings of self-disgust as a possible underlying suicide risk in PTSD patients. LeBouthillier, McMillan, Thibodeau and Asmundson (2015) found that interpersonal trauma and repeated trauma as in CPTSD resulted in a higher risk for suicidality and suicidal ideation due to feelings of social isolation, being a burden to others, and a development of a higher pain tolerance and lack of a fear of death. Knox (2008) notes that while attaining accurate numbers on trauma-related suicide is difficult, due to misdiagnosis of death and family stigma, those with a history of childhood abuse (verbal, sexual, psychological or physical), war time trauma, and incarceration (POWs, prisons, hostages) have a higher incidence of

suicidality and suicidal ideation. For example, Afifi, Enns, Cox, Asmundson, Stein and

Sareen (2008) estimated that between 16% and 50% of suicide ideation and attempt

occurred in women who had experienced childhood abuse, and 21% to 33% of men with

a history of childhood abuse. Adams and Lehnert (1997) reviewed studies of suicidal

behavior among those with combat trauma and adverse childhoods and connected PTSD

to individual-environment interaction, using this connection to describe traumatic events

and possible environments for recovery. These environments would feature social

support, stability, and a strong measure of predictability, and the DVRE can provide that

for PTSD patients (Adams & Lehnert, 1997). Thus the DVRE has the potential to ease

PTSD symptoms including suicidal ideation and suicide.

Physiological Consequences of PTSD

Substance Abuse and Addiction

PTSD is typical among those seeking treatment for substance abuse. Dworkin,

Wanklyn, Stasiewicz and Coffey (2018) further found that comorbid PTSD and substance

use disorder (SUD) varied as to the PTSD symptoms being self-medicated by PTSD

patients and the type of substance used. For example, in alcohol abuse samples,

avoidance symptoms were elevated, in cases of escalated hyperarousal, cocaine use was

comorbid, and in patients with numbing (dissociative) symptom elevation,

sedative/hypnotic/anxiolytic use disorder was present (Dworkin et al., 2018). Examining

the comorbidity of substance abuse and PTSD, and the symptoms associated with

particular types of substances may help with PTSD treatment because PTSD patients with

addictions are more difficult to treat than other PTSD patients (Killeen, Back, & Brady,

2015). Kuksis, Di Prospero, Hawken and Finch (2017) found strong correlations between the severity of addiction and the severity of PTSD, indicating a need for integrated trauma and SUD care across the medical and social and psychological services spectrum. Self-medicating PTSD patients may indicate an absence of care/resource, inadequate clinician care or over-medication by care givers.

PTSD Brain Physics and the HPA Axis

The HPA axis, or Hypothalamic-Pituitary-Adrenal axis is a complex set of direct influences and feedback interactions between the hypothalamus, the pituitary gland, and the adrenal glands. The interactions between these organs constitute the HPA axis, a major part of the neuroendocrine system that controls reactions to stress and regulates body processes such as digestion, immune system, mood and emotions, sexuality, and energy storage and expenditure. For people with PTSD, when a general response to stress is triggered in the body, the patient will either experience the fight-or-flight reaction or the numbness of dissociation. The body then triggers responses in the limbic system, the hypothalamus, the pituitary gland and the adrenal glands. The adrenal glands secrete cortisol which interacts with the serotonin receptors in the brain. While cortisol can enhance performance, in cases of extreme and chronic stress, such as PTSD, cortisol causes inflammation in the body, producing flu-like symptoms, immune system repression, and gastro-intestinal issues. This is thought to cause plaque-building inflammation in the arteries which may lead to cardio-pulmonary problems (Taguchi, 2017). The PTSD injury alters brain physics, leading to dysfunctional release of the brain's chemical signals to the body, has been studied and proved through medical

technology breakthroughs in imaging, and the discovery of brain plasticity (Bremner, Randall, Scott, Bronen, Seibyl, Southwick, Delaney, McCarthy, Charney, & Innis, 1995). There is also a question about whether a smaller than normal hippocampal volume is caused by trauma or pre-exists before the trauma, with complicating factors such as pre-existing trauma, gender, comorbidity, and other variables (Southwick, Davis, Aikins, Rasmusson, Barron & Morgan, 2007; Neumeister, Henry & Krystal, 2007; Lucassen, Pruessner, Sousa, Almeida, Van Dam, Rajkowska, Swaab, & Czéh, 2014). Using magnetic resonance imaging (MRI) and functional MRI (FMRI) neuroscientists such as Bremner (1995), Hostinar, Sullivan, & Gunnar, (2014), Southwick (2007), and Ryan (2008) have been able to conduct significant studies on neuroplasticity and provide reasons as to why PTSD symptoms occur, and how they might be treated. Brain physics, altered by traumatic experience, would logically cause the release of hormones and chemicals that create inflammation, pain, sleep disorder, heightened or dulled senses, and other chronic conditions. Stress is now known to cause a syndrome known as the HPA (hypothalamic–pituitary–adrenal) axis. Research by Hensley & Verela (2008) has shown the destructive effects of the HPA axis, stemming from stress-related brain alterations. Wingenfeld and Wolf (2011) suggest that a lower level of cortisol (hypocortisolism) due to the HPA axis may interfere with reconciliation of traumatic memory with memory and memory retrieval and be associated with "intrusive memories, flashbacks, and nightmares" (p.717). Neumeister, A., Henry, S., & Krystal, J. H. (2007) established marked changes in the brains of PTSD combat patients, including decreased hippocampal volume, and abnormalities in the amygdala and prefrontal cortex.

PTSD Therapies Lag Technologically Behind Neuroscience

The psychotherapies used for PTSD have stayed the same despite leaps in neuroscience: Classic talk therapy, cognitive behavioral therapy (CBT), and therapies such as immersion or exposure therapy, and eye movement desensitization and reprocessing (EMDR) remain the standard treatments for PTSD, despite evidence that these therapies produce low recovery rates, and serious noncompliance rates (Mara et al., 2006). While many trauma therapists have included some of Levine's techniques, such as "felt senses" exercises, modern therapy continues to focus primarily on the aforementioned techniques, and the use, oftentimes over-use, of psychotropic medications to control PTSD symptoms (Levine, 2005).

Patients, frustrated with low recovery rates and therapist reliance on prescription drugs to care for trauma, have taken their unhappiness to the social network, creating groups that provide the empathy, the listening, and the support they are not finding from psychological and psychiatric services (Rubin, Berntsen, & Bohni, 2008). The use of the internet as an official, APA-sanctioned therapeutic venue has been plagued with ethical concerns over privacy, confidentiality and competency (American Psychological Association 2010; Bersoff, 2008). However, the patient population continues to use the Internet, at a growing rate with higher satisfaction, as studied by Peñate (2012), who discovered that patients find the immediacy, convenience of social network support preferable to the in-person therapies: In fact, patients perceive the support of others on the Internet to be more genuine than in-person encounters. For PTSD patients, the stigma associated with PTSD, as well as avoidance symptomology that makes in-person

encounters difficult, are not problems in the use of online support (Green-Hamann et al., 2011).

Virtual Reality: Immersive Technology for PTSD Care

DVREs, also referred to as "virtual worlds" and "3D websites" were created based upon the technologies of social networking and gaming (Heiphetz, & Woodill, 2010). While some people think of DVREs as another world, divorced from the real world, the fact is that using an immersive digital venue to communicate is real, and exists in reality: For this discussion the DVRE is viewed as a complex communication tool through which educational and experiential information can be exchanged for the purpose of PTSD recovery. Research has shown that DVRE activities and education have been as productive as telework (Good et al., 2013; Green-Hamann, et al., 2011).

PTSD damages and disconnects the patient from his- or herself: He or she becomes a stranger to his or her self, and PTSD takes away the sense of self-efficacy and sense of having some control over one self's environment and future. Analyzing responses to the questionnaire and observations/documentation of participants' individually created digital objects and environments, it may be found that using a VRE and an avatar may be useful in restoring features of self-concept and self-control that have been displaced by trauma. This may be enabled by the concept of presence, or the feelings of emotional and psychological engagement in an immersive virtual environment that transcends the actual location of the physical body of the participant (Sanchez-Vives & Slater, 2005). Pan and Steed (2017) found a high level of this quality when DVRE participants identified strongly with their avatars in an immersive virtual environment:

The use of an avatar may reconnect participants to themselves and encourages a sense of self-efficacy and control over the virtual environment, to the extent of creating one's own digital environment. This could have the potential to boost confidence and self-worth that has been displaced by psychological trauma.

According to the literature, standard therapies used for posttraumatic stress disorder (PTSD) have been static for several decades. These therapies include cognitive behavioral therapy (CBT), prolonged exposure (PE), and eye movement desensitization and reprocessing (EMDR). These therapies have low recovery rates, high retrogression and noncompliance numbers, and there is awareness of comorbid conditions that interfere with the efficacy of these treatments (Cook et al., 2014; Mara et al., 2006). PTSD patients with high levels of dissociation do not respond positively or long-term to EMDR (Bae et al., 2016). Cognitive behavioral therapies (CBTs) and exposure-based therapies, namely EMDR have shown positive results, however finding new or complementary or even supplemental ways to ease PTSD symptoms is called for, and it may be that the use of DVREs may fill this gap (Lancaster, Teeters, Gros & Back (2016). Virtual reality has been researched largely for combat-related PTSD, the research literature does not include many studies concerning the possible positive effects of DVREs for people with PTSD (Myers et al., 2016; Waldrop, 2017). Historically, virtual reality environments have been researched through the lens of exposure therapy, but there are other features of the DVRE that should be explored as a complementary or supplemental answer to patient management of PTSD (Botella et al., 2015; Rizzo et al., 2014). This proposed qualitative study of the lived experiences of people with PTSD who use the DVRE to cope with their

PTSD symptoms may point to further research on alternative approaches to managing

PTSD symptoms.

PTSD and the Self

In the DSM-5, one of the new criteria for PTSD includes negative perceptions of

the self and others that did not exist before traumatic events (APA, 2013). Shafran,

Shahar, Berant and Gilboa-Schechtman (2016) studied the self-reported representations

and cognitions of adolescents with PTSD; when compared to adolescents without PTSD,

those with the condition reported more self-criticism than the non-PTSD teens. The

PTSD adolescents also reported a higher desire to distance themselves from others and an

impairment in forming new relationships in a healthy manner (Shafran et al., 2016).

Samuelson, Bartel, Valadez and Jordan (2017) found that negative self-appraisals,

including coping self-efficacy, seem to adversely affect the perception of cognitive

health. Self-disgust associated with post trauma has also been associated with a higher

risk of suicide and suicidal ideation (Brake, Rojas, Badour, Dutton & Feldner, 2017).

Perhaps the perception of oneself within the DVRE can improve these negative self-

concepts and engender a more positive self-appraisal for the PTSD patient through the

creation and control of one's avatar and environments.

The Avatar and the Self

PTSD creates a perception of disconnection from self, from society, and from

one's surroundings. Mennecke, Tripplett, Hassall, and Conde (2010) theorized that the

very act of building one's avatar and using it for social interaction creates an embodied

social presence that is every bit as real in the mind of the user as in-person social and educational exchanges (Ann, 2012).

Literature on the lived experience of digital worlds by DVRE users, including non-PTSD clinical populations, and their respective avatars has shown that reality is psychologically present and experienced during DVRE interactions through simulation of reality, freedom of choice, character involvement, perceptual pervasiveness, subject matter authenticity, character authenticity, and social realism (Ribbens & Malliet, 2010).

A small, but growing body of research on VREs in healthcare applications continues to explore the digital space as a platform for medical health care. Studies using DVREs with clinical populations such as burn victims and virtual demonstrative studies on the effects of driving under the influence have shown positive outcomes, such as pain relief for burn patients and education about how alcohol influences driving skills, that may encourage further research on the use of DVREs for medicine and psychology (Sharar et al., 2008; Burrows & Blanton, 2016).

For example, patient resocialization is an enormous challenge for trauma clinicians: PTSD patients are highly averse to interacting with others in-person, even family and life-long friends. This presents a roadblock to recovery, because re-learning to interact with and trust others is a foundation of trauma recovery (Herman, 1996; van der Kolk, 2013). A DVRE can help with this roadblock by allowing patients to be wholly present (psychologically) with others, listening and interacting, while simultaneously being alone and operating individually in a physical location that is non-anxiety producing, such as home, or another comfortable safe place. Opriş et al. (2012) studied

this in a clinical meta-analysis contrasting in-vivo therapy with civilian participants who have PTSD, comparable to the same therapies in a DVRE and found little difference in the experience and results for participants, adding weight to the need for more research on the application of DVREs to psychological treatment. In a quantitative study with general population, non-military, clinical participants by Slater et al. (2013), the DVRE was shown to significantly evoke empathy and interaction between participants. The act of creating an avatar might be viewed as a reincarnation or rebirth, as described by Yee & Bailenson (2007) who theorized that the creation of avatar (self) is empowering, calling this phenomenon the *Proteus Effect*.

The VRE as A Stable, Safe Place

PTSD creates a pervasive sense of danger in almost every physical location, and patients take great pains to make their homes "safe" from danger, as well as buffered from certain sounds (sirens, traffic, sounds of other people in multi-unit housing), bright or flashing lights, scents that may trigger flashbacks (rotten food, bathroom odors, mold); the virtual homes of PTSD DVRE participants are an interesting study in individual control over one's environment in fine detail. This type of environmental control is not only easy to get in a DVRE but is a core feature of these digital spaces. The ability to quickly establish a place of safety and stability in the DVRE enables clinicians and patients to get into the therapeutic process more quickly. The therapist is engaged in the DVRE. Furthermore, DVRE environments can even be idealized, or super-enhanced to evoke relaxed, safe and calm states of being, making therapy free of distractions, and participants more able to focus and learn (Pallavicini et al. 2013).

Using a DVRE to restore participant *sense of place*, especially in a social context, may enable participants to build a foundation of PTSD resiliency skills that will naturally become part of their non-digital lives: Interaction with others through one's avatar also initiates an inner dialogue with oneself (Yee & Bailenson, 2007). See *Figure 1* for an example of what the DVRE looks like.

The Need for Research on DVREs as Venues for Therapeutic Applications

A small, but growing body of research on VREs in healthcare applications continues to affirm the digital space as a platform for delivering mental and medical health care. In 2008, a study on relieving burn patients' pain by using a DVRE for disfigured burn patients who could create avatars that reflected their inner self concept (Sharar et al., 2008). Burrows & Blanton (2016) found that when people who are risk for behaviors such as driving under the influence (DUI) are exposed to health-positive messages within a virtual world setting that the immersive gaming experience influenced their behavior by providing a virtual reality experience that simulated the negative effects of driving under the influence (DUI). They based their research on the idea of *transportation*, or the psychological engagement of a person in a virtual setting, feeling transported into another world (Burrows & Blanton, 2016). The concept of transportation was examined by Mahood and Hanus (2017), who found that violent game players in DVREs could feel complex emotions such as guilt and shame. While for this study of the possible uses of DVREs for a complimentary treatment for PTSD, there is no intention of evoking negative feelings on the participants, the idea that complex emotions can be explored within the DVRE through transportation may point to its efficacy as a

therapeutic tool for PTSD (Mahood & Hanus, 2017). Transportation can also apply to narratives such as television shows, novels, and articles, absorbing the user to a new world (Green & Brock, 2000). Transportation into immersive virtual worlds might be used as a therapeutic tool for PTSD by presenting real time, positive, educational, and supportive environments in which participants can learn to cope with post-trauma symptoms and gather with other participants for support and advocacy. The studies upon burn victims and the demonstrative studies on the effects of driving under the influence have shown positive outcomes that bear further research.

Perhaps the creative and playful virtual world can promote can immerse PTSD patients in a health-promoting environment or help ease symptoms or shape behaviors. Ferrer-García, García-Rodríguez, Gutiérrez-Maldonado, Pericot-Valverde, and Secades-Villa (2010) studied the efficacy of VREs in inducing the urge to smoke tobacco in an attempt to apply Cue Exposure Treatment (CET) to former smokers using virtual environments such as a pub, lunch at home, and drinking coffee in a café. The results showed how VREs can create enough presence for the participant to influence behavior by demonstrating the positive or negative effects of behaviors (Ferrer-Garcia et al., 2010). Another study had subjects crush virtual cigarettes in a VRE and found that it reduced the urge to smoke, and behavior was shown to be modified; an interesting finding considering the powerful triad of variables involved in nicotine addiction: Psychological, physical, and social factors (Girard et al. (2009). Fox and Bailenson (2009) discovered that when subjects engaged vicariously, or experienced presence with their avatars, it encouraged them to exercise because they could see their avatars either

gain or lose weight based on their real-life physical activity. Presence as a compelling factor in DVREs may be key to how therapeutic a virtual environment can be (Fox et al., 2014).

The DVRE has other features not easily found or established in the non-digital world. These features include multi-national, culturally diverse, and community-driven populations and environments, the ability to span enormous distances, making DVREs implicitly green with a small carbon footprint.

Summary

Based on the literature explored here, a study conducted within a DVRE to measure its efficacy as a therapeutic platform in psychology would contribute knowledge to the field that has the potential to move PTSD care and treatment forward using new and emerging technology. The literature review explains what PTSD is and its types, who acquires it, and its negative effects on the patient and the secondary/vicarious trauma taken on psychologically by family, friends and communities. A brief history of PTSD puts its meaning for society into perspective while outlining the contributions of PTSD pioneers in the field of trauma psychology. The physiological changes created by PTSD, particularly changes in brain physics and the HPA axis have been discussed. The spiritual and moral injury of interpersonal and man-made trauma, even natural disasters, can undermine the patient's sense of control and self (van der Kolk et al, 1996). PTSD therapies have mainly focused on cognitive behavioral therapy and exposure treatments, while technological tools such as virtual reality have advanced and may show promise for new approaches for healing trauma.

The DVRE was introduced as a possible venue to re-socialize and provide therapeutic benefits to PTSD patients by providing a safe, controllable and private space where one's control over events can be re-established. The literature then discussed the possibilities inherent in the creation of one's avatar as an empowering tool along with the creation of one's environment. The need for research on PTSD and DVREs is necessary to explore the possibility of the DVRE as a new tool for addressing and caring for psychological trauma.

Chapter 3 described a qualitative phenomenological inquiry as the chosen approach to capturing the lived experiences of participants who report having been diagnosed with PTSD. The sample would consist of 23 adults who have reported PTSD, both male and female, who are physically located in the United States and outside the United States. These participants claim to have utilized the DVRE as a way to cope with PTSD symptoms. These people self-reported having PTSD through diagnosis by their clinicians. The sample included survivors of crime, sexual abuse, physical abuse, and psychological abuse, as well as secondary and vicarious PTSD. It was determined how experienced over length of time and how current the participants are in active use of the DVRE from their public "resident profiles": Each participant had a profile that publicly showed number of years each has been active in the DVRE, and the most recent log-in date and time. For example, one avatar profile reflected that he or she had been active in the DVRE for about 9.5 years, and his or her last login (activity within the DVRE) was Jan 21, 2019 at 1:30 AM PST.

Using a sample of 23 (*n* = 23) DVRE users who have used the venue to cope with their individual PTSD, a 10-item questionnaire was distributed (*Appendix A*). Ethical practices for working with research subjects was noted in Chapter 3, and questionnaire is in *Appendix A*.

Chapter 3: Research Method

Qualitative phenomenological inquiry was the method I chose to examine the DVRE phenomenon in terms of its lived experience by people with PTSD who have experienced the phenomenon (Creswell, 2013). The reason I chose this approach is because the phenomenon of the DVRE is a new technology and the core essence of this phenomenon was a composite narrative of the lived experiences of a group of people with PTSD who indicate they interface with the DVRE technology to cope with their PTSD.

There were two predominant general lines of inquiry in this qualitative phenomenological study: *What* is the lived experience of the DVRE and *how* is it being experienced? The research questions seek to answer these lines of inquiry by asking: What are the lived experiences of the DVRE for individuals with PTSD? And what particular situations and contexts have shaped these experiences (Moustakas, 1994)? This approach focused on obtaining intelligence that aligned with what Moustakas (1994) defines as "textural and structural descriptions" of shared lived experiences to define the phenomenon of the DVRE as it applies to participants' individual coping strategies for their PTSD symptoms (Creswell, 2013).

Phenomenological Inquiry

This qualitative phenomenological study sought to find common themes of what Patton (2015) describes as narratives of the phenomenon and lived experiences of the DVRE by participants with PTSD (Creswell, 2013). The sample of 23 participants were asked to respond to a 10-item questionnaire that explored the lived experience of the DVRE, and to describe "what" each individual's DVRE experiences have been and

"how" each participant perceives these experiences (Creswell, 2013). Included in the

research were questions about 3-dimensional (3D) creations and environments in the

DVRE with participant descriptions of why and how they created them. The information

and imagery were studied to determine threads of universal commonalities that may

explain how DVREs affect people with PTSD (Merriam, 2009). The conscious, lived

experiences of the participants reflected a combination of objective reality and perceived

experience, rather than a disunion between the phenomenon and the subjective,

intentionally conscious meaning of the phenomenon for the participant (Creswell, 2013).

Types and Sources of Data

A 10-item questionnaire (*See Appendix A),* was deployed in which participants

were invited to share descriptions of their created environments and digital objects to

capture the lived experiences of the participants. Triangulation of the data gathered from

the responses to the questionnaire, which were descriptions of their avatars, descriptions

of their favorite objects, and their favorite environments, and how these related to their

manner of coping with PTSD, were used to form a deeper, more complex understanding

of the DVRE phenomenon (Creswell, 2015; Greene, 2007; Miles, Huberman & Saldana,

2014).

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Establishing Validity

</div>

Reflexivity

As the researcher in this study, I was the inquirer and served as the instrument of

qualitative inquiry and analysis, therefore the following reflexive discussion explains the

perspective, skills, and experiences I brought to the work, because my personal

epistemology allows me to understand the DVRE from the PTSD perspective. My undergraduate degree in graphic design and fine arts, as well as 22 years in professional capacity as an artist, designer and creative marketing strategist, enabled me to appreciate the highly-skilled creative visions of the inhabitants of the DVRE, and helped me to learn the building and programming skills in the DVRE. I am highly skilled in virtual world technology, and how to manipulate/create virtual environments, using my art training and skills, as well as my training in psychology.

What are the lived experiences of the DVRE for individuals with PTSD and what particular situations and contexts shaped these experiences (Moustakas, 1994)? The objective of the research project and resulting analysis was to explore the experience of the DVRE by users who report being diagnosed with PTSD. The analysis consisted of finding patterns and common themes in the narratives of their lived experiences in the DVRE as they reported in their questionnaire responses. Analysis results indicated a basis for further study by PTSD researchers, and suggested that the DVRE may be a complementary or supplemental approach to managing PTSD symptoms. The responses provided insight into what was a readily available, affordable resource to reduce PTSD symptoms. A qualitative phenomenological inquiry into the DVRE experience suggested a basis for understanding how DVREs are utilized by PTSD participants to relieve PTSD symptoms (Merriam, 2009).

Data quality was established by what Miles, Huberman, and Saldana, (2014) refer to as checking for representativeness to ensure that the participation in this study reflected the effects of the DVRE on PTSD symptomology. Substantive validation,

according to Creswell (2015), depends upon the critical self-examination the researcher must maintain to conduct a qualitative integrity that is unbiased, or bracketing, so that the researcher can avoid unduly influencing the study of the DVRE environment on subjects (Miles, Huberman & Saldana, 2014). Careful consideration of the meaning of respondents' answers to the questionnaire and avoiding researcher bias ensured objectivity and confirmability in gathering rich, meaningful data (Miles, Huberman & Saldana, 2014).

Triangulation of the data gathered from the responses to the questionnaire, which were descriptions of their avatars, descriptions of their favorite objects, and their favorite environments, and how these related to their manner of coping with PTSD, were used to form a deeper, more complex understanding of the DVRE phenomenon (Creswell, 2015; Greene, 2007; Miles, Huberman & Saldana, 2014).

Data collection consisted of the questionnaire responses, and written descriptions of participants' avatars, digital objects and environments, and examination of emergent patterns of meaning to organize and code the data. From this, categories and themes were detected and defined. Then the findings were summarized and the results displayed to suggest common themes across the participant population, as well as divergent or outlier experiences that may form the basis for further study.

Maxwell (2013) suggested that examining outliers and contrary cases that challenge any conclusions are important for establishing validity; for example, some participants indicated that they find the DVRE stressful in certain situations, or irritating to their PTSD. The presence of outliers in the sample population can interfere with

saturation. This problem was addressed by an increase in sample size. The consideration and exploration of opposing explanations added internal validity and credibility to the findings.

Analytical Strategies

Data analysis was carefully planned to include hardware concerns such as proper data storage and back-up, dated and time-stamped data, creating a master list and matrix of all the data in order to retrieve it more easily, providing the confidentiality of participants by coding their names or masking them in the data that will be released to the public, and developing a plan for data filing (Creswell, 2013).

Analysis was a two-step plan that circled back to the questionnaire responses in order to keep the study focused, without extraneous information and data that clouds the research focus. First, there was data analysis for convergence or analyzing the data for patterns that can be placed into categories which can be tested for internal homogeneity and external heterogeneity to clean up data that was extraneous, too thin or too bloated (Guba, 1978; Patton, 2015). Then the data categories were examined for divergent themes and patterns using the process of extension and surfacing, or making connections between themes and perhaps creating new categories, confirming that the new categories represented the existing data collection (Patton, 2015). Identifying non-conforming data, or deviant cases, that did not fit in with the emergent themes and patterns was important in order to avoid overextending the data beyond the main purpose of the study (Guba, 1978; Patton, 2015).

Methodological triangulation of the data gathered from the responses to the questionnaire, which were descriptions of their avatars, descriptions of their favorite objects, and their favorite environments, and how these related to their manner of coping with PTSD, were used to form a deeper, more complex understanding of the DVRE phenomenon (Creswell, 2015; Greene, 2007; Miles, Huberman & Saldana, 2014).

Sampling Strategy and Sample Size

Purposeful (or purposive) sampling was a core part of this qualitative study. Unlike larger, random sample sizes used in quantitative analysis, purposeful sampling relies on smaller sample sizes. The participants were volunteers, who elected to answer open-ended questions, align with the purpose of the study, and match the data collection goals, rather than using larger sample sizes to create quantitative empirical generalizations (Patton, 2015). This qualitative phenomenological study sought to find common themes of what Patton (2015) describes as *narratives of the phenomenon* and lived experiences of participants with PTSD (Creswell, 2013).

Patton (2015) warned that a sample size larger than 10 may be problematic in qualitative research. However the sample size was determined to be 20+ participants, because the researcher was looking for a larger body of responses from which to establish what Miles, Huberman, and Saldana (2014) refer to as checking for representativeness and saturation of data to ensure that participation in this study reflected the effects of the DVRE on PTSD symptomology. The participants represented adults who have PTSD both male and female who are physically located in North America and Europe.

Because people with PTSD are not likely to say that they do have the condition, because of stigma, their word that they have PTSD was believed, particularly if they had received a diagnosis (also on their honor) from a professional therapist. The sample population was adept at using the DVRE, determined easily through knowing how long they have been using the DVRE, ideally more than one year.

The call for participants occurred through announcing the study in the DVRE event listings, and announcements to various groups. Each potential participant was asked to click on the email link within one of the announcements, and contact the researcher directly to establish their desire to participate in this research study.

Data Collection and Analysis

This qualitative phenomenological study collected data from the questionnaire and looked for common themes of what Patton (2015) describes as narratives of the phenomenon and the lived experiences of the DVRE by participants with PTSD (Creswell, 2013). The sample of 23 participants were asked to engage in responding to an open-ended 10-item questionnaire (*Appendix A*) that explored the lived experience of the DVRE to describe "what" each individual's DVRE experiences have been and "how" each participant perceived these experiences (Creswell, 2013).

The call for participants occurred through announcing the study in the DVRE event listings, and announcements to various groups. Each potential participant was asked to click on the email link within one of the announcements, and contact the researcher directly via email to establish their desire to participate in this research study. If the person wished to be a participant in this study, he or she could use their avatar

name and send the consent form to the researcher by email. A copy of the questionnaire was included in the combined informational announcement and consent form so subjects could consider their lived experiences in the DVRE as it pertains to their PTSD before deciding to become a participant and respond.

The announcement and informational consent form clearly described the qualities of the participants for this study: People who have PTSD both male and female who are physically located in the United States and Europe. Subjects gave their consent by completing the questionnaire (*Appendix A).*

Initial Questions and Follow-up

An initial set of questions were developed (*Appendix A)* to collect the descriptions of the DVRE as it applied to a participant's PTSD. The following questions were asked:

1. How did you first become acquainted with the DVRE?

2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?

3. What are some of your favorite things to do in the DVRE? Why are they your favorite activities? Do they have anything to do with your trauma or PTSD?

4. What are some things you do not like in the DVRE? Are there situations or items that trigger your PTSD?

5. Do you have your own private place in the DVRE? May I see it and take pictures? Tell me about your private environment.

6. Do you create items in the DVRE? May I see some of them and take pictures? Tell me about them.

7. How do you feel physically (in real life) while you are in The DVRE? How do you feel (in real life) after spending time in The DVRE? Describe your feelings as they relate to PTSD.

8. What are the characteristics of people you find engaging in The DVRE? Are you friends with others in The DVRE? Have you found it easier to make new friends in Real Life after making friends in The DVRE?

9. Who are your favorite creators or vendors in The DVRE? Tell me why their creations appeal to you. Does their work speak to your PTSD feelings? Do these items reflect your thoughts about your PTSD?

10. Tell me about how or if your activities and creations in The DVRE might help ease your PTSD symptoms.

One follow-up communication, via email and in-world, for each participant was to be determined if richer descriptions, details, and images in the initial responses are warranted.

Ethical Concerns

Good practices in data collection protocol included information about the questionnaire and follow-up questions from the researcher on the combined invitation to participate email, research information, and consent form (*Appendix A*). Transparency about the purpose of the questionnaire, and fully answering all questions to the satisfaction of the participant before the commencement of the study as well as the consent of participants through a return of the completed questionnaire to the researcher was required for ethical integrity; ensuring neutrality on the part of the researcher, and

making clear the roles/boundaries between the parties (APA, 2010; Janesick, 2011; Patton, 2015). Data collection and organization included proper data storage and back-up, dated and time-stamped emails, protection of the confidentiality of participants by coding their names or masking them in the data that will be released to the public, and careful data filing (Creswell, 2013).

There is a critical ethical concern that PTSD participants, as a protected class of people according to the *Ethics Code* (American Psychological Association, 2016). In case participants experienced triggering of their PTSD symptoms during the course of answering the questionnaire or at any time during the research process, the following protocol will be included in the information consent form, visually within the DVRE, and before, during and after every initial and potential follow-up.

Ethical Concerns and Strategies to Align with Ethical Research

Good practices in researcher protocol included information about consent (*Appendix A*), transparency about the purpose of the responses to the questionnaire, ensuring neutrality on the researcher's part by focusing on the participants through clarity in the roles/boundaries between the parties (APA, 2010; Janesick, 2011; Patton, 2015). Data collection and organization included proper data storage and back-up, dated and time-stamped email communications, and provision and reassurance of confidentiality for participants by coding their names and masking identifiers in the data that will be released to the public, and careful data filing (Creswell, 2013).

Another ethical concern was that PTSD participants are a protected class of people according to the *Ethics Code* (American Psychological Association, 2016). In this

particular study, participants with PTSD were not exposed to triggering events and images. This study was merely a qualitative narrative compilation of how PTSD participants experience the phenomenon of the DVRE to discover what aspects of this DVRE may ease PTSD symptoms. This assessment of their activities and experiences in the DVRE may shed light on the DVRE as a potential tool for patients to cope with PTSD symptoms. Participants were not asked about the cause of their PTSD or asked to recount trauma whatsoever at any time. The phenomenon of the DVRE is being studied to find out how participants use the technology and what their perceptions of it are.

There is a critical ethical concern that PTSD participants are a protected class of people according to the *Ethics Code* (American Psychological Association, 2016). In the case that participants might be triggered by their PTSD during the course of answering the questionnaire, or at any time during the research process, the following protocol was included in the informational consent form:

This is found in *Appendix A*: In the USA (including Alaska and Hawaii): The National Suicide Prevention Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for participants, and best practices for professionals: Call 1-800-273-8255 – URL: https://suicidepreventionlifeline.org/talk-to-someone-now/. The National Suicide Prevention Lifeline is for anyone in the 50 United States of America under distress from PTSD, and will help participants immediately, 24/7/365, through free phone calls (in many languages, including Spanish) and instant chat (for the hearing-challenged or disabled) and alert local assistance and put

participants in touch with local assistance based upon each participant's geographic location. Private and confidential.

Outside the USA: The Befrienders will help you immediately with 24/7/365 free phone calls for anyone in distress as a result of any aspect of this proposed study. Help is available in many languages in all countries and instant chat is available in these languages for the hearing-challenged or disabled. The Befrienders. Or can alert local assistance and put participants in touch with local assistance based upon each participant's geographic location: https://www.befrienders.org/. Private and confidential.

Mental Health Support Protocol on Demand for the Research Participants in This Study

This is found in *Appendix A*: In the USA (including Alaska and Hawaii): The National Suicide Prevention Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for participants, and best practices for professionals: Call 1-800-273-8255 – URL: https://suicidepreventionlifeline.org/talk-to-someone-now/. The National Suicide Prevention Lifeline is for anyone in the 50 United States of America under distress from PTSD, and will help participants immediately, 24/7/365, through free phone calls (in many languages, including Spanish) and instant chat (for the hearing-challenged or disabled) and alert local assistance and put participants in touch with local assistance based upon each participant's geographic location. Private and confidential.

Outside the USA: The Befrienders will help you immediately with 24/7/365 free phone calls for anyone in distress as a result of any aspect of this proposed study. Help is

available in many languages in all countries and instant chat is available in these

languages for the hearing-challenged or disabled. The Befrienders. Or can alert local

assistance and put participants in touch with local assistance based upon each

participant's geographic location: https://www.befrienders.org/. Private and confidential.

Summary

In review, this phenomenological inquiry asked 23 participants to answer an

open-ended series of questions to capture their experiences of the DVRE in regards to

their PTSD condition. The responses were handled without bias by the researcher to

establish and maintain validity. The questions can be viewed in *Appendix A*.

In Chapter 4, the data analysis of the responses began with convergence to detect

patterns and categories and then examined for emergent themes. Identifying outliers was

important in order to keep the data focused on the hypothesis and research questions.

Chapter 4: Results

Introduction

By examining their lived experiences, the purpose of this study was to understand how people with PTSD utilize the DVRE for posttrauma symptom relief. The research questions sought to answer these lines of inquiry *by asking: (RQ1)* What are the lived experiences of adults with PTSD who are engaged in the DVRE? And *(RQ2)* What do adults with PTSD and DVRE experience, perceive as changes in their narratives about PTSD through their utilization of the DVRE?

These research questions focused on obtaining lived experiences that might lead to what Moustakas (1994) defines as "textural and structural descriptions" of common lived experiences to define the phenomenon of the DVRE as it applied to participants' individual coping strategies for their PTSD (Creswell, 2013). This chapter discusses the study setting and participants, data collection and analysis, trustworthiness of the design, and the results.

Setting

The setting of the study was virtual, using the DVRE and email to collect responses to the study questionnaire.

Demographics

The participants were both male and female adults who have PTSD and who are physically located in North America and Europe.

Data Collection

The *location* of the data collection was virtual: The announcement calling for participants in the study (Appendix A) was initially sent out on November 19th, 2019, using the DVRE website "events" listings to call for participants in the study. The announcement instructed readers who wanted to participate to contact me via my university email address. Each person who contacted me was sent, via return email, the questionnaire which included university contact information, instructions about consent, and emergency contact information. Responses were collected by email until January 12th, 2020. The number of participants from whom each type of data was collected was 23, returning their responses via email to my university email account. The *frequency* of posting the announcement was approximately three to four times per week in that timeframe, or the duration of the data collection (November 19th, 2019 through January 12th, 2020). The responses were collected, encrypted, filed, and backed up on three external hard drives. All data containing raw and identifying information (questionnaire results) paper/digital files will be stored for a minimum of 5 years in a safety deposit box at my bank.

Unusual circumstances encountered: There were no variations in data collection procedures from the Chapter 3 plan. Unusual circumstances encountered were (a) the time of year (i.e., holiday season) slowed collection of data, (b) the use of email, which participants found uncomfortable because they were concerned about the privacy of email, and c) the university email system delayed or blocked two-thirds of the response emails because they were from outside the university email system.

Data Analysis

As each completed questionnaire was returned, the responses were initially read for content and openly coded. Then the responses were read again and coded, guided by the theoretical and conceptual frameworks in Chapter 2. The codes were organized into groups for clarity and associations. These codes were then organized into categories and themes, then analyzed for meanings.

The Coding Process

Coding the data: First, the participants' names were placed in a master list, with their respective contact information, and set aside. Then the participants' names were masked with codes: Each participant was renamed respectively "P01" (Participant 01) through "P23" (Participant 23). The 23 responses across all ten question tables were then studied by reading them repeatedly and similar phrases and passages across the responses highlighted to detect patterns of meaning. Informed by the theoretical/conceptual framework that guided this study, the codes were inductively distilled to form categories, and the categories were organized to show correlating themes e.g., control, safety, self, connectedness, skills, and resilience (*Table 1*.).

Ten tables were created, one for each of the ten questions asked, and populated with the participant responses. The ten tables were then edited to (a) mask identifying information such as avatar names, DVRE places, and links/web addresses, and (b) to clean up emojis, ascii word art, text gestures, spelling, and punctuation. These measures were taken because the raw responses were populated with potential identifiers linked to the respondents and hard to read.

How the Conceptual Framework Informed the Coding Process

The conceptual and theoretical framework for this study guided the detection of patterns, the formation of categories, and the development of themes. Yee and Bailenson's (2007) *Proteus Effect* theory proposed that an individual's creation of an avatar results in an idealized, uniquely individual representation of self, and this was reported in the lived experiences of the respondents. Mennecke et al. (2010) and Ann (2012) found that the creation of the avatar for use in VR social and educational interaction created an embodied social *presence* that is as real in the mind of the user as physical interaction. Using the avatar as a digital self in a virtual environment offered insight into the *presence* of the post-trauma self as reported in the participants' responses (Yee et al., 2009). *Presence* as a compelling factor in participant engagement in DVREs was reflected in the lived experiences of study participants (Fox et al., 2014). Yee and Bailenson (2007) suggested that by using an avatar, social reconnection can be initiated and acted upon by the participant, which supports themes of connectedness and control (Demeure et al. 2011; Lumley, 2013). As discussed in Chapter 2, Bandura and Locke's (2003) self-efficacy theory supports participants' reported experiences of gaining skills in self-assessment in the DVRE, and then forming strategies for socializing in RL. Weiner's (2010) attribution theory asserts that people can change through a sense of control over one's self-cognition, and this is expressed by the participants' accounts of working through a self-created avatar. Bandura and Locke (2003) related the idea that giving individuals the skills to self-address problems empowers them to move forward using new, healthy behaviors. Bandura (1993) and Weiner (1985) offered theories that support

the themes of safety, control, skills-building, and resilience that emerged from the

categories (see Table 1). The participants reported engaging in activities based on self-

motivation and setting realistic goals in a safe and stable environment (the DVRE) that

they chose, created, and controlled. For example, participants described active

engagement in affect control and emotional regulation in the DVRE, even during periods

of high stress. This self-directed pursuit of desired emotional states maps to Maslow's

(1943) Hierarchy of Needs theory of human motivation (Tamir, 2016). Studies have

shown that the DVRE can be beneficial in shaping behaviors that result in resiliency

(Ferrer-García, García-Rodríguez, Gutiérrez-Maldonado, Pericot-Valverde, & Secades-

Villa, 2010; Girard et al., 2009). Participants reported that they manipulate the DVRE in

order to experiment with, and proof new approaches to coping with PTSD symptoms in-

world, and then apply those newly acquired and internalized skills into RL (Mahood &

Hanus, 2017).

Analyzing the Data

An inductive content analysis of the responses was applied to detect common

patterns of meaning in the lived experiences described by participants, i.e., their

narratives of the phenomenon. Next, I applied phenomenological reduction to group

patterns, categories of substantive meaning, and found repeated common themes across

the responses. Bracketing out subjective presuppositions and researcher bias, the

emergent themes became evident in repeated instances of similar accounts by participants

across the data. After bracketing the data, all features of the data were treated with equal

value, or horizontalized. Horizontalization is part of the phenomenological reduction

process, whereby equal value is given to all of the participants` responses, and statements

unrelated to the research questions are removed to detect patterns of meaning after

removal of irrelevant, overlapping, and repetitious information in the data (Moustakas,

1994).

Then, using deductive analysis to interpret the patterns/categories/themes in the

textual and composite structural descriptions, I generated theoretical propositions that fell

in line with the existing literature reviewed in Chapter 2. The categories were integrated

to form an abstraction of the experiences of individuals in the participant group (Patton,

2015). The conscious, lived experiences of the participants reflect a combination of

objective reality and perceived experience, rather than a disunion between the

phenomenon and the subjective, intentionally conscious meaning of the phenomenon for

the participant (Creswell, 2013).

Themes distilled from the study included: Themes of control, safety, self,

connectedness, skills, and resilience. *Table 1*. *Categories and Themes* displays categories,

themes, and definitions: The categories and themes are defined, and include examples of

participants' direct responses that support the definitions, and development of themes

from the categories.

Table 1

Categories and Themes

Categories	Themes	Definitions
Escapism and avoidance	Control	Using the DVRE as a place apart from RL where users can have the psychological space to exercise choices, explore new behaviors, develop new coping skills, and make mistakes to learn from without RL repercussions or judgment. "It was the escape I desperately needed to cope with the constant, daily family abuse I often got at home. With [the DVRE], I could live a life I thought I'd never ever have, as I was suicidal, critically depressed at that time. And seeing my options were heavily limited, having real life escape was definitely not one I had." (P14, Q01)
	Safety	The DVRE is contained within an online service. Anonymity, and RL physical

		constraints and threats are non-existent within the virtual world.
		"I feel more inclined to express myself and it is easier to trust people because I have the choice to maintain my anonymity if I so choose." (P11, Q10)
Digital extension of the self (one's avatar)	Self	Extensions of self/perceptions of self that are projected into one's avatar; the avatar-self relationship, redefining the self through the digital self. Experimenting with new perceptions of self, self-compassion, affect control, self-discipline. The avatar as a reflection of self-perception. "In RL, I deal with gender dysphoria. It has compounded, and has been compounded, by my PTSD. I have dealt with incredible amounts of negativity in RL from family, friends and strangers over it. Being in [the DVRE] has allowed me to feel like I can be myself and not have to worry about the hostility and bigotry that so many of us face." (P23, Q02)

	Control	Gaining mastery through persistence in redefining self through the avatar, re-framing trauma-informed thinking about the self to healthier ideations. Successfully managing digital interpersonal relationships, identifying and setting firm boundaries for oneself (self-discipline).
		"I like to go to poetry open mics and live music venues. I like to go to historical sims and learning sims. I like to play games with a friend, or golf with someone. All these activities seem easier in the virtual world. I don't seem to be as concerned with who is around me, or who might be watching me. I feel less judged and less guilty about enjoying myself, less concerned people are watching me." (P11, Q03)
Control over one's virtual environment	Control	Translating virtual environment experiences into RL modification/control of environments (living space, workspace, public settings)
		"Since I have not been able to be intimate with anyone in Real Life for almost a decade, [the DVRE] has been a way for me to

	Safety	express those needs and desires in an environment that I can fully control." (P12, Q03) Creating, inhabiting, and visiting virtual environments that feel safe from trauma-informed triggers, hyperarousal, dissociation "[The DVRE] is a more predictable, safer environment, one can control experiences to some degree and thus feel safer." (P03, Q10)
Interactions with others	Control	Translating virtual interpersonal relatedness into RL relationships through boundary-setting, establishing limits with others, affect regulation in interpersonal exchanges, cutting off toxic relationships, mastery over dissociation and hyperarousal while engaging in relationships "I feel in better control of my life and not judged because physical and mental ailments I deal with on a daily basis." (P08, Q07)
	Connectedness	Interpersonal connectedness, relational engagement

		"I interact with a wide variety of people in DVRE. Two people are my closest friends, we share contact details in RL, and though we haven't made any specific plans to meet, we are open to it should the opportunity arise. They are very friendly, funny, caring, and I consider them my closest friends, even though we haven't met in RL. They have been there for me through some of the best and worst moments of my life." (P12, Q08)
	Resilience	Translating virtual interpersonal experiences to RL healthy behaviors using effective coping strategies, re-framing skills, and an understanding how one's self figures into social contexts. Intentionally re-approaching toxic interpersonal relationships and social settings to re-write the script, create positive outcomes and gain constructive relationships with others.
		"Making friends is easier than in real life. I am more open, less introverted, or afraid to be with others; yes I have friends in [the DVRE], people I trust more than my RL friends but

		yes, [the DVRE] helped me to slowly open with others." (P15, Q08)
	Safety	Learning to recognize toxic people who might be representative of past abusers and eliminating them from social and relational spheres. Engaging with "new" types of people who are caring, supportive, and dependable to create interpersonal stability. "I have some friends in [the DVRE] that I have become close to and can talk to like a real girlfriend. Especially one, with her I can talk as if we are out-world (with still keeping the safety of in-world privacy) and share my real life. She showed me how important contact with people is. It pushed me to keep contact regular in real life instead of letting it slide because of my situation." (P19, Q08)
Control over environmental stressors	Control	Manipulating the virtual environment to eliminate or minimize trauma-informed triggers. "I have a home in [the DVRE]. I am a member of a small group of anthros who

		have a close bond, and we all live on a sim together in our own homes. The sim has a specific pseudo-Medieval look to it. [Avatar name] and I share one of these homes and have a collection of "trophies" and other such memories from our adventures scattered throughout our house, all of which bring me joy to see them. We have a picture frame which cycles through photos that I have taken of our antics. I can have trouble with dissociation if my environment is too quiet, so the members of the sim were kind enough to install a small stream and a campfire in our yard to create constant ambient sound. My home is my happy place, my safe place, my place of solitude, my slice of heaven, and I adore it." (P13, Q05)
	Self	Developing the capacity to modulate arousal and restore equilibrium following trauma-informed dysregulation of affect, behavior, physiology, cognition, interpersonal relatedness and self-attribution

"There is more of a sense of freedom and open acceptance in a virtual space compared |

		to real life for me so there is less struggle and bale with myself over what I can or can't do virtually verses in real life. When I'm able to have a true sense of being supported through something that I struggle with in Real Life from those I know and surround myself within [the DVRE] then I am able to feel taken care of and loved on in real life." (P21, Q07)
	Safety	Creating virtual environments in which one feels safe and cared for "The sim is private and only members of my group are allowed access. It is yet another safe haven. I have one other cyber family member who suffers from intense PTSD and she seeks refuge there often in order to feel safe." (P04, Q05)
	Resilience	Manipulating the virtual environment by creating and patronizing locations that eliminate or minimize trauma-informed triggers. Purposefully approaching possibly triggering environments to build up resistance to triggers, and gain feelings of control and mastery over affect and reactivity

		"In therapy for my PTSD the issue of my own fear of the house I grew up in - my mom probably was borderline personality disordered according to two therapists I had. I spent a lot of time dealing with my fear of my childhood home when we did EMDR sessions. At the end of each session, I would choose my house I grew up in to put in the garbage can. The technique worked and I eventually was no longer afraid of the house I grew up in." (P03, Q05)
Interactions with others	Control	Exerting control over virtual interpersonal experiences, and then using successful outcomes in RL relationships through new skills in boundary-setting, establishing limits with others, affect regulation, cutting off toxic relationships, and engaging in relationships where there is power equality, consistency, stability, and trust. "The DVRE has been a great tool for me to learn and practice setting healthy boundaries. It is something I have never been very good at in RL, and it has landed me in some

		difficult situations to put it mildly. I think this in turn has helped ease my PTSD symptoms as it has allowed me to take more control over my real life, and confidently be able to say no to people. There is also the immediate relief for PTSD symptoms when RL gets too much, that I can retreat into my virtual world and immerse myself into a world where I have full control over what happens to my avatar." (P12, Q10)
	Connectedness	Translating virtual interpersonal experiences into RL social interactions that are inclusive, compassionate, non-abusive, mutually respectful, and stable. "My greatest struggle is the fear of being sexually propositioned, which now happens incredibly rarely, but is still a viable threat to happen at any me. [Avatar name] is a wonderful support in such instances, though, and I know that as long as I am with him, I am safe. I also remember that at any me, I can teleport away from a situation, and that offers a great deal of comfort." (P13, Q04)

	Resilience	Gaining skills in virtual social settings such as boundary-setting, affect regulation, and mastery over symptoms, and deploying these skills in RL society. "I have it found it easier to make friends in real life, after [the DVRE]. I have that insight from both worlds but mainly from [the DVRE]. I use that as my connection to those friends in real life." (P14, Q08)
Control over stressors	Control	Exercising control over virtual triggers, and then using successful outcomes in RL relationships through new skills in boundary-setting, establishing limits with others, affect regulation, cutting off toxic relationships, and engaging in relationships where there is power equality, consistency, stability, and trust. "The only time people trigger me in [the DVRE] is when I've let someone into my trust and they betray that. It has happened but fortunately, it has been rare. Otherwise, no one can hurt me in here and I am never helpless. In fact, I'm invincible. The only other

		thing to trigger me in world that I can think of are things related to 9/11. I used to get triggered by people who wore the name scrollers on the anniversary. That doesn't really bother me anymore but then it's been eighteen years [since 9/11]. Just time has healed that a bit. (P04, Q04)
	Self	Developing awareness of inner vulnerabilities and deploying psychological strategies to modulate arousal and restore equilibrium within the self through virtual world interactions and challenges, acquiring self-confidence, mastery over self-doubt, and setting boundaries to limit vulnerability.
		"Since my daughter got sick I had trouble spending time with people. I wasn't afraid to, I just didn't have the urge or energy to spend time with others. I have some friends in [the DVRE] that I have become close to and can talk to like a real girlfriend. Especially one, with her I can talk as if we are out-world (with still keeping the safety of in-world privacy) and share my real life. She showed me how important contact with people is. It pushed

		me to keep contact regular in real life instead of letting it slide because of my situation." (P19, Q08)
	Safety	Exerting control over virtual environmental and social interactions, then applying those lessons in RL.
		"I like to meditate, listen to music, build, and such to relieve my symptoms in the Virtual World. I also like to go to the meetings at [DVRE name] and [DVRE name]. For me, it makes me smile to know there are others who are like me and have the same struggles. My original avatar's mom of now 10 years is the one who first started to help me by getting me involved in [DVRE name] when she discovered it. I joined her about a year or two later. So, those things make me happy and I can relax." (P05, Q10)
	Resilience	Developing and consistently applying the capacity to modulate arousal and restore equilibrium following virtual incidents that raise trauma-informed habits of dysregulation

		of affect, behavior, physiology, cognition, interpersonal relatedness and self-attribution. "The DVRE has changed me. I have learned to open my eyes for so many other types of people I never met before in real life. It has changed my attitude towards life too. I don't think I make friends easier in real life now, but I do think the quality has changed for the better." (P07, Q08)
Self-reflective processing	Self	Utilizing newly acquired proficiencies developed in the DVRE to examine and recognize immediately poor coping habits, replacing them with more constructive approaches to potential stressors. "I get down over how it is not quite real and people can get pretty petty and nasty; I try not to, but do it myself too at times…each time I've tried (3 times,) it's ended up with some pervert really upsetting me with some vile sexual energy. I will then drop [the DVRE] for a few months until I can face the place ([the DVRE]) again." (P02, Q04)

| | Control | The ability to study how the avatar-self behaves in-world through reflection upon how successful or unsuccessful one behaved in a variety of DVRE situations. "When I am inworld I am there as deep as I am able and if I am not interrupted, I feel very connected to my inworld character. I laugh and cry and love and feel that in me behind the keyboard." (P19, Q07) |
| | Resilience | Deploying the capacity to self-examine and adjust thinking to more positive behaviors, cognition, interpersonal relatedness and self-attribution. "I love to build - am learning the building process. This does not have anything to do with my trauma but I do find that I want to live in the smaller buildings. And that I myself want to build smaller spaces and find that every home or building I have within [the DVRE] is more comfortable to me if smaller and cozy. I also like sailing and cycling as ways of exploring new regions within [the DVRE]." (P10, Q03) |

Creative experimentation	Control	Using non-rigid, flexible, creative thinking to conceive, initiate, and invent virtual objects, environments, and social interactions that the user can control.
	Self	Pursuing the acquisition of new skills that boost self-compassion, confidence, and RL technical proficiency (vocational skills-building)
		"Helping others going through difficult times has enabled me to turn what was the worst time of my life into something positive and meaningful. When the founder of the group had to leave [the DVRE] due to illness in Real Life, she asked me to take over and keep the group going. Fast forward four years later and the group has kept growing, reaching out to more people, and helping more people all the time. So to finally answer your question, my favorite thing to do in [the DVRE] is to nurture this group and make sure that it will keep helping people in need for as long as possible." (P12, Q03)

	Resilience	Gaining the ability to use non-rigid, flexible, creative thinking in RL that can immunize one from severe reactivity to trauma-informed triggers.
		"If humans are ingrained as a social creature. And arguably the majority of people in a VR might not have major access to tangible society. Then WTF good are you, if you cannot lead by example (or have the humility to learn/grow)? Transcendence would be nice, away from everything horrible Earth has to offer, don't you think? Can't happen unless some people take the initiative and break the mold." (P01, Q04)
Actualizing positive behaviors into RL	Self	The development and evolution of the virtual self influences positive change in the behaviors of the RL self
		"I feel really great for the most part when I am inworld seeing good friends and having some great times dancing and talking with other people and sharing some experiences. I feel

		spending time there really helps to ease my triggers and get a good picture that others out there have similar issues to mine." (P18, Q07)
	Resilience	Acquiring reflexive psychological strategies to regulate trauma symptoms in the DVRE that result in successful RL coping skills
		"To be useful helping others, sharing my skills and learning new ones day by day, gave me the motivation to open myself to unknown people, to socialize again leaving out of the door the suspicion, the fear, the distance. Becoming a Mentor in several groups of help and support, gave me the awareness to be considered and respected, finally ready to consider and to respect my-self once again. To create art pieces, to lock a moment, a landscape using [the DVRE]…I have been in therapy for about 4 years, with small progress, but [the DVRE] gave me the right push to keep talking with my therapist, involving her in my [the DVRE] experiences. My therapy got a happy end, but time to time

		I have a session to talk about the news in my both lives." (P17, Q10)

Trustworthiness

As the inquirer I was self-reflexive about the perspective, skills, and experiences I brought to the study. *Substantive validation*, according to Creswell (2015), depends upon my critical self-examination to maintain objectivity and avoid unduly influencing the study (Miles, Huberman & Saldana, 2014). This ensured objectivity and confirmability in accurately interpreting the data (Miles, Huberman & Saldana, 2014). Member checking confirmed the accuracy of my interpretation by checking with each participant to ensure that I understood their responses. The reader can decide how transferable the results of this study may be to his or her own area of interest. Dependability was maintained by consistently applying triangulation across all the participants' lived experiences; descriptions of their avatars, descriptions of their favorite objects, and descriptions of their favorite environments, and how these related to their manner of coping with PTSD, were used to form a deeper, more complex understanding of the DVRE phenomenon (Creswell, 2015; Greene, 2007; Miles, Huberman & Saldana, 2014).

Credibility

Credibility means establishing believability on the part of the research participants, who are the only legitimate judges of the research results. Implementation of credibility strategies stated in Chapter 3 meant establishing consistency of the findings across the types of data: Questionnaire responses, images, and the theoretical framework

upon which the research design was based. Triangulation and member checking are the techniques by which the truth of these findings is established. Methodological triangulation of the data gathered from the participants' individual conscious experiences as related in their responses to the questionnaire, descriptions of their preferred and created objects, their rendered environments, and how these express and reflect their manner of coping with PTSD, were used to form a deeper, more complex understanding of the DVRE phenomenon (Creswell, 2015; Greene, 2007; Miles, Huberman & Saldana, 2014). The second technique to establish credibility was member-checking, whereby I confirmed the data, interpretations, and conclusions with each participant via emailed updates and conversations within the DVRE. This ensured that I understood their motivations and intentions, that I could correct erroneous assumptions on my part and gather additional information from the participants.

Transferability

Transferability refers to the degree to which the results can be generalized to other contexts or applications. Using participants with PTSD who also have a deep knowledge of the virtual world would provide clear narratives. Knowledge about how participants with PTSD utilize DVREs through their narratives about how DVREs alleviate PTSD symptoms may inform future use of DVREs in the greater general population as a tool for the treatment of PTSD symptoms. Thick description of the results is a means to thick interpretation, which can connect individual participants to larger public issues. Implementation of transferability strategies stated in Chapter 3 meant establishing consistency of the findings across the types of data: Questionnaire responses, images, and

the theoretical framework upon which the research design was based. Readers of this research can responsibly decide how effective a transfer of these results into a different context might be.

Dependability

Dependability was achieved by consistently applying methodological triangulation of the data gathered from the participants' individual conscious experiences as related in their responses to the questionnaire, descriptions of their preferred and created objects, their rendered environments, and how these express and reflect their manner of coping with PTSD, to form a deeper, more complex understanding of the DVRE phenomenon (Creswell, 2015; Greene, 2007; Miles, Huberman & Saldana, 2014).

Confirmability

The confirmability criterion addresses the level of confidence that the study results are based upon and shaped by participants' lived experiences and not on my biases. This can be obtained by the corroboration of other analysts and by documentation of continuous re-checking of the data by me, including active scrutiny and documentation of negative responses that contradict earlier reports. Using an audit trail, triangulation, and reflexivity are the confirmability strategies.

An audit trail was made by documenting the data collection, analysis, and interpretation processes. I have described emerging themes detected in the data and using reflexivity found a rationale for why these themes exist and their meaning. These processes were all conducted in a transparent manner.

Results

Research Questions:

(RQ1) *What are the lived experiences of adults with PTSD who are engaged in the DVRE?*

(RQ2) *What do adults with PTSD and DVRE experience, perceive as changes in their narratives about PTSD through their utilization of the DVRE?*

Emergent Categories and Themes

Avoidance and Escapism

The avoidance and numbing cluster of PTSD symptoms is separated into two criteria in the DSM-5: Criterion C (avoidance) and Criterion D (negative alterations in cognitions and mood); the requirement is that a PTSD diagnosis includes at least one avoidance symptom (APA, 2013). The use of the DVRE by participants was described as not just an "escape" to avoid coping with PTSD, but the DVRE as a space to explore, experiment, and try out new, re-framed approaches to their PTSD and coping. The participants expressed using the DVRE as a safe place in which they had breathing room to sort out their feelings and thoughts, away from RL intrusions and interruptions. As P19 expresses, "I truly use it to escape RL. I have a collapsed marriage that was only here for support of my daughter. Now she is gone, and I really need to escape until I find who I am again." (P19, Q01)

Is using the DVRE to escape/avoid negative, or psychologically unhealthy? The DVRE requires a great deal of high-functioning skill, continuously shifting in terms of technology skill and interpersonal dynamics. For participants with physical disabilities,

the DVRE restores a sense of physical freedom and holistic restoration. Why not expand

that use to psychological disabilities? P21 shared, "The concept of being or doing

anything I wanted is appealing to me as someone with a physical disability which

becomes virtually invisible in an online virtual world." (P21, Q01)

Given P21's response, the question is whether the use of the DVRE is "escapism"

or "avoidance" if it provides a break from RL physical and psychological limitations so

that participants can focus on parts of the self that are negatively impacted or restricted in

RL. Perhaps the DVRE allows a calm, time-out space for evolving one's individuality,

creativity and sense of control. P09 described the calm of being free to evolve

emotionally and psychologically as a relief from suffering, a suspension of stress, and a

chance to develop positive self-management skills: "I get really nervous being around

people in both real life and in the DVRE, so my activities help me out in that I am doing

something but am staying calm while I do them." (P09, Q03)

Question 10 (Q10) asked, "*Tell me about how or if your activities and creations

in The DVRE might help ease your PTSD symptoms*." Participant 01 (P01) responded in a

single line, "Well, of course, whenever you successfully accomplish a challenge, there's

no greater feeling of self-worth/esteem/efficacy." Escapism, avoidance, and Internet

addiction versus using the DVRE to enter a space for evolving one's individuality,

creativity and sense of accomplishment, appeared to have given users opportunities to

challenge themselves in complex, technically difficult ways. This may boost self-esteem,

feelings of self-worth and confidence. P03 expressed the idea: "I gained a lot of skills at

making shapes and forming avatars that looked good. Many times I was told in [the

DVRE] that I made beautiful avatars. I was in a few beauty and modeling contests in [the DVRE] which I have to admit made me feel good." (P03, Q02)

Most participants expressed an awareness of the possible "avoidance" they are engaged in when using the DVRE; this indicates the ability to self-monitor their behavior in terms of avoidance, escapism, and Internet addiction, which in itself may empower users to self-scan their inner motives, actions and outcomes when using the DVRE.

Asserting self-control over time spent online is no different than self-discipline in other aspects of one's life; adhering to diets, schedules, obligations, etc. also requires self-discipline. Time management for Internet use is a skill for all users of the Internet to practice. Regulating time spent online means setting boundaries, just like other goals in life: "When something in [the DVRE] happened to trigger my PTSD, I cried and often logged off. I may still cry but learned to use mute and derender to erase the offender from my life. I feel safer here in [the DVRE]." (P15, Q07) Another participant commented, "My trauma symptoms involve anxiety and worry. [The DVRE] is a great distraction from that as long as I remember to limit my time and if I am learning to build something and make sure I don't get frustrated with the process. I find I am quite calm when I have something to create and that it is quite good to have a chat on the forum or the groups because then I can be a part of something social that most people get from their jobs I guess, at the moment I am pensioned and at home a lot." (P10, Q10)

Leveraging the DVRE for Self-Empowerment

Participants indicated having a sense of power over their interactions and time spent in the DVRE—empowerment they rarely experience in RL: "No longer being able

to live in the city where the assault had happened, I moved to a small town to be closer to my sister, but apart from that I didn't know anybody there. This, coupled with newfound agoraphobia and PTSD made it difficult for me to make connections in Real Life, so I found it extremely helpful to get peer support through [the DVRE] when I was going through my recovery." (P12, Q03) Leveraging the DVRE for self-empowerment might fall under "escapism." However, when unable to control RL sensitivities stemming from PTSD, the DVRE seems preferable to "escaping" RL problems with other unhealthy behaviors such as substance use. In the DVRE, the mind can be free to explore new psychological coping strategies, develop healthy frameworks to examine trauma, and create positive experiences that are transferable to RL. One participant comments, "I feel happy and excited to be in a Virtual World. I feel rejuvenated and relaxed after being in [the DVRE]. For me, this is a very rare thing as I'm almost hypersensitive to everything in RL because of my PTSD." (P05, Q07)

Themes of control through self-empowerment are explored further in this analysis, however it is important to reframe concepts of avoidance and escapism to include positive feelings of empowerment, self-governance, skills development and freedom of choice (control) over DVRE inputs and environments; structures that are not controllable or predictable in RL.

I usually feel very good physically while in the DVRE, and it is very rare for me to get triggered while I am there. How I feel in RL afterwards vary a little depending on what I have been doing. Mostly I feel very fulfilled after doing something meaningful or enjoying the company of friends, while other times I

feel drained and exhausted if there has been a lot going on…It allows me to go to my happy spaces when I feel the need, and I find this extremely helpful when it comes to my PTSD symptoms. Oftentimes just knowing that I have the option is enough to alleviate mild to moderate anxiety, irritability, sadness, etc. (P12, Q07)

If anyone brings it up or triggers yet another moment right after it's over, I'll remove myself entirely from it [the DVRE]. Block and/or ignore it. I have that choice in [the DVRE]. No one else is going to give me the same respect I give them 98% of the time. (P14, Q07)

Extension of RL Self in the DVRE

Using the DVRE to create an avatar, and make choices that reflect a participant's current RL self seems to be an interactive, evolving activity, a two-way street in which the RL self is being influenced by the DVRE avatar self, and vice-versa, in real time.

It's a double-edged sword. What I did in the DVRE really saved my life, helped me overcome several traumas. But I feel I'm very vulnerable because in the DVRE I'm just the same person as in real life. I haven't found a balance between the healing effects of it, and the triggering effects. But I do believe in any case, the DVRE has been a MAJOR positive factor in dealing with trauma. I also found the strength to actually seek help at a therapist, see doctors, thanks to friends I would never have met in any other way. (P07, Q10)

Being able to look and "be" how I feel inside in [the DVRE] has often helped ease my issues with PTSD and my other conditions. No, it certainly isn't quite the same as RL, but, it's something. Being able to log into [the DVRE] and like how I

look there does somewhat ease the self-loathing I feel when looking into an RL

mirror. (P23, Q10)

How Extension of Self in the DVRE Affects RL Self Perception

DVRE lived experiences area subset of RL experience. However, participants

expressed repeatedly the continuous two-way exchange between DVRE extensions of

self and RL self-perception: "In creating the two avatars, I had connected the two parts of

my personality. I realized we all have different prisms that make up our personality and

the two represented a majority part of me. I was neither one of the avatars but a part of

me was in both of them." (P03, Q02) While participants expressed knowing the

difference between RL self and DVRE self, there is acknowledgment that the selves

communicate and inform each other.

> To be useful helping others, sharing my skills and learning new ones day by day,
>
> gave me the motivation to open myself to unknown people, to socialize again
>
> leaving out of the door the suspicion, the fear, the distance. Becoming a Mentor in
>
> several groups of help and support, gave me the awareness to be considered and
>
> respected, finally ready to consider and to respect myself once again…I have been
>
> in therapy for about 4 years, with small progress, but [the DVRE] gave me the
>
> right push to keep talking with my therapist, involving her in my [DVRE]
>
> experiences. My therapy got an happy end, but time to time I have a session to
>
> talk about the news in my both lives…[The DVRE] is my therapy… the infinite
>
> opportunities to try so many different things, make me feel more focused and
>
> challenged to experiment with things. I can forget what I struggle for, being who I

want to be and nobody judges it. The chance to interact safely with various people

coming from other countries, with their own personal attitudes, it's a great

emotional lever to open yourself, even if the process can be long and often hard to

complete. I can do things that should be impossible to repeat in RL, for many

reasons, and that makes me part of a community and not tied to a specific

condition, whatever it is. (P17, Q10]

Figure 2. The Avatar

Figure 2. Participants' avatars.

Extension of the Pre-Trauma Self

An intriguing theme that emerged from the participant responses was the concept

of the self before trauma and the self after trauma. Other participants described their

avatars as merely a more idealized version of themselves in RL. This was illustrated by accounts of the projection of self into the DVRE. The idea that PTSD was experienced as either a "before and after trauma" duality, remembering and realizing the self as profoundly changed after the traumatic event, indicates a possible type of PTSD.

> I'm forever 24 years old in [the DVRE]. Again, I never planned this but just recently put this together. When I was 24 years old, I had not yet suffered the trauma that resulted in my PTSD. In here, I'm not only a younger, un-traumatized version of myself, there is no mention of my trauma or 9/11 in my back story. Those things never happened to me in this reality. My personality today is not a pleasant one in real life but in [the DVRE], I can allow the old pre-trauma me to run loose and be free. The "me" everyone in [the DVRE] knows is the old me, not the current me. When I log in, I leave this me behind and revert to maybe… age 24? (P04, Q02)

> I despise the concept of Real versus online or in real life versus virtual spaces. I am real regardless of where I am as are those I come in contact with. My avatar is very much an extension of me not an escape from me or an unreal version that I aim to live up to or a fantasy. The harsh reality as someone that is confined to a wheelchair and the real world isn't accessible [is that] a virtual world is. (P21, Q04)

Child avatars can seem disturbing but seemed to provide possibilities for choice and change of self in the DVRE: The DVRE user chose to represent themselves as they were before traumatic events took their sense of childhood away. A second chance at

childhood: "Some of my most favorite things is being a child avatar of the tender age of 2 and also running a [DVRE] Maternity Clinic when I'm in my adult form (21+). The child avatar does have some relevance to my PTSD as my trauma did start then." (P05, Q03) There appeared to be *types* of PTSD that were expressed in the DVRE, the before-and-after perception of self, and those who described their trauma as C-PTSD, and perceived themselves as a singular lifelong self, struggling with post trauma events that were part of their lives from a very young age running continuously throughout their lives.

Discussion of CPTSD

The concept of the self before trauma and the self after trauma. Other participants described their avatars as merely a more idealized version of themselves in RL. This was described in accounts of the projection of self into the DVRE. The idea that PTSD was experienced as either a "before and after trauma" duality, remembering and realizing the self as profoundly changed after the traumatic event, indicated a possible type of PTSD.

I have C-PTSD. Complex type of PTSD. I am hypervigilant. I latched onto every word I see and/or hear. Text or not, I hear that tone others put out. Like in this email, I might come off as slightly irritated and confused at the start. I listen more than I talk. That's because I want to know who I am surrounding myself with. If someone comes off as pretentious, disgusting in an overly sexual manner, dramatic, black and white thinking, closed minded or bitchy. I will leave that area most likely. As those people will just make me upset and make me extremely anxious. Any form of guilt tripping, manipulation, gas lighting, talking down to others will trigger me too. I lash out angrily at the abuser in that case, to defend

the victim. Get in between, when I shouldn't. I'm learning to step back from that,

distract myself or other ways to get me in a calm state but I also reach out.

Conflicts trigger me, any hostility I sense does too. (P14, Q04)

Before-and-After Trauma Selves versus Continuous C-PTSD Selves

The participants expressed distinct differences in their perception of their PTSD:

Some knew a life before the trauma event and described a before-and-after trauma self

that appears to play out in-world. Other participants expressed C-PTSD, the chronic,

ongoing result of continuous trauma from childhood, as a factor in developing their

preferences in the DVRE. For people with C-PTSD, there was no before and after trauma

concept: "My avatar is as pretty as I can make her. To me, my avatars are like dolls. I

play dress up with them. They match my looks and personality when I was in my

twenties." (P09, Q02) This perception of self is echoed in Participant 10's comment, "My

avatar does look like me because I like to be the same person everywhere I go - I

understand that I can do, be, create whoever or whatever I want within the world but I

like to be myself. So it is a female alt with same-ish hair build etc." (P10, Q02)

> I feel I'm very vulnerable because in the DVRE I'm just the same person as in real
>
> life. I haven't found a balance between the healing effects of it, and the triggering
>
> effects. But I do believe in any case, the DVRE has been a MAJOR positive factor
>
> in dealing with trauma. I also found the strength to actually seek help at a
>
> therapist, see doctors, thanks to friends I would never have met in any other way.
>
> (P07, Q10)

Creation of Self Not Possible in Real Life (RL)

The DVRE may provide a way to try new approaches to PTSD management that are not possible in RL. The user's ability to develop a strong, positive sense of self, free of RL limitations can be supported by the use of DVREs.

First, let me clarify, I have C-PTSD. I had PTSD from childhood/adolescent abuse and bullying at home, school, and church. The abuse was physical, emotional, and sexual…After a failed surgery for my chronic illness, I was told I had PTSD from having to now live with a debilitating illness the rest of my life. The disease I have took so much from me and continues to rob me every day…One thing I loved doing in RL that quickly ended is dancing. I was still able to work when I first found [the DVRE] and was working my normal overnight shift. I clicked on something in [the DVRE] and slid away in my chair to tend something on the other side of the room. When I returned, I saw my avatar dancing for the first time. I cried for twenty minutes watching this little cartoon character [self, avatar name] dancing. It was as if things the illness took away from me were given back to this little representative of me. It still makes me a little giddy. (P06, Q07)

However, Participant 06 next indicates in the same response to Question 07: "My illness causes me to get tired and have dizziness. Being in [the DVRE] more and more causes me to feel physically ill. Because of this, I am torn. On one hand, I got part of my life back in SL that was taken from me in RL along with so much of my independence. Now, I am being robbed of this as well and it triggers the C-PTSD." (P06, Q07) P06 first described a positive outcome of the use of DVRE to create a self not possible in RL; a

tool of empowerment in coping with CPTSD, but understood that using the DVRE resulted in feelings of helplessness, lack of control, and anxiety. Could P06 have used the elements in the initial positive experience in the DVRE to regain a sense of an empowered self?

This contradictory narrative echoed some of the mixed feelings participants have about the relationship between themselves and the DVRE, indicating conflicted perceptions, negative and positive, about the DVRE versus RL, or the effect of physical illness and psychological stress on that perception: "In the physical world, (which some people call 'real life'), I have trust issues. I am very loyal, and trustworthy, but it takes me time to trust others. By taking a nonhuman form, I avoid the trust issues I experience in inmate relationships which move too fast." (P11, Q02) P08 described empowerment of the self by keeping the use of the DVRE in perspective by keeping in mind that leaving uncomfortable environments in the virtual world was at one's fingertips, and was an empowerment to self-awareness.

> [The DVRE] is my social networking. It's my therapy, counseling, creative outlet
> all from my bed in my jammies. No interactions with RL people in reality…I
> know these avatars running around are real people too, but I am not intimidated
> by them, most of them. If situations get out of hand I can always teleport home
> and regather myself. After I leave for the night or to do something in RL, I miss it
> [the DVRE]. I feel safe there. I feel in better control of my life and not judged
> because physical and mental ailments I deal with on a daily basis. They don't
> know if I have to take meds for this or that. I am just cute there. (P08, Q07)

Creative Expression of Self

Creative interpretation of the self in the DVRE was a theme in which participants described how they created a self that is improved from what their self-concept was emotionally and psychologically. Accounts of self-creation in the DVRE, and how the participant evolved in his or her digital self revealed a great deal of creativity, imagination, and a sense of playfulness. Participant 21 shares, "[The DVRE provides] the space to use dance in my own healing to depict on a stage some of the more difficult parts of my trauma that don't always and can't be put to words or to raise awareness and shed light on those things." (P21, Q03). Another participant explains: "My avatar is modeled after myself although at an earlier age…It really lets me go back to the time when I was half the age I am now and relive how I got to act and play and interact. I was kind of wild and can safely be that again. It makes me feel good in real life even if it is just for a little while." (P19, Q02)

> [THE DVRE] has also been a place for me to engage in and share my writing. I write poetry, short stories, and novels. I have written poems attached to [THE DVRE] as well as a few short stories, one of which is pretty much why I am in [THE DVRE]. Some of my work has been published in [THE DVRE] magazines and is on display in a few writing venues. This has been an outlet to help me deal with all aspects of the CPTSD. (P07, Q10)
>
> I enjoy spending time with friends, listening to music, exploring, DJ'ing, and have taken part in [DVRE group] since 2009. But it's also not uncommon at all for me to log in and just sit at home while experimenting with outfits or talking to people

through IM's or just watching my cats run around downstairs. The tendency to sit at home and talk to a few people (or maybe no one at all) is somewhat PTSD-related, in that I've had my share of negative experiences over the years, and just sometimes keep to myself out of fear of another negative experience. DJ'ing sometimes is also a way for me to express what I'm thinking or feeling through the songs I play without actually speaking of what I am going through or what's on my mind at the moment. (P23, Q03)

Self-Awareness that Feeds Self-Empowerment

Participants were keenly aware of their PTSD, and its resulting unhealthy personal limitations and interpersonal interactions. The DVRE may have provided a way for participants to experiment with new approaches in their PTSD management that were not possible in RL. Creating and managing boundaries, experimenting with or pushing one's perceived limitations beyond what can be achieved in RL seemed to empower participants.

Figure 3. Participants' Virtual Homes and Home Environments

Figure 3. Participants share their created homes and home environments.

Across the participants' responses, RL self-awareness in experiencing the DVRE

seemed to flow seamlessly between RL and the DVRE in the minds of participants. The

following description indicates that the participant felt uncomfortable when observing his

or her avatar being crowded by or too close to other avatars in the virtual environment:

"Avatars standing *close to me* can be a challenge because they seem not to have the same

concept of personal space." (P21, Q04) This participant expressed awareness of

psychological anxiety and discomfort, but the "crowding" was occurring to his or her

avatar on the screen before him or her. In most of the responses, there was a fluid

transition in the participants' described, lived experiences between PL and the DVRE, as

if in their minds, the lived experiences between RL and the DVRE had permeable

boundaries. Note how responses shifted between the DVRE and RL without indicating

that shift: "My current avatar is who I see myself as the one I'm most comfortable with

which is a confident, outgoing, independent, and friendly person who is succeeding in

things that I couldn't do in real life." (P05, Q02) Another participant comments, "[Avatar

name] is the 'me' I want to be. She has my curly-red hair and green eyes. She is more

slender but only because the majority of the clothing is for smaller avatars. She is the

equivalent to my Real Life height. She, however, can do all the things in her world that I

can no longer do in mine." (P06, Q02) Other participants similarly expressed the open

exchange between the RL self and digital self. For example, "When I came to [the

DVRE], I escaped my dreadful childhood by reading as I did throughout my life and I

was aware that I only dreamt in black and white. When I asked other people, they always

said that they dreamt in color. I had no interest or confidence in doing any kind of art. But

by the end of my first year in [the DVRE], I was aware that I now dreamt in color. [The

DVRE] had changed my brain." (P03, Q03)

    Another participant detailed her newly acquired self-awareness stemming from

the DVRE as follows:

    I have never really thought about it. I guess it is almost like I'm two people, my

    vampire self in [the DVRE] and the real me. I step from one into the other

    effortlessly and I am not aware of my other self. Well, I shouldn't say that. I am

    aware but it is like I see my other self in the third person. Right now, for the first

me, I'm seeing my [the DVRE] self as a form of dissociation. I can talk about my

real life while I'm in [the DVRE] but it's like I'm talking about someone else.

I guess I really can't answer the question of how I feel physically (in real life)

while I'm in the DVRE? The dissociation prevents this. I can say that as my

vampire self I feel safe, powerful, and undefeatable. I feel good. It is like I don't

have PTSD in [the DVRE], but I could talk about that other person who does.

I never thought about how I feel when I get up from the computer. I have studied

that the last couple of days so I could answer this question. When I log on, I

instantly become my vampire [the DVRE] self. When I log out, it takes 20-30

minutes for me to gradually revert to my RL self. The hypervigilance and

everything fades back in over that me. (P04, Q07)

Can't avoid triggers much or at all in general, but the choice in [the DVRE] is

easier to get. I want to have that sense of calm, easy going and time to myself

and/or with others. I can function under stress, but I rather not deal with the

heaviness of it. I have zero energy, being depressed for my whole life does that to

me. My emotions are often dulled out and I talk about coffee and chocolate a lot,

as that's the only way I have small amount of energy. (P14, Q10)

Of course, in reality, the virtual world experience is a subset of RL experience.

However, there was a distinct exchange between the two realities that was fluid and had

highly permeable boundaries. "I met a woman who said she is claustrophobic in RL and

was shocked when at her first crowded ball [in the virtual world] where the floor was

jammed with people, she had a panic attack. From then on she always stood at the back of groups [in the DVRE]." (P03, Q07)

My activities really help focus on what is important, not so much what has happened. Doing what I do inworld has kind of reshaped my personality and thinking over the years and made my symptoms ease up, though I still have the occasional trigger, they are far and few between. So, to me the virtual world community has been a worthwhile experience in total since I have been there for 12 years. (P18, Q10)

Just being in-world allows me to escape my life most of the time. Right now, it is harder but still works. Creating my sound effects or decorating and working on my beach house allows me to separate myself from the rest of the world even more so. I believe that viewed in a certain way, digital worlds can be a help to people with PTSD or other issues to either completely cope or as a tool to deal with the things that trigger them or bother them. I know adults here who are children, and it lets them escape and some who are vampires as a way to protect themselves. They can do this easily and to their own comfort level and with the right friends and/or support in world can function a little easier. (P19, Q10)

Themes of Control over One's Environment and Interaction with Others

Across the responses to all the questions, the theme of control over one's environment, as well as themes of control over one's interactions with others, was expressed. This included themes of control over one's anonymity, roleplay, themes of

intimacy and relationships, and control over stressors and triggers in the DVRE that cannot be leveraged in RL.

> The DVRE has been a great tool for me to learn and practice setting healthy boundaries. It is something I have never been very good at in RL, and it has landed me in some difficult situations to put it mildly. I think this in turn has helped ease my PTSD symptoms as it has allowed me to take more control over my real life, and confidently be able to say no to people. There is also the immediate relief for PTSD symptoms when RL gets too much, that I can retreat into my virtual world and immerse myself into a world where I have full control over what happens to my avatar. There is a very real risk that this becomes an avoidance behavior, so I am very mindful to not neglect my real life in the real world. That said, I would feel extremely isolated and alone without the DVRE and all the very real friends in pixel form I have within it. (P12, Q10)
>
> My best friend and partner in [the DVRE] is named [avatar name], and finding activities to do with [avatar name] are my favorite things to do. We like to explore new sims together. The rich stories and memories that we create together are healing to the soul…we've experienced more in a year and traveled to both realistic and fantastical places, laughing together all the while, than we could hope to do in several lifetimes. Our [the DVRE] life is a constant adventure. Occasionally, I will attend [DVRE group] or [DVRE group] meetings, but other than the possible desire for thrill-seeking instilled in me from having PTSD, my

[the DVRE] experience is largely an escape from my day-to-day struggles. (P13, Q03)

Control Over One's Experienced Environment

Participants reported that having control over the virtual environment simultaneously being experienced by the RL self and digital self was empowering. "The DVRE seems to provide a digital space in which to develop strategies to cope with distressing situations: When I get griefed and there are loud bangs I close the DVRE and leave. (P22, Q04)."

Playing in [the DVRE] makes me feel relaxed. My anxiety lessens. I can find sims to suit my mood, either tranquil or peaceful where I can soak up the scenery and be meditative, or exciting and adventurous to distract myself from my real-life symptoms. Both of these can be exactly what I need at the time for my real-life self to find a sense of peace. I laugh more playing [the DVRE] than I do at any other me of the day, which is important to note as I have also been diagnosed with major depressive disorder. It is a wonderful tool to help me cope with both the physical and psychological symptoms of PTSD. (P13, Q07)

There is one group I am in where, on occasion, a few people will engage in conversation regarding things that can trigger my CPTSD. There are many places I stay away from as they can trigger my illness. If I desire to go to one of them in order to hang out with a friend, I have to derender most of the things in the place before I can enjoy time with my friends. (P06, Q04)

Anything that is laid back, easy going and fun in a calm sense. I am in my very

late 20s of age. I've dealt with emotional, verbal and mental abuse on a daily basis

for my entire life until near end of 2018. So pretty much anything with little to no

stress involved is what I seek. In [the DVRE], I get that choice freely and that's

what I am doing for the past 10+ years in this virtual world. (P14, Q03)

Freedom of choice themes, even accounts of choosing to let go of freedom in a

limited controlled environment, might be interpreted as taking a chance, exploring past

trauma in a controlled, choice-rich environment. After all, the participants were

physically situated in RL, and could log off, or make boundaries in the DVRE that gave

them a sense of empowerment, but did that translate to empowerment in their RL or real

lives offline?

This is the perfect place when I feel the need to isolate to come and spend some

time with friends with boarders. This means my friends are my friends, we don't

judge and we don't delve too deep into each other's problems, we just try to have a

good time. There have been times when I wake from a nightmare the day before,

and then get on [the DVRE] where I feel safe the next day. (P16, Q07)

Environmental factors in the DVRE are controlled because the participant has

choices to manipulate the sight, sounds, and access by others to their environment. In the

DVRE, one can create the sound effects, mood, and overall "feel" of an environment:

"My PTSD is stress related from having been in the military. Noise triggers. I don't live

in a "quiet room" but it is real close to it. When I leave the DVRE, I am pretty relaxed

and don't get as upset as I would if I did not have that outlet." (P09, Q07) If a participant

described that creating their own personal space was not interesting to them, they found existing environments that were personally relaxing and engaging (favorite places).

I had an amazing realization just now, writing this. I have created my real life here in a house like the one I grew up in. That chest is in it as are pictures that reflect my real life. Pictures on the wall include ships captained by my ancestors and even a picture of my grandfather. My real life is in [the DVRE] but here is the kicker: I spend absolutely NO TIME there! Interesting. I'll give you a tour of that place too, if you like. (P04, Q06)

I create soundscapes such as the sound of the ocean that anyone can drop a ball on their property on in their house and it will give them the ambience they wish. RL I have over 70,000 sound effects so they are very real and not the ones people steal off the internet. Being a sound pro, they are adjusted to be optimum in world. I have a marketplace store with a few up. Now that I am back online, I will begin to put more up. I have also been learning animations that I hope over time to use inworld. (P19, Q06)

Control over Interactions with Others

Participants recounted examples of having control over interactions with others in the DVRE. Having the freedom to control how close another person in the DVRE could get emotionally and psychologically, even accounts of choosing to let go of freedom with others in the DVRE might be interpreted as having taken a chance, exploring past trauma in a controlled, option-rich environment. In RL, these relationship options were not possible. The participants were physically situated in RL, and could walk away, log out

of the DVRE, or make interpersonal boundaries in the DVRE that gave them a sense of empowerment over DVRE situations. P11 commented, "I think people in virtual worlds are as diverse as people in the real world. It is just easier for me to set boundaries in the virtual world. (P11, Q08)"

Figure 4. Participant themes of control over self and interactions with other people in the virtual world, including close, intimate relationships and belonging to social groups.
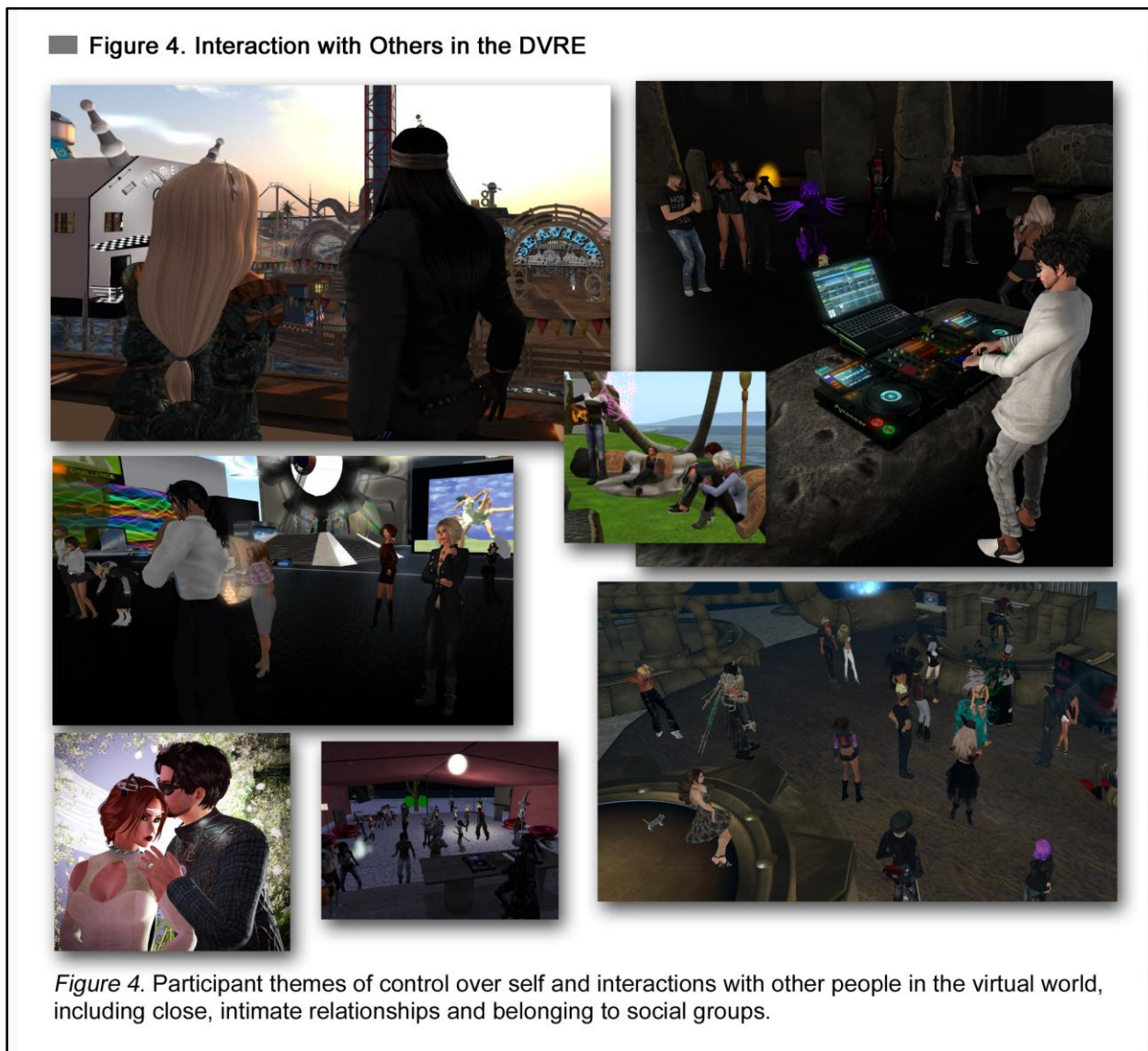
Participants further described their interpersonal behaviors in the DVRE as ways of exploring their fears in a safe place, not just perpetuating interpersonal avoidance.

They seemed to approach this by using the DVRE as a testing ground to re-frame their interpersonal problems and experiment with new approaches to interactions with others.

> [THE DVRE] is my escape. It is my place where I can just be myself to an extent that I am allowed. I have my own place because I am able to earn my own money without hassle. Can't do that in real life. Everything is overly complicated with that system in real life. I can easily choose to leave or stay by one landmark/teleport. I can block people, making them shut up if they're going to cause trouble. I have friends who have that power to boot a troublemaker too. I am very selective in both locations and people. I like the low lag, friendly places, and friendly people. I get more triggers happening in real life, than on [the DVRE]. It's a choice and exposure therapy is not going to work at all, in my state right now. I'll get out of my comfort zone from time to time in [the DVRE], regret it instantly afterwards but it's an experience at least. (P14, Q10)
>
> I do a lot of things in [the DVRE] that are not fun per se, but they are rewarding. I manage/own one of the oldest clubs in [the DVRE] and its primary mission has always been to be a safe haven for women. I find this gratifying as I have always had a need to protect people and care for them. Maybe that is the reason I chose a career in EMS. Maybe that is why being helpless was so traumatizing for me. I've also gathered cyber friends and family around me, and I find that rewarding for much the same reason as above. Until recently, [the DVRE] was my only social outlet and probably filled that need, though I was socializing at the much younger

and untainted me. All that being said, I do enjoy living and playing as the vampire me on my own region with others in my cyber family. That sim has become something of a hobby, and I enjoy spending me there. (P04, Q03)

Control over one's anonymity

Testing new approaches to personal interactions between themselves and others in the DVRE: Anonymity is a built-in feature of DVREs through the creation of the avatar. Anonymity as a liberating factor in empowering people with PTSD to control interactions with others seemed to be a reason why the DVRE has been embraced by the participants: "For the most part, nobody knows what exists behind the screen so I never feel judged or pitied in the same way I would in real life due to the disability. I'm definitely more equal and people like me or don't like me based on qualities over appearances." (P21, Q07)

Control in intimacy and relationships

Participants described in detail the importance of roleplay as an expression of self used to control interactions with others. Themes of intimacy, family, partnership, and closeness were expressed: "In [the DVRE] I spend most my time with my partner, no sex just cuddles, with my [DVRE] heart family." (P15, Q03). Participants further related:

I have two avatars…One avatar is an adult version of myself who is a vampire. I…find this to be super helpful to me as many people generally don't like and are afraid of vampires. I would much rather someone be afraid of me…over automatically liking me and drawing attention toward me that is very unwanted even when harmless. My personal trauma directly involves other people, so I have a huge allergic reaction to people in general so my vampire self and the vibe it

gives of gives me a sense of deep safety. This is something as a disabled person that I am not able to access easily because the trauma is in both worlds...people are people and people are generally unsafe and being disabled means I'm unable to protect myself to a great degree. (P21, Q02)

My child avatar self is me that still exists that can at times represent the wounded child I once was. She loves to dance and is very playful. Dance can be very much an expression of my Real Life experiences. As an adult survivor of childhood sexual abuse even the adult me struggles with anything with sexual content. My like version of me has less of an issue with the idea that it bothers me when having to speak to those around me about it. She can usually handle it rather cutely and people are generally more willing to do less of that stuff around a child then they are an adult who is old enough to handle it. Both avatars are a more authentic version of my raw and real self then is able to survive in the real world. I am able to release the one thing that scares most people though I still deal with a little stigma on mental health as far as an unwillingness from others to hear me out and support it as far as adapting something for me based on my trauma. I am also able to choose the style that I wear and have more choice and control over that as a disabled person then I do in RL. Physically I am nothing like the versions of myself online. (P21, Q02)

Before I met my RL partner whom I now live with, I had a number of [the DVRE] lovers who will always be dear to me. I partnered and married one of them: He was from Belgium and once we met in RL for a week's vacation in Vancouver. It

was an amazing time, but he was married. I loved planning the wedding. I hadn't

had a formal one in RL, but I didn't want the wedding in [the DVRE] to be just

like RL. After all this is [the DVRE]. So, I planned it like you would a show. I

based our vows on Druid ones I found on the Internet. Volcanos erupted at one

point; at another point a large globe appeared between us to represent how

geography separated us. Storms raged and flowers fell from the sky. I was very

proud of how the whole thing turned out. (P03, Q03)

Since I have not been able to be intimate with anyone in Real Life for almost a

decade, [the DVRE] has been a way for me to express those needs and desires in

an environment that I can fully control. There is a big red X in the corner that I

can hit at any me and instantly disconnect if I should feel uncomfortable. Nobody

can force me to do anything I don't want in a DVRE, which has allowed me to

experience at least some form of intimacy since the assault. It is a fairly important

part of my DVRE experience and has some relevance due to my PTSD not

allowing me to express that part of me in Real Life. (P12, Q03)

During my marriage, I lost myself. My RL therapist said, "Because he doesn't

beat you, you think everything is fine." So, when I came to [the DVRE], although

my career was going great, as a person I had lost a lot of parts of me. The first

change in [the DVRE] was that as a younger woman interacting with the

environment, I felt sexually aroused in a way that I thought was long gone. Then I

learned to flirt which I had never had the confidence to do in RL. Both transferred

in RL to men other than my spouse. I probably would never have gotten divorced

if I hadn't been in [the DVRE], but it showed me so many things about male-female relationships. I never said anything, but the people who were my closest friends in [the DVRE] began to say that they noticed a big change in me. That I was much bolder and interesting. Much of this seemed to transfer into RL. (P03, Q08)

Forming in-world family bonds and relationships

Participants described themes of approaching and forming meaningful relationships that enabled them to experience intimacy, family and interpersonal closeness:

I am a fiddler in a Tiny band. That is my family. I met the most amazing man here and we are planning our RL futures together…I still get mild attacks but it is better…I have a very small team but that doesn't matter because I am part of the bigger picture. I lost family to cancer and I fight for them…But it does me good to help, even if it's a little bit. (P08, Q03)

A big concept within the trauma as far as abuse circles is the concept of a family of choice, Not a family that you just happened to be dropped into but a family of people that you developed a bond and true connection with and [the DVRE] allows me that. I get that in many ways being involved with a family-oriented vampire clan. (P21, Q03)

Control over stressors and triggers.

Themes of control over stressors, including self-paced attempts to gain mastery over PTSD triggers in what they considered a safe environment indicated a willingness to

replay past traumatic interpersonal relationships without the helplessness that occurred in those past traumas (APA, 2013). "If there is a place or situation that may cause triggers, then I can avoid them. Can't always do that in the real world." (P08, Q10). Griefers, trolls, and other bullies are as abundant in the DVRE as in RL. Participants acknowledged the existence of interpersonal friction in-world, but seemed to engage with negative people more readily in the DVRE as way to explore new approaches to handling people who cause stress, and seek new ways to handle them; all while knowing that they could exit the situation—a luxury that was not theirs during RL trauma events. They described the empowerment of being able to retreat from the virtual world to consider alternative, new interpersonal strategies:

> My avatar is a red fox. I made this choice for several reasons. First, as a human (and I was only a human for the first month of my [DVRE] experience), it quickly distressed me how open I was being sexually propositioned as I was moving through [the DVRE]. My PSTD is directly tied to years of sexual abuse that I endured, and sexual motifs can still upset me. Being addressed by strangers in such a way was very upsetting as I still have fear when it comes to saying no to sexual propositions, since that put me in very real danger in my past. I decided I needed to do something in order to make myself less appealing and create some distance, but I still wanted to be proud of how I looked. At first, I tried to wear the most conservative clothes I could: turtlenecks, long sleeves, no midriff showing, long pants or ankle-length skirts. This did not deter the propositions. I happened to befriend someone with a cat avatar, and it dawned on me that I could choose to

be anthropomorphic. In my real life [RL], I have often stated that I feel like an alien trying to assimilate among humans; my cognitive and emotional disorders coupled with my tragic backstory make it very difficult to create bonds with others, and it feels like there is a barrier there that can at times feel practically insurmountable. (P13, Q02)

In RL, I deal with gender dysphoria. It has compounded, and has been compounded, by my PTSD. I have dealt with incredible amounts of negativity in RL from family, friends and strangers over it. Being in [the DVRE] has allowed me to feel like I can be myself and not have to worry about the hostility and bigotry that so many of us face. And, yes, as far as [the DVRE] is concerned, I am female. My [the DVRE] appearance basically is a lot how I wish I looked in RL. Tall, feminine, yet outrageously dressed and made up. The makeup would fit right in with the 80's (red lips and blue eyeshadow). I've always had a fondness for boots and fetish-wear in [the DVRE], and I'm in latex and boots all the time in [the DVRE]. Basically, for me, my appearance in [the DVRE] comes down to feeling like "myself" and I'm not held back by having the wrong body like in RL. My RL transition is stuck in the mud, so, [the DVRE] "fixes" that – at least while logged in. On top of that, my late partner loved how daring I dressed in [the DVRE], plus my "tall with big boobs" body. So, since her passing, both my wardrobe and my body shape have been a tribute to her. (P23, Q02)

I really despise griefers, people who get great joy in disturbing the fun and enjoyment of others. They exist in most virtual worlds and spend their time and

industry disrupting things. They don't trigger me as I'm usually someplace with estate manager rights and I can ban and eject them from the region or estate. Again, my club is a safe-haven for women, and I get great satisfaction maintaining that. As a matter of fact, all three of the estates I'm involved with are safe havens, [DVRE location/group], [DVRE location/group], and my own [DVRE location/group]. (P04, Q04)

I am not a fan or parties or large gatherings of avatars so I would stay away from that - I don't like this in real life much either. During Halloween, the decor put out or sold by some residents does contain triggers that directly relate to my trauma. My husband hanged himself just after New Year in real life so any hanged men or similar nooses etc. that feature in decor is a trigger for me. Christmas itself is not a trigger for me as I have learned in real life the need to keep it exciting and fun for the children and I am starting to get that back for myself too. (P10, Q04)

I have only ever been triggered once while in [the DVRE], and that was when someone I had been mentored messaged me out of the blue and started unloading on me about how her adult son had been assaulted. I had had a long and stressful day, and was recovering from a flu at the time, so my strength and energy was already low. I told her several times to stop but she kept on talking and talking and it pushed me over the edge. I completely lost it at that point. I think my exhaustion, along with her talking about a rape, and then ignoring my requests to stop, made me feel like it was all happening again. It took me days to recover from that one, and it is the reason I stopped friending the people I help. Now I tell

them they can contact me through my online board if I am shown there as online

and available. (P12, Q04)

Themes concerning creative experimentation and evolution of the Virtual Self, and

how that influences RL self, behaviors, and choices

Using the DVRE requires a great deal of willingness to learn new skills, and to

engage in a very high level of technical skill and brain activity. It is not a passive or easy

set of skills to learn, operating on multiple, simultaneous choice-making and other frontal

lobe, decision-making levels.

I think a guide in the beginning is important or [THE DVRE] could create more

stress than resolve it. But then after that first stage has ended and [THE DVRE] is

a more predictable, safer environment, one can control experiences to some

degree and thus feel safer. However, places like [THE DVRE] aren't for everyone

without a therapist's guidance and support. None of my RL friends have wanted

to go in…It's scary for them because they don't have the computer skills… After

a few months, people would be ready to split off into whatever direction they

wanted to with the skills they need in this place [the DVRE]. (P02, Q10)

Participants shared that they were all highly aware of their PTSD and coexisting

psychological conditions. They described their DVRE activities through the lens of their

PTSD: "My favorite is no longer in [the DVRE]. She designed and built the original

[DVRE vendor name]. She also designed meditation objects and taught the class where I

first learned about chakras and meditation. Meditation has helped me the most with my

CPTSD." (P06, Q09)

I am a person that totally immerses himself or herself in what they are doing. If I

am reading a book, I am in the book and the outside world does not exist.

Watching a movie, playing my guitar. All are total immersion for me and an

escape. [The DVRE] is no different. When I am inworld I am there as deep as I

am able and if I am not interrupted, I feel very connected to my inworld character.

I laugh and cry and love and feel that in me behind the keyboard. This allows me

to escape the world of hell I have had in real life. Inworld I don't have a dying

daughter or now one that has passed, I don't have a drunk husband. When I hug

someone, part of me feels it inside. I have a friend that I am so very much alike at

[DVRE group], We are the same age (10 days apart) we are addicted to music,

understand each other while joking, talking, or crying. I feel like we have lived

parallel lives just in different countries. I can stay immersed always while there

unless I am triggered, then it is almost worse that real life. I have lots of close

friend and support outworld, but I can't be with them all the time and that special

person in [the DVRE] has held me together more time than I can count. (P19,

Q07)

Summary

In review, this qualitative phenomenological study asked participants with PTSD

and experience in the DVRE to answer an open-ended series of questions to capture their

lived experiences of the DVRE in regards to their post-trauma conditions. The analysis of

the responses began with convergence to detect patterns and categories and then studied

for divergent themes that emerged to form categories and then themes. Themes included

control, safety, self, connectedness, skills, and resilience. Chapter 5 will present an

interpretation of the study results and relate them to the existing literature. Theoretical

and conceptual frameworks used as the foundations for this study will be discussed. The

strengths and limitations of the study will be reviewed and recommendations for future

research indicated. The chapter will close with the potential impact of this study for

positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative phenomenological inquiry was to answer the research questions: (RQ1) *What are the lived experiences of adults with PTSD who are engaged in the DVRE?* And (RQ2) *What do adults with PTSD and DVRE experience, perceive as changes in their narratives about PTSD through their utilization of the DVRE?*

DVREs may have the potential to address PTSD symptoms, and this qualitative phenomenological study might bring science closer to understanding this phenomenon. This study's participants have indicated that the DVRE is an empowering space inside which RL post-trauma stressors can be minimized through skills-building by acquiring control over environmental and interpersonal elements, re-framing and evolving a more positive perception of self, establishing a safe space and solid interpersonal boundaries, re-establishing and/or forging psychologically healthy relationships, and transforming virtual experiences into RL behaviors that support post trauma management.

Summary of Key Findings

Participants agreed that their engagement with the DVRE was in large part to acquire a measure of mastery over their post-trauma conditions. While each participant had their own individual approach, their reported experiences shared commonalities in efforts to establish control over external stressors, create new interpersonal boundaries, explore the self apart from previous self-definitions, connect with others in healthier roles, acquire new skills that gave them new-found confidence, and build resilience to reduce regression when confronted with triggering life events.

Interpretation of the Findings

(RQ1) What are the lived experiences of adults with PTSD who are engaged in the DVRE?

Factors contributing to the use of the DVRE as a way to cope with post-trauma were explored by encouraging participant descriptions of their lived experiences in the DVRE. Their collective experiences indicated that their persistence in engaging with the virtual world was motivated by the understanding that this was a place that gave them the psychological space to experiment with new ways to cope with post-traumatic anxiety and stress through reconnection with others, trial and error skills-building that lead to positive self-perception and confidence, and new-found strength and resilience that were internalized and applied to real-life coping strategies that were healthy, self-affirming, and self-protective.

(RQ2) What do adults with PTSD and DVRE experience, perceive as changes in their narratives about PTSD through their utilization of the DVRE?

Participants described their lived experiences in the DVRE in personal accounts of situational contexts in which they were confronted and challenged by their own post-trauma shortcomings. Using the DVRE to control stressors, including self-paced attempts to gain mastery over PTSD triggers in a safe, user-controlled environment, may indicate the DVRE as a proving ground to replay past traumatic interpersonal relationships without the helplessness that occurred in those past traumas. Bullying, adversity, and threats to the self are as abundant in the DVRE as in RL. Participants acknowledged the existence of interpersonal friction but seemed to engage with negative people more

readily in the DVRE as way to explore new coping strategies, and re-frame themselves when interacting with others. Studying the participants' DVRE-acquired skills and resiliency, there is realistic self-assessment happening that helps them establish decision-making strategies in RL. This reflects Bandura and Locke's (2003) self-efficacy theory as discussed in Chapter 2 and maps to Weiner's (2010) attribution theory, which asserts that people can change by applying a sense of control over their self-cognition, and this is expressed by the participants' accounts. The idea that participants who self-addressed problems empowered themselves to move forward in post-trauma recovery using new, healthier behaviors, through manipulation of the DVRE, confirming Bandura's (1993) and Weiner's (1985) theories concerning themes of safety, control, skills-building, and resilience that emerged from this study. For example, participants reported engaging in activities based on self-motivation and realistic goal-setting in what they perceived as a safe and stable environment (the DVRE) wherein they exercised choice and exerted control. For example, participants described active engagement in affect control and emotional regulation in the DVRE, even during periods of high stress, actively pursuing desired emotional states; this supports Maslow's (1943) hierarchy of needs theory of human motivation (Tamir, 2016). Participants reported that they manipulate the DVRE in order to experiment with and proof new approaches to coping with PTSD symptoms, then taking those internalized skills back into RL (Mahood & Hanus, 2017).

Theoretical Frameworks

The results of this study support key concepts in previous research detailed in the Chapter 2 Literature Review. Van der Kolk (2007) noted that the most remarkable feature

of PTSD is its interconnection between society and its attitude toward PTSD. Herman (1996) asserts that recovery occurs in stages, starting with the establishment of trust, safety, and stability, which form a solid platform upon which the patient can process and mourn the trauma and its outcomes, followed by re-learning how to connect with other humans, and then developing an understanding of oneself as part of a larger narrative that includes the traumatic events. Van der Kolk & Najavits (2013) asserted the need to develop new treatments that work with the PTSD-injured brain and physiology, such as helping patients develop skills to correct thoughts and behaviors impaired by post-trauma. Van der Kolk (2007) has further indicated the stalling of recovery through the widespread use of practices that do not address the whole-body nature of PTSD, the fallacy of exposure and immersion techniques, and the lack of recovery regimens that deal with post-trauma dissociation, numbness, anxiety, and panic. The social and interpersonal ripple effect of PTSD is felt keenly by those close to the PTSD patient. Herman (1997) asserts that the PTSD patient alternates between withdrawal from others and an anxious clinging to others out of fear and a sense of isolation.

Weinberg and Gil (2016) found that PTSD types vary according to objective and subjective variables in the trauma event, such as PTSD being significantly more intense in face-to-face encounters such as sexual assault. Lee, Furnham and Merritt (2017) assert that the Mental Health Literacy (MHL) of PTSD should be expanded and deepened to a discussion of different types of PTSD, suggesting an "under-recognition" of PTSD because of non-differential consideration of the type of trauma (p. 257). There are diagnostic differences between PTSD patients that call for new approaches in treatment

(Palic, Zerach, Shevlin, Zeligman, Elklit & Solomon, 2016). CPTSD patients suffer chronic problems in affect regulation, such as preoccupation with suicide and self-destructive behavior, extreme dissociation, including depersonalization and derealization, and preoccupation with re-living the trauma (Karatzias, Shevlin, Fyvie, Hyland, Efthymiadou, Wilson, Roberts, Bisson, Brewin, & Cloitre, 2016).

PTSD patients have a high rate of death by suicide and suicidality (APA, 2013). Brake, Rojas, Badour, Dutton, and Feldner, (2017) examined PTSD-associated feelings of self-disgust as a possible underlying suicide risk in PTSD patients. LeBouthillier, McMillan, Thibodeau and Asmundson (2015) found that interpersonal trauma and repeated trauma in CPTSD resulted in a higher risk for suicidality and suicidal ideation due to feelings of social isolation, being a burden to others, development of a higher pain tolerance, and lack of a fear of death. Afifi, Enns, Cox, Asmundson, Stein and Sareen (2008) estimated that between 16% and 50% of suicide ideation and attempts occurred in women who had experienced childhood abuse and 21% to 33% of men with a history of childhood abuse. Adams and Lehnert (1997) reviewed studies of suicidal behavior among those with combat trauma and adverse childhoods, connecting PTSD to individual-environment interaction; they also described possible environments for recovery. These environments would feature social support, stability, and a strong measure of predictability, and the DVRE can provide that for PTSD patients (Adams & Lehnert, 1997). Self-disgust associated with post trauma has been associated with a higher risk of suicide and suicidal ideation (Brake, Rojas, Badour, Dutton & Feldner, 2017). Findings

from this study showed that the DVRE has the potential to ease trauma-origin suicidal ideation and suicide.

Substance abuse is often part of post-trauma comorbidity. Dworkin, Wanklyn, Stasiewicz and Coffey (2018) found that post-trauma and substance abuse varied according to the PTSD symptoms being self-medicated by patients and the type of substance abused. For example, in alcohol abuse samples, avoidance symptoms were elevated, in cases of escalated hyperarousal, cocaine use was comorbid, and in patients with numbing (dissociative) symptom elevation, sedative/hypnotic/anxiolytic use disorder was present (Dworkin et al., 2018). Kuksis, Di Prospero, Hawken and Finch (2017) found significant correlations between the severity of addiction and the severity of PTSD, indicating a need for integrated trauma and substance abuse care across the medical, social, and psychological services spectrum. Self-medicating PTSD patients may indicate an absence of care/resources, inadequate clinician care, or over-medication by care givers, resulting in higher suicide incidences and poor treatment outcomes.

This may be because therapeutic interventions for PTSD have remained static for several decades despite evidence that these therapies produce low recovery rates, high noncompliance rates, and high retrogradation in patients (Mara et al., 2006). Patients, frustrated with non-effective care for trauma, have taken their unhappiness to the social network, creating groups that provide the empathy and support not found in medical, psychological, and psychiatric services (Rubin, Berntsen, & Bohni, 2008). The use of the internet as an official, APA-sanctioned therapeutic venue has been largely dismissed due to ethical concerns over privacy, confidentiality, and competency (American

Psychological Association 2010; Bersoff, 2008). However, the patient population continues to use the Internet at a growing rate and with higher satisfaction in its efficacy for trauma coping; Peñate (2012) found that patients find the immediacy and convenience of social network support preferable to in-person therapies. Patients perceive the support of others on the Internet to be more genuine than in-person encounters; for PTSD patients, the stigma associated with PTSD, as well as avoidance symptomology that makes in-person encounters difficult, are not problems in the online support (Green-Hamann et al., 2011). Participants in this study have demonstrated that the DVRE is a complex communication tool through which self-motivated actions can be taken to attempt PTSD recovery. Analysis of the responses to this study's questionnaire and of participants' descriptions of their avatars, objects, and environments indicates that the DVRE may be useful in restoring psychological perspectives that have been displaced by trauma.

This is supported by this study's findings that participants, through manipulating the DVRE, gained skills in control, self-regulation, the establishment of safety, relational engagement, and resilience by translating virtual experiences into healthier real life perceptions, coping strategies, and new behaviors. Participants reported that the concept of presence, or their virtual-world emotional and psychological engagement in the DVRE, transcends their physical presence when they are engaged in DVRE activities (Sanchez-Vives & Slater, 2005). Pan and Steed (2017) found a high level of presence when DVRE participants identified strongly with their avatars, reconnecting participants to themselves and encouraging self-efficacy and control over the virtual environment.

This has the potential to encourage the development of self-confidence and resiliency that has been displaced by psychological trauma.

This supports Mennecke, Tripplett, Hassall, and Conde (2010) who theorized that the very act of building one's avatar and using it for social interaction creates an embodied social presence that is every bit as real in the mind of the user as in-person social and educational exchanges (Ann, 2012). Literature on the lived experience of digital worlds by DVRE users, including non-PTSD clinical populations and their respective avatars has shown that reality is psychologically present and experienced during DVRE interactions through simulation of reality, freedom of choice, character involvement, perceptual pervasiveness, subject matter authenticity, character authenticity, and social realism (Ribbens & Malliet, 2010). For example, patient resocialization is an enormous challenge for trauma clinicians: PTSD patients are highly averse to interacting with others. Re-learning to interact with and trust others is a foundation of trauma recovery (Herman, 1996; van der Kolk, 2013). The DVRE allows patients to be wholly present (psychologically) with others, listening and interacting, while simultaneously being alone and operating individually in a physical location that is non-anxiety producing.

Opriş et al. (2012) studied this in a clinical meta-analysis contrasting in-vivo therapy with civilian participants who have PTSD, comparable to the same therapies in a DVRE, and found little difference in the experience and results for participants, adding weight to the need for more research on the application of DVREs to psychological treatment. In a quantitative study with general population, non-military, clinical

participants, Slater et al. (2013) indicated the DVRE was shown to significantly evoke empathy and interaction between participants. The act of creating an avatar might be viewed as a reincarnation or rebirth, as described by Yee & Bailenson (2007) who theorized that the creation of avatar (self) is empowering, calling this phenomenon the Proteus Effect.

A core feature of the DVRE is the participants' ability to quickly establish a place of safety and stability, enabling clinicians and patients to get into the therapeutic process more readily, making trauma therapy free of distractions, and participants more able to focus and learn (Pallavicini et al. 2013). Using the DVRE to restore participant sense of place, especially in a social context, may enable participants to build a foundation of PTSD resiliency skills that will naturally become part of their non-digital lives: Interaction with others through one's avatar also initiates an inner dialogue with oneself (Yee & Bailenson, 2007).

Limitations of the Study

The DVRE appears to be dependable, insofar as the user leverages it to control anonymity, interpersonal relationships, stressors and triggers, and opportunities to evolve (make mistakes and learn from them), learn new skills, and test out new interpersonal approaches (re-framing) that can be transferred into RL choices that may support resilience and self-confidence. However, the lack of DVRE engagement by the participants' therapists presents a gap between what participants are experiencing and what the therapist understands. As Participant 03 states, "She [the participant's therapist] had heard me talk so much about it and was curious. She had mixed feelings

about [the DVRE] because she was older and didn't understand it…places like [the DVRE] aren't for everyone without a therapist's guidance and support." (P03, Q10). "Mixed feelings" by clinicians/therapist may indicate either a dismissive stance about what superficially appears to be gaming, or a pastime, or the therapist's own reluctance to learn about and experience the DVRE due to a prejudice about the technology. The DVRE is not a "game." It is a sort of niche, even subculture, in which people can give themselves the psychological space to experiment with and explore themselves by testing new approaches to healing trauma that are not possible or are too overwhelming in real life. As one participant commented:

> I have been in therapy for about 4 years, with small progress, but [the DVRE] gave me the right push to keep talking with my therapist, involving her in my [the DVRE] experiences. My therapy got a happy end, but time to time I have a session to talk about the news in my both lives. [The DVRE] is my therapy and my Neverland! Be Eager, Be Curious! (P17, Q10).

The scope of this study was limited to participants who are experienced in using the DVRE software application. This would mean at least a year or more of frequent (daily or several times weekly) use of the application by individual participants. One reason for this limitation is that while there are other virtual worlds, the subjects will be on a consistent platform, using the same technology and techniques in the virtual space to avoid confounding variables between various virtual worlds. Populations excluded were people with PTSD who were not familiar with the DVRE because they did not have the

technological skillsets to utilize the platform. Going forward, PTSD populations can be trained to use the DVRE (transferability).

Miles, Huberman, and Saldana (2014) suggested thinking in a sampling-frame approach, for example while negotiating with participants, considering what other subjects might provide new perspectives and insight into the DVRE phenomenon. Bias was controlled by considering carefully the perceptions of potential power differences between the participants and myself as interviewer (Maxwell, 2013). This concern was addressed by my approaching subjects as a peer, an equal participant in the DVRE lived experience. Not only people, but settings, events and processes were aligned with the research questions in order to be representative of the phenomenon (Miles, Huberman, & Saldana, 2014). Observation and documentation of digital environments and objects created by, or liked, by the participants deepened the information gained from the questionnaire results (Maxwell, 2013). By focusing on what the meaning of the DVRE is to participants through their conscious experiences and how these expressed and reflected their manner of coping with PTSD, the resulting shared meanings may be drawn across the sample that can indicate directions in future research (Patton, 2015).

Another concern about limitation is that the number of the sample ($n = 23$) may not be representative of the larger population, because not everyone with PTSD may use the DVRE. Reasonable measures to address this meant limiting the study to participants with PTSD who utilized the DVRE to alleviate post-trauma symptoms. If the number of participants can be increased, the possible future transferability of the DVRE for PTSD patients will increase.

Recommendations

Recommendations for further research based on the strengths and limitations of this study include expansion of the definition of PTSD to include different types of the condition, and to consider the DVRE as a psychological space in which post-trauma patients can be motivated to redefine the self and reframe coping behaviors. The purpose of this qualitative phenomenological inquiry was to answer the research question: What is the lived experience of people with PTSD who are active in the DVRE, and have these experiences changed their narratives about their PTSD? Understanding the lived experiences of participants in the DVRE, reveals a novel, portable, and freely accessible venue that may provide the public with a readily available, affordable, complementary technology to cope with PTSD. Research using DVREs for learning and social support have indicated DVRE features that may engage PTSD participants with skills-building to alleviate psychological and physical symptoms (Lee et al., 2010; Travassos et al., 2013).

Recommendations for further research based on the strengths and limitations of this study include using the DVRE to expand upon what some researchers describe as different *types* of PTSD, depending on the specific trauma type, the length of the trauma, the proximity of the trauma, and even the gender of the trauma victim. For example, Weinberg and Gil (2016) found that PTSD types vary according to objective and subjective variables in the trauma event, such as PTSD being significantly more intense in face-to-face encounters such as sexual assault. Lee, Furnham and Merritt (2017) assert that the Mental Health Literacy (MHL) of PTSD should be expanded and deepened to a

discussion of different types of PTSD depending upon the character of the trauma, such as sexual assault, combat, and man-made or natural disasters. They suggest an "under-recognition" of PTSD because of non-differential consideration of the type of trauma.

The results of this study highlighted previous findings regarding the positive impact for post-trauma clients through development of internal motivation to change behavior autonomously. The use of the DVRE by participants has been described as not simply an "escape" to avoid coping, but as a space apart from real life stressors to explore, experiment, and cultivate skilled empowerment over PTSD. The DVRE provides a break from RL's physical and psychological limitations so that participants can focus on parts of the self that are negatively impacted or restricted in RL, providing a calm, time-out space for evolving one's individuality, creativity, and sense of control. Participants indicated having a sense of power over their interactions and time spent in the DVRE—empowerment they rarely experience in RL. The DVRE can free participants to explore new psychological strategies, develop healthy frameworks to examine trauma, and create positive experiences that are transferable to RL because the RL self is being influenced by the DVRE avatar self and vice-versa. While participants expressed knowing the difference between RL self and DVRE self, there is acknowledgment that the selves communicate and inform each other.

Participants described the concept of the self before trauma and the self after trauma, illustrated by accounts that the self was experienced as a "before and after trauma" duality, while other participants expressed C-PTSD, i.e., the chronic, continuous

condition in which there is no before and after self-concept. The DVRE may provide a new approaches to PTSD management that are not possible in RL.

Control over interactions with others, particularly over one's anonymity, was reported as a safety measure for their interpersonal behavior, exploring their fears in a safe place rather than perpetuating interpersonal avoidance in RL. In manipulating the DVRE as a testing ground to re-frame trauma-informed interpersonal limitations, anonymity was stated as a liberating factor as to why the DVRE has been embraced by the participants. As Participant 21 states, For the most part, nobody knows what exists behind the screen so I never feel judged or pitied in the same way I would in real life due to the disability. I'm definitely more equal and people like me or don't like me based on qualities over appearances. (P21, Q07).

Participants described approaching and forming close relationships in the DVRE that enabled them to experience intimacy, family, and interpersonal closeness.

Mastering control over stressors, including self-paced attempts to gain mastery over PTSD triggers in what participants considered a safe environment indicated a willingness to replay past traumatic interpersonal relationships without the helplessness that occurred in those past traumas (APA, 2013). "If there is a place or situation that may cause triggers, then I can avoid them. Can't always do that in the real world." (P08, Q10).

Toxic and abusive people are as abundant in the DVRE as in RL. Participants acknowledged their existence but persisted in engaging with them in an attempt to re-write the old hurtful scripts, roles, and patterns, knowing that they could exit the situation—a luxury that was not theirs during RL past trauma events.

Using the DVRE requires a great deal of willingness to learn new skills and to apply a high level of technical knowledge, actively operating on multiple, simultaneous choice-making and other frontal lobe levels. Therefore, the goal of future research should be to expand the field of trauma psychology to include virtual environments as settings in which post-trauma clients can transition toward empowered, self-realized, and resilient motivation.

Implications

The results of this study reveal a novel, portable, and freely accessible venue that may provide the public with a readily available, affordable, complementary technology to cope with post-trauma. Research using DVREs for learning and social support have indicated DVRE features that may engage PTSD participants with skills-building to alleviate and resolve psychological and physical symptoms (Lee et al., 2010; Travassos et al., 2013).

The application of the DVRE to re-socialize and provide therapeutic opportunities to PTSD patients in a safe, controllable, and private space where the individual's control over trauma can be established and acted upon. The possibilities inherent in the creation of one's avatar as an empowering tool along with the creation of one's environment. The negative impact of PTSD on the vocational careers and wage-earning abilities of patients is also a concern: Unemployment, homelessness, the impact on spouses and children can create a burden not just on those concerned but on society as a whole (Heinz et al., 2016). Heinz et al. (2017) found that veterans who developed resilience to traumatic events became more entrepreneurial and owned their own businesses that employ others.

Perhaps the entrepreneurial, self-starting DVRE can serve as encouragement for PTSD patients to stay the career course or establish their own businesses in RL. This has the potential for influencing future alternatives to current approaches for best practices in approaching post-trauma recovery.

Positive social change based on this study may point to a more granular and accurate description of PTSD. Weinberg and Gil (2016) found that PTSD types vary according to objective and subjective variables in the trauma event. Lee, Furnham and Merritt (2017) assert that the definition of PTSD should be expanded and deepened to a discussion of different types of PTSD depending upon the character of the trauma, suggesting an "under-recognition" of PTSD because of non-differential consideration of the type of trauma.

The potential impact for positive social change for people with PTSD would include the use of DVREs to curtail the occurrence of suicide among PTSD patients. (Raines, Capron, Stentz, Walton, Allan, McManus, Uddo, True & Franklin, 2017). Boffa, King, Turecki and Schmidt (2018) explored the likelihood that exposure to positive and creative virtual environments can reduce hopelessness and engage PTSD patients.

New technologies in 3D, immersive virtual environments have the potential to reduce PTSD symptoms, and this qualitative phenomenological study might bring science closer to understanding this phenomenon. DVREs have few boundaries and the users operate largely on free will. The DVRE is largely utilized as a social and creative outlet and is reported by participants as being "relaxing" and "stress reducing."

Participants have indicated that the DVRE is an empowering space where "real life" (RL) stresses can be minimized or avoided. People with disabilities, mental or physical find it empowering because they can, as their avatars (digital selves), engage in activities that are impossible in RL, such as flying, having an idealized avatar, and creating 3-dimensional (3D) creations within the DVRE that are aesthetically beautiful, functional, and have value to other residents (Green-Hamann et al., 2011; Norris, 2009; Yee & Bailenson, 2007).

Conclusion

Conclusions that can be drawn include leveraging the DVRE to give post-trauma patients the ability to gain control over and experiment with stressors in self-paced attempts to gain mastery over PTSD in a safe, user-controlled environment that can serve as a proving ground to reinact past traumatic interpersonal relationships without the helplessness that occurred in those past traumas. Using the DVRE as way to explore new approaches to coping with PTSD may serve to help educate, inform, and provide a stage upon which trauma issues can be re-framed and approached from a variety of directions to work through trauma.

The key essence of this study might inform future PTSD treatments by providing an anonymous, "safe," and creative theater within which people with PTSD can have options and choices to explore their behaviors and attitudes, and make inner changes that are psychologically healthy. Further research on PTSD and DVREs may serve to explore the DVRE as a new tool for addressing and caring for psychological trauma. The DVRE is certainly a place in which skills can be developed by users to support resilience-

building and to resolve maladaptive attitudes and behaviors that prevent them from

moving forward in their lives.

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Appendix A: Invitation To Participate in a Research Study and Consent Form

Invitation to Participate in a Research Study, "The Experiences of PTSD Sufferers Who Participate in Internet-Based Virtual World Activities in Desktop Virtual Reality Environments (DVREs)"

You are invited to take part in a research study about your experiences in Desktop Virtual Reality Environments (DVREs) that ease PTSD symptoms. The researcher is inviting people with PTSD who use DVREs to cope with PTSD symptoms to be in the study. You are reading this after contacting, via email, the researcher named in the Events announcement or Group Announcement concerning this study.

This form is part of a process called "consent" so you to understand this study before deciding whether to take part, or not.

This study is being conducted by a researcher named Colleen M. Crary, known by her avatar name "Anya Ibor" in the DVRE, and who is a doctoral student at Walden University.

Please print out and keep a copy of the consent form.
Background Information:

The purpose of this study is to find out what features of a desktop virtual world environment (DVRE) may or may not affect PTSD symptoms.

Procedures:

If you agree to be in this study, you will be invited to:

- Respond to the interview questions below. This may take up to 45 minutes, but may be less than 45 minutes. If more information or descriptions are wanted by the researcher, the participant may be contacted for one follow-up interview that lasts no more than 20 minutes. A follow-up interview is voluntary.
- Share your experiences and activities in the DVRE that you think might ease your PTSD symptoms.
- Share your activities (creative, building, music, games, etc.) in the DVRE that help you cope with PTSD symptoms.
- This study is voluntary. You are free to accept or turn down the invitation. If you decide to be in the study now, you can still change your mind later. You can refuse to reply to any question. You may stop participating at any time.
- There is no compensation, gift(s), or reimbursement for your participation in this study.

Here are the research interview questions, so you can take your time and think about them and write about your experiences. Think about the questions and be very

descriptive in your responses. When you are satisfied with your descriptive responses, you can copy/paste into a response email to the researcher. The questions are:

1. How did you first become acquainted with The DVRE?
2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?
3. What are some of your favorite things to do in The DVRE? Why are they your favorite activities? Do they have anything to do with your trauma or PTSD?
4. What are some things you do not like in The DVRE? Are there situations or items that trigger your PTSD?
5. Do you have your own private place in The DVRE? May I see it and take pictures? Tell me about your private environment.
6. Do you create items in The DVRE? May I see some of them and take pictures? Tell me about them.
7. How do you feel physically (in real life) while you are in The DVRE? How do you feel (in real life) after spending time in The DVRE? Describe your feelings as they relate to PTSD.
8. What are the characteristics of people you find engaging in The DVRE? Are you friends with others in The DVRE? Have you found it easier to make new friends in Real Life after making friends in The DVRE?
9. Who are your favorite creators or vendors in The DVRE? Tell me why their creations appeal to you. Does their work speak to your PTSD feelings? Do these items reflect your thoughts about your PTSD?
10. Tell me about how or if your activities and creations in The DVRE might help ease your PTSD symptoms.

These are initial questions. Follow-up interviews will be determined based upon these initial responses, and a second, voluntary interview appointment will be asked for by the researcher with individual participants **if needed** in order to gain a deeper understanding of your experiences with your additional descriptions and greater details about the initial responses if warranted. This is voluntary in basis, you do not have to participate in a follow-up interview.

Voluntary Nature of the Study:

This study is voluntary. You are free to accept or turn down the invitation. If you decide to be in the study now, you can still change your mind later. This study is voluntary. You are free to accept or turn down the invitation. If you decide to be in the study now, you can still change your mind later. You can refuse to reply to any question. You may stop participating at any time. You may stop participating at any time.

Risks and Benefits of Being in the Study:

Participating in this study may trigger your PTSD, because the questions ask about how The DVRE may or may not reflect or affect your PTSD. The Emergency Contact Information below is provided for you in the event you are upset or triggered in any way by your participation in this research study. You are encouraged to ask as many

questions as you want at any time and you can leave the research study at any time. This study may help researchers understand how the DVRE may affect, or not affect, PTSD.

Privacy

Reports coming out of this study will not share the real life or The DVRE identities of individual participants. Details that might identify participants, such as the location of the study, also will not be shared. The researcher will not use your online information for any purpose outside of this research project. However, if during the Interview you reveal illegal activity, the APA Ethics Code requires me to report illegal activities.

Data will be kept secure through the use of data security measures, including password protection, data encryption, use of codes in place of names, storing avatar names (when necessary) separately from the data if storing avatar names is necessary. Data will be kept, encrypted and offline, for a period of at least 5 years, as required by Walden University.

Contacts and Questions:

You may ask any questions you have now or along the way of the research project. If you have questions at any time, you may contact the researcher, **Colleen Crary (Anya Ibor in SL) via phone (360-844-6328), text (908-963-8405), or email (colleen.crary@waldenu.edu).** If you want to talk privately about your rights as a participant, you can call the **Walden University Research Participant Advocate at 612-312-1210.** Walden University's approval number for this study is [**IRB will enter approval number here]** and it expires on [**IRB will enter expiration date].**

Obtaining Your Consent

If you feel you understand the study well enough to make a decision about it, please indicate your consent by providing the contact information below, responding to the questions, and emailing your responses to:

Colleen Crary (Anya Ibor in SL), colleen.crary@waldenu.edu.

YOUR CONTACT INFORMATION

(Send to colleen.crary@waldenu.edu)

- **Your Avatar Name**:
- **Your Email Address:**

EMERGENCY CONTACT INFORMATION IF YOU ARE TRIGGERED BY YOUR PARTICIPATION IN THIS STUDY

IN THE UNITED STATES (including Alaska and Hawaii):

The National Suicide Prevention Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for participants, and best practices for professionals: Call 1-800-273-8255 – URL: https://suicidepreventionlifeline.org/talk-to-someone-now/. The National Suicide Prevention Lifeline is for anyone in the 50 United States of America under distress from PTSD, and will help participants immediately, 24/7/365, through free phone calls (in many languages, including Spanish) and instant chat (for the hearing-challenged or disabled) and alert local assistance and put participants in touch with local assistance based upon each participant's geographic location. *Private and confidential.*

INTERNATIONALLY – OUTSIDE THE USA

The Befrienders will help you immediately with 24/7/365 free phone calls for anyone in distress as a result of any aspect of this proposed study. Help is available in many languages in all countries and instant chat is available in these languages for the hearing-challenged or disabled. The Befrienders can alert local assistance and put participants in touch with local assistance based upon each participant's geographic location: https://www.befrienders.org/. *Private and confidential.*

Appendix B: Data Sets

1. How did you first become acquainted with The DVRE?	
P01	I became friends with a group leader at [RL group]. She's a smart lady, not your usual group leader (and, coincidentally, to this day, I'm still hoping not just [RL group] integrates things like [the DVRE] to expand on meeting attendance & participation). About 12 years ago, she told me about this new place online called [the DVRE]. I kind of blew it off at first, "yeah, yeah, I'll check it out," but when she brought her laptop to our frequent girls' gathering and couldn't pry herself away. It seemed intriguing, to say the least (I was seriously concerned for her and had to run my own experiment on this privately, afterward)! Keep in mind, [the DVRE] wasn't as awesome as it is now. So I left for about 5 years. But when another computer pastime I loved drastically changed things around (again *grumble*), I was *SO* glad to have recovered my [the DVRE] password to give it another chance. And THAT, is when I got completely sucked in, because SO much had changed (for the better, mostly!)
P02	I saw it about 2006 on a documentary on [the DVRE] and instantly wanted to join, it was a strong attraction to the escapist value I could see in it, and couldn't till about 2008 due to slow internet.
P03	It was a fluke. I gave a presentation in a New York suburban school district on research-based reading instruction, and the school district wanted me to make a Moodle for them and paid me upfront, adding the money for the Moodle to what I earned for the presentation. . I thought that since I'd had such success with Twitter that I could certainly do a Moodle. I had no idea how much more difficult Moodle was. Although I bought at least 3 books on Moodles, I simply didn't have the skills to do it. While Googling "Moodles", I saw that there was a place in a virtual world called [the DVRE] where they taught people to Moodle. So I decided to go into [the DVRE]. I was only interested in the Moodle instruction so I skipped past [the DVRE] instructions I should have gone to. Since I had skipped those stations, boxes would go on my head when I tried to open them. I had a hard time even walking. I'd never played video games and the learning curve was steep. Thus I purchased another book discussing the skills needed in [the DVRE], and that one was a tremendous help along with [DVRE group]'s University where they had some explicit instruction about necessary skills. After the helpful book and [DVRE group] University in [the DVRE], I learned enough so I could find and go to the island where Moodle instruction was. But somehow that never worked out. No one was ever there and although there were posters about how to Moodle, they were less effective than the books I had bought. I never learned how to Moodle, but I became fascinated in [the DVRE]. However, it took me 6 months to talk to anyone. I was afraid to type conversation so I hung around in the shadows (this sounds silly, but a very nice Beast avatar led me to open up. Somehow a beast was less intimidating than a male avatar). Because of the [DVRE group] instruction, I ended up buying a house and renting land in [DVRE group] and the builder of the house and Des, the landlord in [DVRE group], were both very patient about the myriad of problems I had in rezzing the house, buying the land and all the other things that were a part of that. At first I kept blowing up the house or making half of it disappear. But gradually through the book I bought on [the DVRE], classes I went to, and YouTube videos, I learned enough. At first once I could do the basic things in [the DVRE], it was like playing paper dolls when I was a kid. But then I began to develop friendships and love relationships and [the DVRE] became a very different thing.

1. How did you first become acquainted with The DVRE?	
P04	[RL name] launched [the DVRE] in 2003 and it was probably around 2004-2005 that I began hearing about it. I recall seeing news stories on it and thinking how weird it was that people would spend their time and money that way. I was also involved online in forum-based roleplay. It was around 2007 that I began hearing in those places from people that also did [the DVRE] and how they roleplayed there too. In forum-based roleplay you write a couple of paragraphs and post it to continue the story. I never really found it immersive, rather I was an author contributing to a story. Nothing happened in real time like it does in a virtual world. I could log in after dinner and read a couple of posts from earlier in the day and then write my response. It was in 2010 that I finally broke down and decided to see what all the fuss was about, and I created my avatar in [the DVRE]. I was only expecting to explore it for an afternoon or two and then probably lose interest in it. That is coming up quickly on ten years ago.
P05	My very first interaction was actually discovering [the DVRE]. I saw an ad for it. My original account was from 2009 and I fell immediately in love with it.
P06	After my illness and all it took from me, I saw an episode of Law & Order: SVU where a character had been engaging in a virtual reality world. I wondered if this type of thing was fiction or reality, so I Googled it. I found [the DVRE].
P07	2007, by accident. I needed some distraction from real life as I was working hard. I didn't know yet this was a sign of upcoming medical issues (I had a brain tumor which was removed in 2010). Also this was the start of processing of traumas earlier in my life: seeking social contact. I joined a group called [DVRE group], support for people with disabilities and became mentor.
P08	Years ago I belonged to a covenstead in RL. I had moved away from there due to health and a failed marriage. I found out that my covenstead was on line in this virtual world that I had never heard of. So I made an account to be near them again. That was just over 3 years ago now.
P09	My husband introduced me to it a few years ago.
P10	As early as 2006 / 7 I heard about [the DVRE] through the media and was interested in it as I was a new mother having to stay home a lot I was interested in the social and income based possibilities through a virtual world.
P11	I came to attend a weekly support group meeting once a week.
P12	My first foray into DVREs was in 2008 when a close friend of mine introduced me to [the DVRE]. He had a parcel there and we both experimented with prims and building things, though since we never left his land apart from buying some basic outfits, I had no idea of how social the experience could be, and stopped playing when he left after only a couple of months. It wasn't until 2010 after my incident that caused my PTSD that I got back into [the DVRE], since at that point I was rarely able to go out in the real world.
P13	I used to be involved in a mobile app that was a game which had a social component to it. I had befriended someone through the game, and I had opened up a little bit about my struggles and expressed that I wished I could attend group therapy again, as my schedule was not conducive at the time to do so. He suggested that I join [the DVRE] in order to possibly be connected to group therapy sessions that would take place at unconventional times. I was intrigued by the idea, and created an account. One of the first things I did was seek out sims

1. How did you first become acquainted with The DVRE?	
	related to PTSD and other disabilities, and this is how I joined the groups called [DVRE Group] and [DVRE Group]. Sadly, the group therapy sessions for [DVRE Group] still do not often coincide with my schedule, but I am still very grateful for the resources and support that both groups have afforded me.
P14	I joined [the DVRE] based on what an old friend told me in my school years, back in 2007. It was the escape I desperately needed to cope with the constant, daily family abuse I often got at home. With [the DVRE], I could live a life I thought I'd never ever have. As I was suicidal, critically depressed at that time. And seeing my options was heavily limited. Having real life escape was definitely not one I had. So [the DVRE] it is!
P15	At this moment I was reclusive; terrified to go out and be near people. I first heard of [the DVRE] in the media but I was at this moment involved in a movie making community using the game The Movies to do small movies Here is one I done about the trauma of rape [link]. When this game died I needed another way to be open to other, to not sink in my own despair I saw again an article about [the DVRE] and decided to give it a try.
P16	I first came acquainted because I had a computer and was a homebody, and then I saw an ad for [DVRE], I later then found [the DVRE] which is much better
P17	I heard about [the DVRE] in 2003 by reading an article on a magazine, and I created my first account. At that time the whole thing was still very basic and tricky to run for a pleasant experience. So after more than a year I quit. I came back in 2007 with a new account and despite the grid development was still slow, I never gave up logging in.
P18	I became aware of [the DVRE] through a good friend of mine who thought it would be something fun for me to try.
P19	I do voice acting for a living and I had been approached by someone wanting radio spots for a radio station on [the DVRE]. I have no idea what that was so said that I needed to look at what my voice might be used for because negative jobs can greatly affect working in the higher end of my profession. I decided it was not a good fit for me workwise but was curious about what was here. I met a 198 year-old vampire who became very close to me and have been here ever since. I truly use it to escape RL. I have a collapsed marriage that was only here for support of my daughter, now she is gone I really need to escape until I find who I am again. I wasn't aware that I did suffer from PTSD until my counselor pointed it out to me. I has always related PTSD to combat and emergency service personnel. I certainly did think that service for this would be available in the virtual world unless it was some kind of joke. You have shown that it actually is. Almost 5 years ago my daughter collapsed in front of me out of the blue and went into a seizure. We called 911, she was taken to the emergency, they did not know what was wrong but she was dying quickly. They determined what was wrong but not the cause and did emergency surgery within the hour indicating that she had less than 50/50 chance of pulling through. She was on life support for 5 days and 2 weeks in the ICU where they determined she had an extremely rare form of lung cancer. They gave her 3 months. Late one night while I was watching her before she woke up and Doc came to me and said he knew the cancer and studied it and with his mentor in Boston there was a good chance to prong her life and keep a

1. How did you first become acquainted with The DVRE?	
	quality of life at the same time. He did in fact do that and except for a few episodes (scary ones) managed to prolong her life for almost 5 years. That was the start of my PTSD. This past spring the drugs stopped working and though it was a hard fight we lost her in November 2019. I guess I have it full on now. I am a mess. I know time will heal things but since that first day Easy was gone, forever. Anyways, I thought that I should tell you this so you know where I am coming from.
P20	It got talked about in a group I went too to deal with some of the PTSD effects I suffer from.
P21	I initially became familiar with [the DVRE] in particular through a friend I had met online. The concept of being or doing anything I wanted as appealing to me as someone with a physical disability which becomes virtually invisible in an online virtual world.
P22	It got talked about in a group I went too to deal with some of the PTSD effects I suffer from.
P23	A former friend of mine (and that is another long story in and of itself, and has contributed to my PTSD over the years) kept insisting to me in late 2007 and early 2008 that "I need to check out this 'game', [the DVRE]." I finally made the decision to sign up on [the DVRE] on January 5, 2008. After a slow start, I started getting more involved after a few weeks, and, have been on pretty regularly for the last 12 years now. (Maybe it'd be a bit cathartic sharing that as well: That friendship fell apart several months later, after losing my [the DVRE] partner to cancer. My friend just had a complete lack of understanding and compassion, and, when she stormed off a few days after my partner passed because I was emotional and grieving and could care less about her fantasy football team, I never saw my friend the same way again. 17 years down the drain in a matter of minutes because of misplaced priorities.)

2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?

P01	I am a dark fae for those faint of heart... But, really, I am a succubus ...In fact, I am Lilith incarnate. I look just as I do in RL (shape-wise and eye-color-wise). But I have unveiled how I truly am, via [the DVRE] (as obvious RL-versus-[the DVRE] physical differences = the horns, pointy teeth/ears, tail, and wings). ...Other than that, though, also in [the DVRE]: • My hair is as long as I want it to be (currently, in RL, it's 1/2 the length it is in [the DVRE]). • My hair is also the red color I want it to be (however, in RL, the beauty school does a cool trick to make it a two-tone of red + black ...it's just phenomenally expensive... To which I just tell people in RL, "My hair is naturally red & black, I just get it dyed burnt orange with streaks of gray the rest of the year!!!"). • My skin is a Gothic pale (I often fear and am pissed at possible rosacea or lupus in RL). • I have sexy tribal tattoos (none of which I would ever be able to afford in RL). • The lip/fang piercings are just to enhance my pointy teeth, but the plentiful piercings in my ears just happen to bleed true in both realms (the only difference is that in RL I have 7 piercings in each ear, while in [the DVRE] I actually have 8 in each ear to compensate for my very long elven ears plus the very tiny/life-size jewelry). I actually should've known better, because each piercing is a rite of passage in both realms, LOL! • I am also hairless and blemish less (to correct the not-so-awesome RL version of me that God forgot to Photoshop). My succubus fascination started eons ago, as I find women with evil-looking bat wings very prey and symbolic. As a teenager, I painted and drew them all the time, as if these demons had actually possessed me with a calling. i.e. "Why do you draw such horrible things?" Nada might ask. To which, in my head, I would point to the roses I drew for her that she never framed and probably ended up somewhere under her closet hoard. Oh, well. It was for the beer anyway, as this is the path I was meant to take! I have always been a creative night owl, and I have always hated people for the most part (because they can be so mean; abandonment/rejection = kryptonite). Even before high school, I would come home, go to sleep, wait until everyone was in bed to come out of my room, then do homework for the rest of the night and then go to school (avoid, excel, rinse, repeat). Of course, this drove my parents nuts, to the point where I later honed my craft as someone working graveyard shift. My manual labor job that I successfully turned into a career is into this as well. The job and the avatar seem to feed into one another. Not only does the occupation make me feel very powerful (being a small woman doing "a man's job"), and I, therefore, feel more akin to the succubus totem ... but also the succubus aspect indeed makes me feel more powerful at work (as if to empower me to say with just a mere look, "I'm a badass, not your normal everyday bitch off the street. Fear me and stay the fuck out my way."), while I do amazing things like lift and throw cases up to 70 pounds, over and over again, from at least 4 9-foot floats a night, that they call pallets, for starters)! There was a me when I felt completely and intensely obsessed/alienated (knowing lucidly, but burying it deep in the back of my mind, that it was just something "I full-heartedly believed in, to keep me 'sane' with RL"), like, "I really must be Lilith incarnate... being punished/trapped on Earth, walking amongst tortured souls," to the rebellious point where I "wouldn't advocate humans at all" and even gave up

2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?

	normal/annoying functions (like eating, sleeping, or even tried to give up going to the bathroom) ...all to faithfully separate myself from the mortal-muggles and return to my true demon form, of course! :p ...But that faded away when I gave birth to my daughter---> into my midlife crisis. Meanwhile, I have always thought that if someone could allow the complexity filter in [the DVRE] to render me to show my true self. It might prove (or at least positively reinforce) that I am attractive (both spiritually and physically). However, I find that Goth is an era long gone, and instead, I seem to unintentionally instill fear (thank you, Disney stereotypes, from the 80's and previous), and still have to deal with snobby bullshit all the same as in RL. *shrugs* Oh, well. At least I like looking at my avatar (and yes, the succubae love looking into mirrors).
P02	I have piles of avatars and make them generally toward a specific look per avatar. Each will be an aspect of myself. I do it because of boredom and wanting something to do, make a new avatar.
P03	At first I made [my avatar] look very spinster-like safe. I had peeked at the seedier parts of [the DVRE] and I didn't know how private this universe was. Since I work in education which can be conservative, and I'm sensitive to computer privacy, Mary dressed in medieval clothes which weren't like some of the more floozy garments I saw in [the DVRE]. I had always wanted to have dark hair (I'm a blonde in RL, except now I'm probably grayer) so I made sure she had black hair. Looking back at her first staid image, it's hard to believe I went around as her. Meanwhile, eventually I created another avatar [avatar name removed]. She was a blond and I didn't feel the constraints to protect my image with her. [Avatar name removed] turned out to represent my freer side. I found it fascinating to see how an alt could impact the initial avatar. [Avatar name removed] eventually brought out more freedom in Mary and gradually Mary became less of the spinster avatar. It was interesting to see how people reacted to a blond versus someone with black hair and someone who was a bit more of a "space cadet" to someone who was more serious. In creating the two avatars, I had connected the two parts of my personality. I realized we all have different prisms that make up our personality and the two represented a majority part of me. I was neither one of the avatars but a part of me was in both of them. I was always honest with people I met or knew that [avatar name] was my alt. I didn't want deception with people I was meeting. I had too much deception in the past, and it seemed wrong in this world. It was interesting to see that some friends I developed in [the DVRE] preferred Mary and others preferred [avatar name removed]. Mary looked like who I had always wanted to be (dark haired and mysterious) and [avatar name removed] represented who I looked like, but wasn't nearly as bold as. I think because [avatar name removed] was a blond or because she seemed more vulnerable, she had more "frightening" experiences with men than Mary. Arabic men teleported her into their bedrooms when then said they would teleport her to another club. One skilled vehicle maker, somehow got her on a ball and then raped her. That was traumatic and triggered some PTSD. Mary never had experiences like that. She was the more formidable side I probably present. About five years into [the DVRE], I had a mini face lift in RL which I don't think I would have ever had if I wasn't in [the DVRE]. But after changing hairs, and shapes, and skins in [the DVRE], a mini face lift which would have seemed far too exotic, didn't seem like such a big deal. I was facing a divorce and dating at the age of 60. Why not shave off fifteen years? It was something I would never have done, but my

2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?	
	avatars did that kind of thing all the time. I gained a lot of skills at making shapes and forming avatars that looked good. Many times I was told in [the DVRE] that I made beautiful avatars. I was in a few beauty and modeling contests in [the DVRE] which I have to admit made me feel good. When I met my current RL partner [name removed] I was out of [the DVRE] much of the time and then after a sleeping driver of a semi-truck hit my car and cause a severe concussion and a recurrence of my PTSD, I couldn't do anything social in [the DVRE] because it was too overstimulating. Partially because of mesh and partially because I've again become a blond in RL, [avatar name removed] represents me now more than before. At a brain conference they recommended planning something to look forward, so since my DNA showed I was more than a third Norwegian, I spent a month in Norway finding ancestral farms, meeting 7th cousins, and diving deep into the culture. So now that I've embraced my Norwegian roots, [avatar name removed] has to be a blond.
P04	The first thing anyone notices about my avatar is that I'm a vampire but there is nothing scary, gross, menacing or mean in my appearance. I have been told my avatar is quite beautiful. The look is not a "sometimes" thing; I appear this way 24/7 and have since 2012. Even though I manage a club, go to Fearless Nation for discussions, and do many other routine things in [the DVRE], I do so as 199-year-old vampire with an extensive back story.
	I never consciously created my vampire self with my PTSD in mind, but I have noticed something recently that is worth mentioning. A big part of my trauma was being helpless, and helplessness is a big trigger for me. Most of my nightmares involve me being helpless. In [the DVRE] I'm a vampire with super-human abilities and I'm never helpless.
	Another point is that in my back story I was turned in 1844 at the age of 24. I'm forever 24 years old in [the DVRE]. Again, I never planned this but just recently put this together. When I was 24 years old, I had not yet suffered the trauma that resulted in my PTSD. In here, I'm not only a younger, un-traumatized version of myself, there is no mention of my trauma or 9/11 in my back story. Those things never happened to me in this reality. My personality today is not a pleasant one in real life but in [the DVRE], I can allow the old pre-trauma me to run loose and be free. The "me" everyone in [the DVRE] knows is the old me, not the current me. When I log in, I leave this me behind and revert to maybe… age 24?
P05	My original avatar is just like me in every way but "size" wise. My current avatar is who I see myself as the one I'm most comfortable with which is a confident, outgoing, independent, and friendly person who is succeeding in things that I couldn't do in real life.
P06	[Avatar name removed] is the me I want to be. She has my curly-red hair and green eyes. She is more slender, but only because the majority of the clothing is for smaller avatars. She is the equivalent to my Real Life height. She, however, can do all the things in her world that I can no longer do in mine.
P07	My avatar visual appearance seemed to be shaped as I felt: Personal, unique though younger than I really am. But it was and still is a reflection of who I am, as I never felt the urge to roleplay or take another shape like an animal or furry kind of avatar. I wear clothes I would wear in real life (though again a bit younger and maybe a bit sexier too), colors I really like. Long hair I also have, the same green eyes, and as a matter of fact also more or less the same body measurements. Again, with some age difference.

2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?

P08	I have two main avatars on the same account. Up until a year ago I have been a stunning red head. She's tall, proportionate, nice rack and a Neko. Yes I always have ears and a tail. Just over a year ago, an incident happened in [the DVRE] and I became a full me Dinkie. Basically I am a 2' tall tuxedo kitty with purkle (purple) eyes. (I'll send pics)
P09	My avatar is as pretty as I can make her. To me, my avatars are like dolls. I play dress up with them. They match my looks and personality when I was in my twenties.
P10	My avatar does look like me because I like to be the same person everywhere I go - I understand that I can do, be, create whoever or whatever I want within the world but I like to be myself. So it is a female alt with same-ish hair build etc. I have enhanced some parts that might not be as enhanced in real life as most people do. Less hips, more bust, etc.
P11	My avatar is called a 'dinkie' and it looks like a gecko, a friendly gecko. It is smaller than most human avatars. In the physical world, (which some people call 'real life'), I have trust issues. I am very loyal, and trustworthy, but it takes me time to trust others. By taking a nonhuman form, I avoid the trust issues I experience in inmate relationships which move too fast. Because the gecko is friendly, cute, a little humorous, relationships in the virtual world seem to start out more on the surface – it gives me time to build trust. Some exceptions have been various support groups where I hear things that very much resonate with me. In these virtual settings, I trust more, but it is still hard, even in the virtual world, for me to reach out and trust others with what is going on with me.
P12	My avatar has changed over time. Mostly it resembles me in some way, though I will admit to making some embellishments like perfect abs and a nicely toned body. Though my head, skin, hair, eyes, etc. changes often, the one thing I find difficult to change is the animations, like the way I stand, walk, run, fly. For some reason I identify more with that than how the avatar looks. I always need to have a calm stand, I hate the ones that walk around all over the place, or turn their backs on people, or look fidgety or hyperactive. It has to be calm and reflect how I am in RL.
P13	My avatar is a red fox. I made this choice for several reasons. First, as a human (and I was only a human for the first month of my [the DVRE] experience), it quickly distressed me how open I was being sexually propositioned as I was moving through [the DVRE]. My PSTD is directly tied to years of sexual abuse that I endured, and sexual motifs can still upset me. Being addressed by strangers in such a way was very upsetting, as I still have fear when it comes to saying no to sexual propositions, since that put me in very real danger in my past. I decided I needed to do something in order to make myself less appealing and create some distance, but I still wanted to be proud of how I looked. At first, I tried to wear the most conservative clothes I could: turtlenecks, long sleeves, no midriff showing, long pants or ankle-length skirts. This did not deter the propositions. I happened to befriend someone with a cat avatar, and it dawned on me that I could choose to be anthropomorphic. In my real life, I have often stated that I feel like an alien trying to assimilate among humans; my cognitive and emotional disorders coupled with my tragic backstory make it very difficult to create bonds with others, and it feels like there is a barrier there that can at times feel practically insurmountable. Being anthropomorphic felt like a symbolic manifestation of this disconnect between myself and humans--I am almost human, but not quite. I chose a fox because, first, I

	2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?
	fell in love with the looks of the avatar, and despite the fact that it is known for being a more difficult avatar to use, I chose it because it was beautiful and I had a sense of connection to it. Second, I did not want to be an animal about which it would be easy to make sexual jokes (dogs, cats, and livestock are the fodder of some low-hanging fruit). Third, I identify as having an above-average intelligence, and foxes are known for being clever. Since I became a fox, the sexual propositions all but stopped entirely. I was free to dress how I wanted, feel beautiful and classy, and, most importantly, I feel safe. Incidentally, all but a couple of the friends I had formed in my first month of [the DVRE] unfriended me after I became a fox because they expressed they did not want to be friends with a fox. It was a lonely me for a while, that in this vast virtual world with an international community, I felt like I was stuck between worlds, even though I finally felt free within myself. Eventually, I found friendships largely within the anthropomorphic community, while I also have some human friends, and I feel a beautiful sense of family, belonging, and acceptance amongst all my contacts.
P14	My avatar in general wears comfortable clothes. Bizarre in appearances, sometimes I'm a guy, sometimes I'm woman. I have plenty of avatars. My favorite ones right now are an animatronic fox, one that looks/feels out of place. Goofy yet deadly in character. That might be my go to appeal; Goofy with something morbid involved. As in real life, that's how I present myself too. Real me is depressing, cynical and tiny ball of anger. Something I have been working on to better myself.
P15	My avatar is my pure unstained me, for years I tended to dress as a school girl, a kawaii Lolita, a teen. I am 90% of the time a Neko, a cat girl; I love cats and Japanese, goofy and childish cat girls' animes.
P16	She's everything I would like to be and some thing's I don't. I look at my avatar as my little dolly. I dress her up, decorate her house, and go shopping. Sometimes I make things.
P17	My avatar appearance has not a specific look, starting from a human shape to various critters (cat, dragon, leopard, ferret, hamster etc.). It depends on my mood or if I am involved in a specific activity. In no case does my appearance reflect my RL image, but maybe it's close to my playful side in a virtual environment. As I like to say, we are mature teens!
P18	My avatar basically is short like myself. I wouldn't call her stunning by any means but she does really reflect my personality more so than my looks. I focused on the personality side of things.
P19	My avatar is modeled after myself although at an earlier age, and with it being a fantasy world I embellished things that I always thought I would change on me, i.e., nicer boobs. It really lets me go back to the time when I was half the age I am now and relive how I got to act and play and interact. I was kind of wild and can safely be that again. It makes me feel good in real life even if it is just for a little while.
P20	I change my avatar regularly, it's because I 'm fairly well known in [the DVRE], I try to have fun with changing avatars to reflect the situation or the conversation I am in.
P21	Currently, I have two avatars but it didn't start out that way. One avatar is an adult version of myself who is a vampire. I found and still find this to be super helpful to me as many people generally don't like and are afraid of vampires. I would much rather someone be afraid of me and I prove that there is nothing to be afraid of over automatically likely me and drawing attention toward me that is very unwanted even

2. Tell me about your avatar's appearance. How does it reflect your thoughts about your Real Life personality or image?

	when harmless. My personal trauma directly involves other people so I have a huge allergic reaction to people in general so my vampire self and the vibe it gives of gives me a sense of deep safety. This is something as a disabled person that I am not able to access easily because the trauma is in both worlds...people are people and people are generally unsafe and being disabled means I'm unable to protect myself to a great degree. My child avatar self is me that still exists that can at times represent the wounded child I once was. She loves to dance and is very playful. Dance can be very much an expression of my Real Life experiences. As an adult survivor of childhood sexual abuse even the adult me struggles with anything with sexual content. My like version of me has less of an issue with the idea that it bothers me when having to speak to those around me about it. She can usually handle it rather cutely and people are generally more willing to do less of that stuff around a child then they are an adult who is old enough to handle it. Both avatars are a more authentic version of my raw and real self then is able to survive in the real world. I am able to release the one thing that scares most people thought I still deal with a little stigma on mental health as far as an unwillingness from others to hear me out and support it as far as adapng something for me based on my trauma. I am also able to choose the style that I wear and have more choice and control over that as a disabled person then I do in RL. Physically I am nothing like the versions of myself online.
P22	I change my avatar regularly, it's because I 'm fairly well known in [the DVRE], I try to have fun with changing avatars to reflect the situation or the conversation I am in.
P23	In RL, I deal with gender dysphoria. It has compounded, and has been compounded, by my PTSD. I have dealt with incredible amounts of negativity in RL from family, friends and strangers over it. Being in [the DVRE] has allowed me to feel like I can be myself and not have to worry about the hostility and bigotry that so many of us face. And, yes, as far as [the DVRE] is concerned, I am female. My [the DVRE] appearance basically is a lot how I wish I looked in RL. Tall, feminine, yet outrageously dressed and made up. The makeup would fit right in with the 80's (red lips and blue eyeshadow). I've always had a fondness for boots and fetish-wear in [the DVRE], and, I'm in latex and boots all the time in [the DVRE]. Basically for me, my appearance in [the DVRE] comes down to feeling like "myself" and I'm not held back by having the wrong body like in RL. My RL transition is stuck in the mud, so, [the DVRE] "fixes" that – at least while logged in. On top of that, my late partner loved how daring I dressed in [the DVRE], plus my "tall with big boobs" body. So, since her passing, both my wardrobe and my body shape have been a tribute to her.

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P01	I like going to a [avatar name] ([avatar name] is the sweetest!) or a [avatar name] Show. These musicians are hilarious, and take me far the fuck away from everything uncontrollable, and leave me feeling carefree and renewed. I also enjoy playing L$ earning games while writing. Kill two birds with one stone. Earn money (offset the cost of [the DVRE], and not feel so guilty about the incredible debt I'm in) plus get to bleed all over a canvas, hoping someone else appreciates it too (and, therefore, my efforts are not necessarily in vain, heh). Breedables are cool too (for the most part). I seem to get some income or exposure at least every other day with the sale of them. And breedables are simple, yet so hard to harness (I do like a seemingly obtainable challenge plus simulation). Building, yes, that's absolutely fun too. ...I really need to learn Blender and Avastar... Just kind of overwhelming/frustrating when you can't devote your entire RL to [the DVRE]. Other than that, I did enjoy building Zamargad and cannot wait until I can buy it all back and move forward with my identity. All else fails, explore! I think I really need to do more of that!
P02	I get into scripting, making skins, shopping binges, rarely finishing any of it, it is a way to cut off outside world, as the thinking is so all pervading it shuts me off. I enjoy unpacking shopping and putting it in a neat system in my inventory, I buy stuff I don't need and don't wear a lot of it.
P03	1. I love taking photographs and then working on them in Photoshop. (If you put "[avatar name]" in Google and then Flickr [link] you can see the progression of my photos. Because I was in [the DVRE], I started teaching myself Photoshop because there was so much with it I wanted to do. I found taking photos relaxing and rewarding and then I bought a new camera and started to take far more photos in RL trying to improve my skills. When I came to [the DVRE], I escaped my dreadful childhood by reading as I did throughout my life and I was aware that I only dreamt in black and white. When I asked other people, they always said that they dreamt in color. I had no interest or confidence in doing any kind of art. But by the end of my first year in [the DVRE], I was aware that I now dreamt in color. [the DVRE] had changed my brain. I also developed the kind of intuition that so many people talking about developing when they type with other [the DVRE] avatars. Anyway, eventually when I was going through a divorce from hell before the semi-truck accident, I worked on my art museum for 3 years until it was done. Some photos were from real life and some from [the DVRE]. I loved it when people said, "I can't tell whether some of them are RL or [the DVRE]". That was what I was trying to achieve. Shortly after the accident I took the museum down when I moved out of [DVRE group] which had always been my safe place to live in [the DVRE]. Partially I needed money and it was all too overstimulating. Just recently I've bought mainland and probably will take 3 more years until the 2nd museum is finished. 2. I loved taking classes in [the DVRE] and learning little building skills, but these days - probably because of mesh - the majority of classes are for doms or subs. I miss the learning part of [the DVRE] and all the classes there used to be. 3. I like visiting artistic or educational sims. I was so sorry when they took down the PTSD sim. I learned a lot from that simulation, things I do that I wasn't aware of. The Autism house where the experiences and over-stimulation of a child on the spectrum

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has when in a classroom was very well done. Another well done one was the Heart Sim where one rode on a pod down an artery or vein.

From what I've seen, medical schools are ahead of much other education in creating simulations for their medical trainees that are more systematic and explicit than just "experiencing." When I was learning to build, many courses were a waste as they gave a brief explanation or demonstration and then had us "find out how to do it naturally." There were one or two teachers at the Builder's Brewery School who taught building skills in a more "step-by-step" manner were the only classes where I came away knowing how to build something that I couldn't before. I've had a fantasy of hiring someone to develop a sim about research-based reading instruction vs. whole language/balanced literacy and the connection on how the latter leads to what looks like dyslexia in so many children. Right now my PTSD interferes with the energy needed to raise funds and plan it.

4. I like playing "en garde" a sword fighting game based on numbers rather than actual fighting. But the developer quit [the DVRE] and gradually some of the game items have been failing. There are no longer the "en garde" tournaments there used to be. Once I won 2nd place in won which shocked most of the [DVRE group]ians because so many of them have high level skills and I was seen as somewhat of a ditz there. In RL I never ever won an award for any game or athletic endeavor. There is still one woman I play with occasionally on a machine that still works. I still keep my trophy on the wall in whatever house I'm living in.

5. I love being introduced to new music in [the DVRE] when I go to the clubs. I bought most of the songs I came to love, and put them on my Apple listening device and when I am sad, playing some of the songs, makes me happy almost immediately…. Even if they are sad songs about failed love.

6. I would love to teach in [the DVRE] or even just give a few lectures when the museum is up, but the one frustrating thing is how voice so often doesn't work for me in [the DVRE]. I can't depend on it and that is very frustrating. I miss teaching college and consulting in schools which I can't do since the accident and being able to transfer that to [the DVRE] would be helpful. When I lived in [DVRE group], I enjoyed the community and working on various volunteer activities or silly activities that they held. For three years I was in a pirate fashion show trying not to fall off the gangplank as I showed off my outfit. Tao led the pirates in [DVRE group] and is absolutely amazing. He made the enormous birthday cake for [the DVRE] a few years ago. Besides being a talented builder, he's just plain fun. In [DVRE group] at the dances, I had the chance to be a mermaid, a fairy, a witch…..you name it and that was the thing I enjoyed most about [DVRE group]

7. Before I met my RL partner whom I now live with, I had a number of [the DVRE] lovers who will always be dear to me. I partnered and married one of them - he was from Belgium and once we met in RL for a week's vacation in Vancouver. It was an amazing time, but he was married. I loved planning the wedding. I hadn't had a formal one in RL, but I didn't want the wedding in [the DVRE] to be just like RL. After all this is [the DVRE]. So I planned it like you would a show. I based our vows on Druid ones I found on the Internet. Volcanos erupted at one point; at another point a large globe appeared between us to represent how geography separated us. Storms raged and flowers fell from the sky. I was very proud of how the whole thing turned out.

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P04	I do a lot of things in [the DVRE] that are not fun per se, but they are rewarding. I manage/own one of the oldest clubs in [the DVRE] and its primary mission has always been to be a safe haven for women. I find this gratifying as I have always had a need to protect people and care for them. Maybe that is the reason I chose a career in EMS. Maybe that is why being helpless was so traumatizing for me. I've also gathered cyber friends and family around me, and I find that rewarding for much the same reason as above. Until recently, [the DVRE] was my only social outlet and probably filled that need, though I was socializing at the much younger and untainted me. All that being said, I do enjoy living and playing as the vampire me on my own region with others in my cyber family. That sim has become something of a hobby, and I enjoy spending me there.
P05	Some of my most favorite things is being a child avatar of the tender age of 2 and also running a Maternity Clinic when I'm in my adult form (21+). The child avatar does have some relevance to my PTSD as my trauma did start then.
P06	In [the DVRE], I steer clear of anything that could set off my CPTSD. Early on, my avatar was raped. I began to be even more selective of people I engaged with in [the DVRE]. I enjoy hanging out with friends. I used to explore, but then my illness got worse. Now, I mostly hang out and listen to music as I feel up to it.
P07	I used to explore a lot, as I adore photography, I take photos just as in real life. I used to make machinima (videos) too, but stopped after brain surgery. Yes they are directly related to my traumas, as my photos keep track of my life (lost my access to memories after brain surgery). I found an article in an art book of 2012 I actually contributed to: [link]. This partially explains my (brain) trauma and how I used DVRE to overcome it. I also saw more than 15 people of the DVRE in real life, traveled from Belgium to Colorado months after brain surgery to thank the president of Virtual Ability with a box of chocolates - as their support saved my life.
P08	I love music, as a lot of us do. I have done the club scene, sort of. In the beginning and up till about 18 months ago, there was too many people around and it wreaked havoc on my anxiety and would cause me to go into attacks. Now, I do spend a majority of my time on my own personal sim. But I am an AVID [DVRE vendor name] and [DVRE vendor name], I am a fiddler in a Tiny band. That is my family, I met the most amazing man here and we are planning our RL futures together. And now I am a clothing designer for both Dinkies and Ladies. I still get mild attacks but it is better. I am also very active with the [RL charity] and [DVRE group]. I have a very small team but that doesn't matter because I am part of the bigger picture. I lost family to cancer and I fight for them. But an event at one event is why I chose to be a tiny. But it does me good to help, even if it's a little bit.
P09	As stated above, I "play doll dress up" but my biggest interest is learning to build sims. Houses and other items that I would use to make my sim interesting. They are my favorite activities because I can do them alone. I get really nervous being around people in both real life and in the DVRE, so my activities help me out in that I am doing something but am staying calm while I do them.
P10	At the moment I am quite involved in the new Linden home continent [DVRE vendor name] which has solved the dilemma of finding a good community to live in within [the DVRE] which actually has people in it and also started to use the forum more so

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	as a forum member and a chat member I find that this helps me to feel less isolated online. I never really went to hangouts or clubs before and not really now either. I love to build - am learning the building process. This does not have anything to do with my trauma but I do find that I want to live in the smaller buildings. And that I myself want to build smaller spaces and find that every home or building I have within [the DVRE] is more comfortable to me if smaller and cozy. I also like sailing and cycling as ways of exploring new regions within [the DVRE]. I am a big interior decorating fan.
P11	I like to go to poetry open mics and live music venues. I like to go to historical sims and learning sims. I like to play games with a friend, or golf with someone. All these activities seem easier in the virtual world. I don't seem to be as concerned with who is around me, or who might be watching me. I feel less judged and less guilty about enjoying myself, less concerned people are watching me.
P12	My pride and joy in [the DVRE] is the mental health peer support group I run. I originally joined the group for support as I was recovering from my last suicide attempt following a very traumatic sexual assault in Real Life. I had no idea support groups like that even existed within [the DVRE] until I started searching for tem and found [DVRE group]. No longer being able to live in the city where the assault had happened, I moved to a small town to be closer to my sister, but apart from that I didn't know anybody here. This, coupled with newfound agoraphobia and PTSD made it difficult for me to make connections in Real Life, so I found it extremely helpful to get peer support through [the DVRE] when I was going through my recovery. I had tried some online forums, but there is something with DVREs that gives you an immediacy you just can't get from text based online forums and chat rooms. As time passed and I got better I started helping others who were going through the things I had recently been through. I found this to be very fulfilling. Helping others going through difficult times has enabled me to turn what was the worst time of my life into something positive and meaningful. When the founder of the group had to leave [the DVRE] due to illness in Real Life, she asked me to take over and keep the group going. Fast forward four years later and the group has kept growing, reaching out to more people, and helping more people all the time. So to finally answer your question, my favorite thing to do in [the DVRE] is to nurture this group and make sure that it will keep helping people in need for as long as possible. Other things and activities I enjoy are hanging out with my friends. I have a small but very close group of friends. We share a sim together, well two sims at the moment with a temporary winter sim for Christmas. Whenever I'm not working on the peer support group, I am usually with my friends doing something or other. Often just hanging by the pool, but we go sailing and exploring together regularly. We have a like building platform where we each work on like creative projects. One of my favorite things to do is create mesh objects for [the DVRE]. I started learning a 3D creation software called Blender a few years ago, and with the help of some in-world classes and a lot of help from patient friends, I've become prey decent at it. I really enjoy it as it lets me be creative while also challenging my brain by doing more and more complex things as I learn.

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	Since I have not been able to be intimate with anyone in Real Life for almost a decade, [the DVRE] has been a way for me to express those needs and desires in an environment that I can fully control. There is a big red X in the corner that I can hit at any me and instantly disconnect if I should feel uncomfortable. Nobody can force me to do anything I don't want in a DVRE, which has allowed me to experience at least some form of intimacy since the assault. It is a fairly important part of my DVRE experience, and has some relevance due to my PTSD not allowing me to express that part of me in Real Life.
P13	My best friend and partner in [the DVRE] is named [avatar name], and finding activities to do with [avatar name] are my favorite things to do. We like to explore new sims together. The rich stories and memories that we create together are healing to the soul. We have trekked the Amazon, climbed Everest, been detectives and solved mysteries, tamed dragons, outwitted ghosts and outrun zombies, flown in space, gone deep-sea diving and skydiving, met Cthulu, danced in a sea of frost stars, sipped wine on hot air balloons, explored the Louvre--we've experienced more in a year and traveled to both realistic and fantastical places, laughing together all the while, than we could hope to do in several lifetimes. Our [the DVRE] life is a constant adventure. Occasionally, I will attend [DVRE group] or [DVRE group] meetings, but other than the possible desire for thrill-seeking instilled in me from having PTSD, my [the DVRE] experience is largely an escape from my day-to-day struggles.
P14	Anything with the tiny community and [DVRE group]. There's lazy bingo, playing CLUE, 7seas fishing, dancing themes, Social Night. Anything that is laid back, easy going and fun in a calm sense. I am in my very late 20s of age. I've dealt with emotional, verbal and mental abuse on a daily basis for my entire life until near end of 2018. So pretty much anything with little to no stress involved is what I seek. In [the DVRE], I get that choice freely and that's what I am doing for the past 10+ years in this virtual world.
P15	In [the DVRE] I spend most my time with my partner, no sex just cuddles, with my [the DVRE] heart family; I love to do shopping; to go at live concerts, to see what others create.
P16	I love to shop it's a release for me especially when I don't have to spend my hard earned cash on something. I like to take photographs and I enjoy singing online when I feel up to it.
P17	During many years in [the DVRE] I tried so many experiences, enjoying the multiple opportunities to do so many things. I like very much to help newcomers for an easier orientation in a new experience. Mainly I love to take pictures and to build: for myself or to display in events and art exhibitions. I do also sculptures and buildings but as a 3D creator I am quite limited. In some cases my personal disease has been the topic to face it, through a building to show not only my feelings but also like a kind of manifesto for everyone who suffers for the same condition.
P18	I love to build things. I love being a DJ and sharing music which I think helps people heal and relax. The DJ aspect I feel does tie in with my trauma as it gives me an outlet to express myself in many ways and to share those expressions with others and say "Hey PTSD is okay it's not something to be ashamed of"

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P19	I do lots here. It kind of changes on a whim. The main things I do are dance, ride my motorcycle (I ride in RL but circumstances have kept me off the bike the past year), I spend time at my house here on the beach. I have begun to build sound effects to put on the market place which kind of ties in to my RL. Sometimes, when I am upset about the condition of my daughter or home life I just go out and have nasty dirty net sex. I think being just an object for a while makes me get out of my mind and be on auto pilot. I am not sure. I usually feel lonely after, but then I was feeling terrible before anyways.
P20	I love teaching, I teach users of our viewer how to use it as good as they can. Classes are my favorite activity. No it doesn't have anything to do with my trauma or PTSD.
P21	A big concept within the trauma as far as abuse circles is the concept of a family of choice, Not a family that you just happened to be dropped into but a family of people that you developed a bond and true connection with and [the DVRE] allows me that. I get that in many ways being involved with a family-oriented vampire clan. Another big part of my [the DVRE] experience is dancing which as someone confined to a wheelchair I cannot do in the same way in RL. Part of that has also given me many opportunities to access real organizations like [DVRE groups] and use dance as a way to help support those causes as well as the space to use dance in my own healing to depict on a stage some of the more difficult parts of my trauma that don't always and can't be put to words or to raise awareness and shed light on those things. The last thing really is music be it me spinning it or creatively expressing my story on stage using the lyrics to a song unknown largely to those around me they get to know more than they think they do about me and what I've experienced in life.
P22	I love teaching, I teach users of our viewer how to use it as good as they can. Classes are my favorite activity. No it doesn't have anything to do with my trauma or PTSD.
P23	I enjoy spending time with friends, listening to music, exploring, DJ'ing, and have taken part in [DVRE group] since 2009. But, it's also not uncommon at all for me to log in and just sit at home while experimenting with outfits or talking to people through IM's or just watching my cats run around downstairs. The tendency to sit at home and talk to a few people (or maybe no one at all) is somewhat PTSD-related, in that I've had my share of negative experiences over the years, and just sometimes keep to myself out of fear of another negative experience. DJ'ing sometimes is also a way for me to express what I'm thinking or feeling through the songs I play without actually speaking of what I am going through or what's on my mind at the moment.

	Q04. What are some things you do not like in The DVRE? Are there situations or items that trigger your PTSD?
P01	I cannot stand indifference, invalidation without reasonable jusficaon, when things are not fair or omitted for convenience (because it turns out that common sense just isn't that common), and when there's blatant and uncalled for disrespect... When things are not judged impartially or the rules have not been explained clearly beforehand (so that even a child could understand). I loathe how the majority that I have run into, doesn't get that "we're all in it together," but furthermore advocate that it's "every man for himself." Some type of narcissisc, manipulative, bullshit, capitalism feeds this and it sincerely needs to DIE (condescending assholes who rule the world based on power and greed, and not experience or merit). Like, no wonder you do not find accounts as old as mine more often (everyone is making alts to start over with, because they've been traumatized into fleeing)! If humans are ingrained as a social creature. And arguably the majority of people in a VR might not have major access to tangible society. Then WTF good are you, if you cannot lead by example (or have the humility to learn/grow)? Transcendence would be nice, away from everything horrible Earth has to offer, don't you think? Can't happen unless some people take the initiative and break the mold.
P02	When I first joined in about 2008, I went to Gorean Role Play sims, I loved it because I didn't know role play wasn't real and you could opt out if it got scary. I thought it was all real and serious, in the role play I got kidnapped and I was terrified but the drama was so good. I was determined to escape because I thought our city had to pay real life money for my return, they didn't it was role play Gorean coins. At times logging on my hands would be shaking with fright, but I had to log in to escape and so on and so on. When I slowly learned it wasn't real, it lost its excitement. I get down over how it is not quite real and people can get pretty petty and nasty, I try not too- but do it myself too at times. It is the internet in general. I have shopping binges which have depressed me. Also I have gone and worked as a dancer/escort to be around people, the other girls, not the men coming in, but can't do it very well and usually burn out around 3 months. I think the dancing, is a form of prostitution, each time I've tried (3 times,) it's ended up with some pervert really upsetting me with some vile sexual energy. I will then drop [the DVRE] for a few months until I can face the place ([the DVRE],) again. While I am away I am still doing other things that give me the same result of diverting my attention from real life. Also I get upset, seeing someone attacked in some brand group because they have a problem with something they've bought, that triggers me at times, the way many people are sycophantic to brands/creators that so overtly exploit shopping addiction is really sad to me.
P03	When I was a newbie in [the DVRE], I didn't like it when vampires tried to trick me into giving blood. I was delighted when someone gave me a garlic necklace that kept them at bay. When I first came into [the DVRE] and learned how to IM people, I tried to "save" slaves who were tied up on their knees. I'd tell them they could come and live in my place in [DVRE group]. But they got very angry. They wanted to be slaves or subs. My urge to rescue goes back to my childhood. (PTSD of childhood was one diagnosis my therapist gave me in addition to having my car window shot out on the highway and facing the gun, and then this latest semi-truck accident on the highway.) I couldn't understand why someone would choose to be a sub or slave so a few years ago I tried twice to go through sub training but never got past the first station where you bow at someone's feet. It was boring, I would leave and go do housework, and both men told me that I simply didn't have what it took to become a sub. They

Q04. What are some things you do not like in The DVRE? Are there situations or items that trigger your PTSD?	
	were right. Later at some point a friend talked me into modeling in a show for someone who was a sub in the House of O. I agreed after they promised all I would have to do was wear the outfit and walk the runway. However, the sub was telling me a million rules during the short time I was in their house of O. I told her I could never learn all those rules. She told me that for each one I broke she would get whipped. She said this as I heard the sounds of whips in the other room and when I cammed past the walls, two women were being whipped. This all started to trigger my PTSD and I told her right then that I was not doing the modeling for her and never wanted to be any place people were getting whipped. I left immediately. When a yacht builder from Serbia whom I met in a club tricked me to get on a rape ball rather than a "Sit on the Couch" ball which I thought I was sitting on, and I couldn't get off the ball or TP somewhere else, or do anything about being on that ball, that really triggered my PTSD once again. In that situation, I used my skills that I developed when I once worked with emotionally disturbed teenagers in a group home and made IM comments that I knew would be humiliating for him until he finally let me go. Nothing else worked and I had had to eject spoofers several times. I don't know what he used but I learned you have to be careful in [the DVRE].
P04	I really despise griefers, people who get great joy in disturbing the fun and enjoyment of others. They exist in most virtual worlds and spend their time and industry disrupting things. They don't trigger me as I'm usually someplace with estate manager rights and I can ban and eject them from the region or estate. Again, my club is a safe haven for women, and I get great satisfaction maintaining that. As a matter of fact, all three of the estates I'm involved with are safe havens, [DVRE location/group], [DVRE location/group], and my own [DVRE location/group]. The only time people trigger me in [the DVRE] is when I've let someone into my trust and they betray that. It has happened but fortunately, it has been rare. Otherwise, no one can hurt me in here and I am never helpless. In fact, I'm invincible. The only other thing to trigger me in world that I can think of are things related to 9/11. I used to get triggered by people who wore the name scrollers on the anniversary. That doesn't really bother me anymore but then it's been eighteen years. Just time has healed that a bit.
P05	The main thing is all the guys in [the DVRE] who are very sex-oriented and that's all that they want. These situations do trigger my PTSD and also when I'm a child avatar and I lose a family will trigger it also.
P06	BDSM sites can set me off. Also, there is one group I am in where, on occasion, a few people will engage in conversation regarding things that can trigger my CPTSD. There are many places I stay away from as they can trigger my illness. If I desire to go to one of them in order to hang out with a friend, I have to derender most of the things in the place before I can enjoy time with my friends.
P07	I engaged in a relationship with someone in-world, also met the person in real life a few times. For like 2 years. My own brain issues and tensions between us triggered my PTSD badly, so I am a bit scared of being close to people now. Also certain situations where people act harsh trigger my PTSD. I don't visit certain places with too many people around. Even my own place (see further), can trigger PTSD as I created it for my ex.
P08	There are actually. Moving vehicles, bikes, see through floors and stairs. Just typing that I shake a littie.

Q04. What are some things you do not like in The DVRE? Are there situations or items that trigger your PTSD?	
P09	I dislike going to a club that uses a lot of emotes. Even with my sound off, that creates a noisiness which definitely triggers my PTSD.
P10	I am not a fan or parties or large gatherings of avatars so I would stay away from that - I don't like this in real life much either. During Halloween the decor put out or sold by some residents does contain triggers that directly relate to my trauma. My husband hanged himself just after New Year in real life so any hanged men or similar nooses etc. that feature in decor is a trigger for me. Christmas itself is not a trigger for me as I have learned in real life the need to keep it exciting and fun for the children and I am starting to get that back for myself too.
P11	I wish land did not cost so much. I've attended classes on how to protect myself, how to teleport out of an area that is triggering me. So it is much beer than the physical world in that regard. Generally, if I am triggered, it is by conversation or when people are being poorly treated without their consent.
P12	There can be a lot of dishonest and devious people in DVREs. Some people forget that there are real people behind the pixels, and as [avatar name] says, sin is when you treat people as things. I can't stand the cliques and tribal groups that like to exclude people that aren't exactly like them. I have only ever been triggered once while in [the DVRE], and that was when someone I had been mentored messaged me out of the blue and started unloading on me about how her adult son had been assaulted. I had had a long and stressful day, and was recovering from a flu at the time, so my strength and energy was already low. I told her several times to stop but she kept on talking and talking and it pushed me over the edge. I completely lost it at that point. I think my exhaustion, along with her talking about a rape, and then ignoring my requests to stop, made me feel like it was all happening again. It took me days to recover from that one, and it is the reason I stopped friending the people I help. Now I tell them they can contact me through my online board if I am shown there as online and available.
P13	It is easy to find the seedy, sexual underbelly of [the DVRE], and I tend to be wary of these places. BDSM sims can be popular amongst the furry community, and these can make me feel threatened. Loud, unexpected noises can also scare me. I can be triggered by bathrooms which are unkempt, and sometimes I have encountered such bathrooms, especially in mystery solving or haunted houses. However, my greatest struggle is the fear of being sexually propositioned, which now happens incredibly rarely, but is still a viable threat to happen at any me. [Avatar name] is a wonderful support in such instances, though, and I know that as long as I am with him, I am safe. I also remember that at any me, I can teleport away from a situation, and that offers a great deal of comfort.
P14	Idiots. They are everywhere unfortunately. And I have C-PTSD. Complex type of PTSD. I am hypervigilant. I latched onto every word I see and/or hear. Text or not, I hear that tone others put out. Like in this email, I might come off as slightly irritated and confused at the start. I listen more than I talk. That's because I want to know who I am surrounding myself with. If someone comes off as pretentious, disgusting in an overly sexual manner, dramatic, black and white thinking, closed minded or bitchy. I will leave that area most likely. As those people will just make me upset and make me extremely anxious. Any form of guilt tripping, manipulation, gas lighting, talking down to others will trigger me too. I lash out angrily at the abuser in that case, to defend the victim. Get in between, when I shouldn't. I'm learning to step back from

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	that, distract myself or other ways to get me in a calm state but I also reach out. Conflicts trigger me, any hostility I sense does too.
P15	In [the DVRE] there are people looking for sex, intruding sometimes naked in my [the DVRE] home. It often made me panic and made me once change of house.
P16	Some people are very sexual. coming from abuse and sexual abuse in my neighborhood, I don't like all the sex talk it makes me feel icky
P17	Honestly there are not many things that I dislike, basically I avoid scenarios when the violence or the pain is the main theme. Luckily those ones are clearly advertised, to prevent any regrettable and unwelcome surprise. Strong colors and bright particles effects usually make me a bit dizzy, or in a crowded place the over chatting and gestures confuse me.
P18	People discussing heavy drinking is the biggest trigger I endure. Because my trauma was caused by an intoxicated driver, such situations usually set me up to have a problem. I really dislike rudeness and people thinking it's just a game and they can act in any way they please without regards to others.
P19	I find that I do not have any patience ever for the people that come here and do nothing and just use the remoteness of this medium to let their obnoxious or ignorance flourish in a way that would never be acceptable in a real life situation like a bar or a beach. Guys that would be scared to death to talk to you in a real life situation but feel that they can be as ignorant as they wish because we "are not real" In deciding to be here, on [the DVRE], I think it only fair that you put effort into how you appear and act so it is complimentary to other residents and enhance everyone's experience. As for triggers, in my state it can just be a phrase that will remind be and I pretty much break down here in real life badly. Or if someone spouts Christianity and god's plan, I actually need to log off because I will go berserk. People who complain about their life mostly little things but even larger things. I compare them to how my daughter lived every minute of her life, at 27 she had done more than most would ever do. It just gets me thinking about her, when she was sick and since she is gone. She lived.
P20	When I get griefed and there are loud bangs I close the DVRE and leave. I don't like that I can't go places without people asking me about the viewer, but that's a bit par for the course what with me being such a visual face for [DVRE viewer].
P21	I don't like the idea of everyone in a space has to get along or become friends adding them to each other's friends list or connecting in private message being seen as acceptable and ok. The general idea that an adult is able to handle adult things within a space is difficult to me as mentioned above when it comes to sexual content within a chat. Avatars standing close to me can be a challenge because they seem not to have the same concept of personal space. The unwillingness from some not to do things like sending too many items that I am not asking for or accepting to move to local chat rather than in IM or leave me be when I've explained my hands hurt when I'm typing. Script counting within the dance world can be a challenge as some scripts I use to help me navigate [the DVRE] where others can help me move around and people get upset plus counting can impact and influence eating disorder behaviors. Music can but that is easily navigated

	Q04. What are some things you do not like in The DVRE? Are there situations or items that trigger your PTSD?
	I despise the concept of Real versus online or in real life versus virtual spaces. I am real regardless of where I am as are those I come in contact with. My avatar is very much an extension of me not an escape from me or an unreal version that I aim to live up to or a fantasy. The harsh reality as someone that is confined to a wheelchair and the real world isn't accessible [is that] a virtual world is.
P22	When I get griefed and there are loud bangs I close the DVRE and leave. I don't like that I can't go places without people asking me about the viewer, but that's a bit par for the course what with me being such a visual face for [DVRE viewer].
P23	Just like in RL, there are a lot of negative people and a lot of negative things in [the DVRE]. As much as people want to assume that everyone that comes in here is "strange" and "different", and because of their own issues or quirks or the like that they understand how it is to be different, that's not always the case. I have encountered a lot of people who are clearly homophobic and/or transphobic, which is why I do not share with the public that the person behind the avatar is not the same as the avatar. I have been stalked in [the DVRE] by a number of people. Most of them are the usual that want sex and won't take no for an answer, but, some have gone well beyond that. I had one who spent months stalking me, and when I finally blew up, proceeded to start telling people that I murdered my partner and that I act the way I do out of "guilt" for doing so. I had a major PTSD episode last July that involved me coming unraveled with the leadership of the [DVRE group] of [the DVRE], including two employees with the [RL group]. Despite my passion for wanting to kick cancer in the ass for what it did to my partner, I've endured plenty of negative experiences there. I have encountered more than a few homophobic and transphobic Relayers. I have been judged, harassed and bullied over my avatar's appearance. Since 2012, I have been constantly pressured to "wear normal clothes" and told "If you dressed like that at a RL Relay, everyone would think you were crazy." I've been told to shut up about my partner and my feelings, because "no one wants to hear that". And, I have had a prominent member of the Relay community basically sexually assault me in IM's during an event – they IM'd me and said they were "going to slam me against the wall, rip off my latex and f*** me in the ass". It wasn't until two months ago that I finally told the [RL organizationabout the incident. I didn't identify the person who did it – I said I'm not sure if I want to give names yet, because I seriously fear retaliation. But that this happened and I've had to bottle it up for 7 1/2 years until I finally snapped. I was heavily bullied in RL back when I was in school, and at times, [the DVRE]'s [DVRE group] has felt like reliving that. I do feel targeted and singled out, shunned and rejected, and many times since 2012 it has triggered my PTSD. Everything from getting upset and isolating myself, to yelling, and even occasional thought of self-harm. Then finally having a complete breakdown in mid-July of 2019 over it.

Q05. Do you have your own private place in The DVRE? May I see it and take pictures? Tell me about your private environment.

P01	I did. I would prefer to pretend that it still is, as it was, since that is exactly how it will go back to being in the not too distant future. Here is a free brochure (please feel free to utilize those pictures in it for [DVRE location]). For now, I participate in cool things like decorating contests in other fantasy places in [the DVRE], and that makes me feel a like bit more like "home" (or my sense of self, basically) is not all lost. I'm about to give birth to another blog entry about something I accomplished over the holly-dates. Oh, and, yes: A small snippet of what [DVRE location] was (and shall be again), can also be seen at my premium home, if you wish to experience that.
P02	I do, I binged and bought a heap of land on the ocean that I couldn't afford, the hunt for the perfect land being a way to shut world out. I've made many skybox environments and then dismantled them and mainly live in a giant skybox which has skin making things or scripts all over, messy, you can go there & take pics, I'll give you an LM [link].
P03	Until the semi accident, I always had perfectly decorated homes, castles, and treehouses in [DVRE group]. One year I won the [DVRE group] "best garden" award. I liked changing homes every few months on the land I rented. In therapy for my PTSD the issue of my own fear of the house I grew up in - my mom probably was borderline personality disordered according to two therapists I had. I spent a lot of time dealing with my fear of my childhood home when we did EMDR sessions. At the end of each session, I would choose my house I grew up in to put in the garbage can. The technique worked and I eventually was no longer afraid of the house I grew up in. As a child I drew endless pictures of house plans and had many dreams of houses with endless passageways, I think my frequent changing of houses in [the DVRE] which I very much enjoyed empowered me in some ways. However since the semi accident retriggered the PTSD, I've been much disorganized in RL and I find that same disorganization seeping into [the DVRE]. After I left [DVRE group], I bought a strange shaped property and after months of searching found the building I want for my art museum. That's where all the classes I took in [the DVRE] are helpful because I can make the changes I want to the building even though it's harder with mesh. In the meantime on my land I have a totally disorganized mess of a garden and a building that I had toyed with as being the museum but decided against. I also put a platform up in the sky with another garden, a house that is mostly for working on my texture machine and a grunge building where I keep a skeeball game, a memory gamer, and a Mahjong game. When I'm stressed I like to go there and play them. In all of my homes, I've had to have gardens and books in the house. I once tried living like a mermaid but found it suffocating. That was the worst house I ever had.
P04	Yes, I do. I have a sim with my castle on it, which is the center of my vampire world. You are welcome to visit it anyme and you may take pictures if you like. I'll give you a tour if you like. The sim is private and only members of my group are allowed access. It is yet another safe haven. I have one other cyber family member who suffers from intense PTSD and she seeks refuge there often in order to feel safe. The Island is called "Mowadeng," which happens to be the last name [company name] saddled me with when I joined [the DVRE] back in early 2010. Before 2011, all avatars and accounts had both a first name and a last name taken together as their username. You logged in with it (still do) and even included the [space] when you typed it in. Most people picked their first name when registering and the system would give you a choice of possible last names that were available (untaken) for that

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first name. It was important to me to be "Susan," and the only available last name when I registered was "Mowadeng." I didn't much care for it, but I settled for it. These last names that Linden Labs assigned back then are known as "heritage names." The heritage name of "Mowadeng" was assigned to 657 avatars by Linden Labs from 2009 to 2010. Of those originally assigned the name as a heritage name, I appear to be the only one still active today. A search of the name in [the DVRE] only reveals me (of the originals) and those in my family that have taken it, changed their display name to reflect it.

As my family naturally grew, others took the name as their own. Eventually I created a whole sim dedicated to our vampire family. It represents an island nation that we now call "Mowadeng." The island is supposedly the last Pictish place on Earth. The Pictish people disappeared over 1000 years ago in real history but according to our back story, they remained in one place until modern times, the island of Mowadeng. They historically occupied the upper most northeastern part of what is now Scotland and many of the islands in the area.

The Pictish people have been a mystery to historians. Outside of a few proper names, nothing is known of their language. What we do know, we know from their neighbors, especially the Irish and the Romans. As the Church took a footing in early Britain, we have yet another source. We also have a couple of king lists and after the Irish, Roman and Church sources begin to comment, the king lists seem to correspond nicely to what is written.

I have attempted to recreate the Pictish world as one of the last remaining Picts in existence. Remember, in real life the Picts ceased being a nation over 1000 years ago and got absorbed by the Scottish and in some cases, the Vikings. There have been no Picts for that 1000 years and the premise of our island, Mowadeng, is that somehow, it survived obscure and the last Pictish place on Earth. Throughout our History here, I have taken real European history and using a crochet hook, I have woven the thread of Mowadeng into the fabric. To the reader, it is almost like we were always part of the story. In telling about the Picts, I can't do that as so much is missing. There are huge gaps with no material through which to weave our thread. Instead, I must reweave the missing material, much like darning a sock and weave our thread into that. I have drawn conclusions based on circumstantial evidence; made assumptions that I feel make sense about the Picts and just plain fabricated what I needed to. Luckily, I'm an avid student of history and the Picts are one of my favorite subjects. I just so happen to be up on all the latest discoveries and conclusions concerning them.

Our 1600-year history is written and recorded in several documents, which I created. It starts with a scholarly work on our history, The History of Mowadeng, published in 1850. This tells our basic history starting in the 6th century. Then there is my autobiography. Since I was born in 1820 and turned vampire in 1844, this picks up our history where the last work le off, but I tell it though my own eyes and experience up to 2012, when it was written. There are other works too, including the Black Book of Buroo, which tells the parallel history of the Fairies of Emain Ablach, and the Confessions of Conall, which tells my father's story, much like mine is told in my autobiography.

I never really put this together until just now, but I guess I have spent years creating a history where I was never subjected to the events of 9/11. I have meticulously created it down to the smallest detail. It is the ultimate back story and the basis for my day to day existence in [the DVRE] and my vampire self.

	Q05. Do you have your own private place in The DVRE? May I see it and take pictures? Tell me about your private environment.
P05	I do have a private place. It's actually in reconstruction mode for the winter season coming up! It's one of the things I like to do is decorate my home. You're more than welcome to come and take photos and enjoy the scenery as landmarks are in my profile. If you would like to see my home, feel free to message me and I will be happy to share it as it is on the same sim (full sim). :D
P06	Yes, I own [DVRE vendor name] in [DVRE location name]. I originally owned [DVRE vendor name] and closed it last year as my illness became worse. [DVRE vendor name] is smaller and I have one DJ. Below the sphere with the club is my meditation spot and below that is my home. All three of these are my sanctuaries. They provide a calming, reassuring and tranquil mood for me and anyone else. You are more than welcome to come to Musically Rapt and take snappies.
P07	My biggest private place is not private, as I share it with anyone who cares about peace and relaxing. It's my ultimate creation, a full island. I will send a picture of my real private place soon, it's very modest, just a like house in a skybox.
P08	I do have my own place. We do. I have made it smaller over the time here due to finances but I am always happy with the results. I decorate and hubby terraforms. I have banned myself from ever doing that. You are more than welcome to come see anytime. Our skybox has an orb on it, but I would be happy to give you links to my main level and my build platform mess. Main level [link].
P09	I guess, right now, my private place is my sim. You are welcome to come see it and take pictures. It is where I go to relax.
P10	I DID have a linden home but I have swapped so many times recently that currently I am homeless but my homes often follow a Georgian or Victorian theme / sometimes a fantasy castle theme - but always with a cozy ness to them - a comforting feel to the space is important. I also feel more wellbeing from sunset facing places inside [the DVRE].
P11	I used to have a parcel, but it was too expensive, so earlier this year I abandoned my land and took residence in a Linden home. I like it, and you are welcome to visit. It is a simple environment, with a balcony where I can look up at the stars and have a like fir pit going. There is a desk for me to write at. A group meeting space with a wall hanging fireplace, in case folks want to come together and read some poetry. There is a place to sleep, though I rarely use it. Downstairs there is a game table and also a living room with another fire space. There are paintings by my friends hanging on the walls along with motivational sayings reminding me I am enough. I also have another build on [DVRE location name] to house my poetry and effort to create 3D poetry in the virtual world.
P12	Yes, I have several private places in [the DVRE]. The main one is a sim I share with my closest friends. It is an arid tropical lagoon where we each have a small house for privacy, and a fairly large common area where we spend most of our time on the sim. We normally redecorate it in a winter theme for Christmas, but because we feel so comfortable there we have instead opted to rent another sim for the Christmas period where we have made it nice and wintery. Because I am a premium member, I also get a Linden Home, and I have opted for one of the new houseboats. It is mainly a place I go to when regions are being restarted or I want some alone me. The plus side is that it is connected to hundreds of sailable sims, so I can easily launch my boats from there and go sailing.

	Q05. Do you have your own private place in The DVRE? May I see it and take pictures? Tell me about your private environment.
P13	I have a home in [the DVRE]. I am a member of a small group of anthros who have a close bond, and we all live on a sim together in our own homes. The sim has a specific pseudo-Medieval look to it. [Avatar name] and I share one of these homes and have a collection of "trophies" and other such memories from our adventures scattered throughout our house, all of which bring me joy to see them. We have a picture frame which cycles through photos that I have taken of our antics. I can have trouble with dissociation if my environment is too quiet, so the members of the sim were kind enough to install a small stream and a campfire in our yard to create constant ambient sound. My home is my happy place, my safe place, my place of solitude, my slice of heaven, and I adore it. You are welcome to see it and take all the pictures you like.
P14	Nothing is private on the internet, that is a given. I do have my own place though. It was a Christmas gift to myself! Anyone is welcome and I'm always finding new objects to put in my home. First floor is the mix of tinies, dinkies and average sized humanoid avatars can sit in. Second floor is just me nerding out with Five Nights at Freddy's. Be sure to click open the locker! Third floor is just my bedroom. The keys over my bed is what's important to me. My best friend, I've known for years online, her religion has keys as its symbol. I want to let her and others know, that she's special to me. [link].
P15	As you can see, [avatar name] and me room is full of plushies and animals, I wanted Something safe , a cocoon Our room tended to become the family gathering place as in the home we live with a part of our heart family Photos attached at the end
P16	My little house is just that my little cottage I call it, it's all pink complete with bunny chairs and flowers and lights. Sort of like my sanctuary. Pictures are included.
P17	Yes I have my own place. Yes you can visit to take pictures. I need to know in advance who comes so I can properly set my security system. My home is set at 4000 meters of altitude for a better privacy and safety. It is a simple home, with a traditional Japanese design: there is also a terrace with trees and a garden pond. I spend enough time at my home, to relax or to build having a specific platform.
P18	I do own my own space and I created a fairy forest to call home and relax in it's a great safe haven. Yes you may see it.
P19	I have a beach house on [DVRE group] residential island. It started as a little shack done up like my family's cottage while I was growing up. It was wonderful and rustic with lots of pictures and nick knacks and pictures of my family and anyone who I was dating and also a copy of the original art that I have hanging in my house in real life. I just had a new more modern house put up that I am decorating at the moment. It is slowly getting there. To me the outside is just as important as it is where I spend most of my time or have visitors. Dock, loungers and hot tub and a blues channel as my sim music. It was important to me to be on a bigger body of water instead of a waterway, our family cottage is where I was the happiest and as an adult escaped there when I need space and calmness. I tried to create the same here as I do not have this in real life any longer. Yes you are welcome to visit, bring a bathing suit.
P20	I don't. I lack the time and the drive to make a nice place.

Q05. Do you have your own private place in The DVRE? May I see it and take pictures? Tell me about your private environment.	
P21	I have my office and a family sim (you may already have pictures) I really don't classify either as private and I do also have other lands that I live at with others. Due to this, I am unable to give you or grant you access to pictures to some of my spaces. My home space and safe space is my family sim called Mowadeng. When I didn't know who I was or where I belonged or who I was I found in there. It's a space I can still go to when overwhelmed from being around to many people for long periods of me. Dancing in a sense gives me space which is mine at least for the few minutes a song and a dance lasts and I lose myself in those spaces. My farmhouse and cottage are quiet and safe places that offer much me for me to be alone active, as a child in play.
P22	I don't. I lack the time and the drive to make a nice place.
P23	Yes, and, yes you may. I have a simple Linden home. It has been in various degrees of being decorated (or undecorated) since 2010. Right now, it consists of a few pictures of my late partner, our old bed, a candle she used to own, and my two cats. For the most part over the years, it's just had the bed, candle, occasionally memorial roses, and various pictures.

	Q06. Do you create items in The DVRE? May I see some of them and take pictures? Tell me about them.
P01	Yes. [Avatar name] and I own [DVRE vendor name]. We have a Casper HoloVend inworld, and I can meet with to show you how that works, or maybe give you a tour (albeit small at this point). Most of the answer to this was mentioned in the previous answer, so I hope you don't mind if I move on.
P02	There's no pics to take, it's just grayed boxed in the skybox atm. I did have a shop in another avatar gacha reselling and my own things I made and but the pirating copybots in [the DVRE] made the gacha impossible, I enjoyed building the store and making the stuff & ads. I enjoyed making the things a lot, it was more of the overwhelming concentration I look for. I enjoy making the artwork for the adds as much as any part of it, (they're all I have left of it,) I got invited to an event and it was quite a scam and after that I just stopped and down-priced the entire shop on the Market place to 50$L per item, (low price) and forgot it.
P03	You can see them and take pictures, but besides photos, I haven't done much except make rugs from prints I've found on the Internet. My Flickr photos are at [link]. Most of those weren't in my art gallery. I can show you those pictures from the art gallery and pull them out of inventory so you can take photos. The Flickr photos are either [the DVRE] nature-based, art-sight based, or from [DVRE group] dances when I was a bit bored and so took photos of people. I was most proud of the 3rd floor of my gallery where I had a Posada exhibit. My ex-husband had the original prints under the bed with other art he didn't like and so he was delighted to give them to me. I used a technique I once saw in an art museum in the Netherlands. Having a card up that explained something about a picture of Posadas and then asking a question the person could think about. Posada lived during terrible times in Mexico, but was able to use his imaginative, funny art which was published on cheap paper sheets and distributed. He was able to convey his message and response to the repressive government in this way. I found the entire experience of putting up the 3rd floor healing. I even had an old fashioned projector that projected an interesting short YouTube video on Posada. Because Posada so often put skeletons in his art, I had 2 or 3 walking around and one playing a violin. When I was going to totally redo my partner's home because his wife who passed smoked so much and I have asthma, I made a copy of his house in [the DVRE] and then was able to convince him to take down a wall and a few other major things in the redo. When I build I never get square corners totally square so it was only good for changing our house, but it was a big help.
P04	Yes, I do. You may see as many as you like and take pictures. One of my most personal creations are my tattoos. The Pictish people were extensively tattooed over their entire bodies and as a Pict, so am I. There are no Pictish tattoos by any of the creators in [the DVRE] so I had to make my own authentic ones. I create all sorts of things. Some I create completely from scratch, when I find that no other creator has yet created such things. I sometimes create things I know of in RL like the sea chest that belonged to one of my ancestors. I have the object in RL and I have recreated it at my beach house at [DVRE group]. I just had an amazing realization just now, writing this. I have created my real life here in a house like the one I grew up in. That chest is in it as are pictures that reflect my real life. Pictures on the wall include ships captained by my ancestors and even a picture of my grandfather. My real life is in [the DVRE] but here is the kicker: I spend absolutely NO TIME there! Interesting. I'll give you a tour of that place too, if you like.

	Q06. Do you create items in The DVRE? May I see some of them and take pictures? Tell me about them.
	Back to my creations… Most of the time I create stuff in [the DVRE], I do so by incorporating stuff others have created. I have thus created the entire [DVRE group] region including the club and the shopping mall.
P05	I do create items in [the DVRE] but they are for littles and on my original avatar I create wall hangings and such! The store is at the sim that I was talking about above. My wall hangings are normally quotes as I LOVE quotes both [the DVRE] and RL!
P06	Only thing I can really create in [the DVRE] is a mess. However, with the help of another person who did the Photoshop work, and ready-made parts, I made the sphere, which houses Musically Rapt.
P07	I created an English countryside, also because my ex-partner is English. It's the result of love.
P08	Yes, yes, yes, and um yes. I would love to send you and outfit if you are Maitreya, slink or Belleza... let me know in world :) would you like a gift card? [Link].
P09	I am learning how to build with my other avatars and you most certainly can take pictures. Currently I am working on a Pirate/Slave theme. I have built a prison cell, a few houses. They aren't the greatest since I have to learn as I do.
P10	Yes I do create things. I am not a mesh creator I use full perm meshes and kits to make my own things. My stores are on the [the DVRE] MP at [link].
P11	I am capable of creating items out of prims, however I no longer have land to build on. I might have some of my creations in my inventory, but we'd have to go to a sandbox for me to show them. One is really cool, from a Speed Build event I do sometimes.
P12	I create mesh objects for use in [the DVRE]. I am by no means a master, but I have taken on some commissions from people who have wanted something custom made, and it has been a fun and rewarding way to help pay for my [the DVRE]. It has been mostly decorative items like signs and 3d versions of logos, but also some bigger things like a cave, a bridge, and a replica of a Pink Floyd stage for a customer. I'm also working on a house, though that is taking a lot longer to complete than I had anticipated. And yes, you can see them and take pictures if you'd like.
P13	As I am still fairly new to [the DVRE], I have yet to branch out into the world of creating.
P14	I use to create items using sculpts and prims back in the day, not anymore. I can't create mesh, since my bones are brittle and I often get bad cramps and tremors. I have been just making skin mods, texturing clothes as a hobby. A lot of it is cheap, as I said, it's only a hobby. And I heavily believe in being fair and reasonable. An avatar that is L$3,000 on the marketplace, I'm going to make skin mods that are under L$200 range obviously. Frankenstein kind of avatars, like kobold avatar, new head from a different creator, with wings from another creator and legs completely elsewhere. Another thing I will make skin mods cheap for. Not everyone has that, unlike a fully complete avatar from one single creator. It's going to be reasonable to get from me. I try to think of everyone in that sense. [Link].

Q06. Do you create items in The DVRE? May I see some of them and take pictures? Tell me about them.	
P15	I began creating clothes for me and my partner, and people began to ask me to do clothes for them and to open a shop. But creating became too stressing the fear to fail, the feeling never reach the quality I saw in other creators I respected. I finally stopped when mesh came, I was too bad with blender. Photos attached at the end
P16	I use to create but I haven't in a long time, it got too expensive since [the DVRE] charges you to upload textures.
P17	I do take pictures and you can see those at my Flickr page [link]. I also create sculptures and art buildings. Those are mainly abstract shapes because I have no patience to learn how to use the specific software and besides I am not good in drawing.
P18	No, not to sell but to just tinker around with. I do artwork in real life and would be happy to share the link to that.
P19	I create soundscapes such as the sound of the ocean that anyone can drop a ball on their property on in their house and it will give them the ambience they wish. RL I have over 70,000 sound effects so they are very real and not the ones people steal off the internet. Being a sound pro they are adjusted to be optimum in world. I have a marketplace store with a few up. Now that I am back online I will begin to put more up. I have also been learning animations that I hope over time to use inworld. There is nothing to photograph except the little balls that I use to deliver them, but you are welcome to and also hear them.
P20	Define items, I create the classes I teach. You are welcome to come and enjoy them.
P21	I do create, many of my items are on the market place, and I do not really have any pictures of items nor a way to take pictures, unfortunately. I've created baby DJ booths for a prim baby. I take pictures of scenes within [the DVRE] also and that is more of an art type creation. I have done many different theme pares where I've built the sets as well as build most if not all the parts and pieces for dances sets that I do.
P22	Define items, I create the classes I teach. You are welcome to come and enjoy them.
P23	Yes you may. So far, I've only created a few simple things in [the DVRE]. I've never been much of a builder/creator, and mostly just go about editing and fine-tuning other stuff. Probably the most notable thing I've created in [the DVRE] was a set of insect arms for a "bid me" event back in 2016, where to shock/horrify most of Relay, I let them bid me to look like Debbie Stevens from A Nightmare On Elm Street 4.

Q07. How do you feel physically (in real life) while you are in The DVRE? How do you feel (in real life) after spending time in The DVRE? Describe your feelings as they relate to PTSD.	
P01	It depends on what is going on. Most of the time my breath is shallow and halted because I'm very involved and simulated (and I'm also vaping). It is a bit of an addiction. "Afterwards" is always put off. Most of the me my mind races until I've laid in bed for 3 hours trying to sleep, and then I have to give in to doing something physically different for a bit (like ...going back to [the DVRE]!), to only then try to sleep again. Vicious cycle. For the most part, I do not necessarily experience PTSD in [the DVRE]. I usually see [the DVRE] as a place to hone some creative talents and socialize a bit. My trigger could be an evolved form of abandonment and rejection (like what I discussed in question #4). But I have been banned so many times now in [the DVRE], that the exposure therapy has just made the PTSD null. However, the last me I was triggered was very recently by this crap (a cascade of Linden Law, Ethical Law, and drama BULLSHIT, from both realms. Very simple: My first banning was this: Then, a certain influential person in another correlating fantasy set of sims/regions, encouraged me to go ahead and build Zamargad (tried to make me feel beer about being banned from Faery Crossing). Let me join their reincarnated group of Elf Circle. I asked if when I was done with the Zamargad brochure, I could distribute it to their group. They said yes (even gave me notification rights). Zamargad had the grand opening, the article got published, Treasure Quest customized a coin for us, and the brochure went out. Next thing I knew, I was banned from this correlated fantasy place too. Fine ...Joined a mental health group to help me figure it all out. A lot of me had passed (like a couple years). This group even began helping me with RL problems! :) I had been dealing with a particular RL issue when, this certain influential person, unexpectedly joined the mental health group and showed up to a meeting I had attended. I brought this issue to the meeting/group leader's attention. They informed me that my "prestige/rapport" did not matter (because "everyone is equal" -?). Also, that there was "no conflict of interest" because "everyone is entitled to get the help they need." even if maybe this person was only doing so to trigger me, based on evidence from a few others that have dealt with this manipulative person in the past as well -that the mental health group leaders refused to acknowledge, unless there was an actual restraining order or police report ... To which, I remember the ridiculous, "what was I supposed to do, get a rape kit done?" kind of jokes that were made about things that happened in a virtual reality platform! *face palms* The leaders furthermore did not care that I needed their group because I could not afford therapy in RL (like really, I'm about to get billed over $1K for blood tests because some assholes seriously don't know how to code for insurance). Instead of condoning the idea of letting me make an alt (to keep my sacred anonymity) + behaving respectfully and peacefully during all meetings (especially toward this trouble-making person to avoid conflict + allow them to get help), they insisted on "banning" me from meetings on the day this person wanted to go to them. They did not care about the days I could attend, despite RL work/sleep availability. ...The boom line was that it's THEIR group, not mine (or anyone else's who would've fit the role of mental health consumer), and whatever they said ...went. Simply because it's THEIR group. ...And they can get away with it because they're "peer" support, not "professional" support. (Lordy, help me if I ever thought I would be stable enough to

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	try my hand at becoming a mentor for them in the future, because that's ruined now!) :p So, fine. I decided not to go to their meetings anymore (or at least for a like bit, as sometimes time can give everyone the gift of clarity). I looked for other places, but found this mental health group to be the most dominating one in all of [the DVRE]. I then give up. I immerse myself in productively distracting things (both [the DVRE] & RL). Time passes (like a couple of months) and I feel good. ...Great, really! Next thing I know, I'm going down uncharted territory with anxiety attacks that make me physically feel like I am falling. Yes, fucking falling! Residual adrenaline? Yeah, got blood work done, passed with flying colors (no diabetes, no magnesium deficiency). Fucking scary!!! Currently, that person has "left the mental health group" (for reasons I have absolutely no idea of, other than they said they needed to update their viewer or something. And yeah, I advised the leaders to check into it and make sure this person was alright), but I am still banned from meetings on that person's day, in case they decide to show up. People are strange sometimes, politics are horrible, and I guess I am maybe just lucky to still even belong to the group! So. Sometimes you need a break from [the DVRE]. Because usually when RL sucks, [the DVRE] rocks (and vice-versa). But when both suck and are hitting hard on a certain trigger, that you didn't even realize you had, that makes you feel absolutely powerless in both realms! Sometimes there's absolutely nothing you can fucking do, but acknowledge the weird physical symptoms, and then look forward to seeing what happens next. Like a crazy, alienated bitch. Welcome to [humanity &] [the DVRE]!
P02	Either bored or unable to connect, or numb in a way I look for, by using it to block out real world with some activity that takes a lot of mind power. I guess underneath it all I feel anxious. I am addicted to the diversion from my real life that [the DVRE] gives me. I feel sad and disempowered by the addiction, but these feelings are suppressed if I am overwhelmed with some activity in the game.
P03	I'm usually relaxed in [the DVRE] and it's often hard to get out because I'm having fun or concentrating on something I'm working on. However, if I'm playing "en garde" or doing something stressful in [the DVRE], the stress is just like in RL. I met a woman who said she is claustrophobic in RL and was shocked when at her first crowded ball where the floor was jammed with people she had a panic attack. From then on she always stood at the back of groups. In RL I am terrified of spiders….has something to do with my mothers' hair when she was beating me on the floor. In [the DVRE], an amusement place had a huge spider crawling on the floor and I had to shut the computer off…..likewise at Halloween I've been disturbed by spider costumes. When I was getting divorced I would often stay in [the DVRE] until 3 or 4 in the morning. I never could or would want to do that anymore. Because of the shooting incident and now the terrible bomb-like sound from the semi-truck crashing into the back seat I couldn't stand fireworks in RL and will never go to another one. I become almost catatonic and am terrified. But in [the DVRE], the fireworks are much removed from RL reality and very much on a screen. So they don't bother me. Gardens and gardening has always been my safe thing to do in RL when I'm super stressed by my PTSD. And it's also the same in [the DVRE]. I simply couldn't have a house here without a garden. Sitting at a computer screen for a long time is

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	excitatory and somewhat overstimulating. I've always had problems sleeping and so when I've been on for a long time before sleeping, I have a very, very hard time going to sleep.
P04	I have never really thought about it. I guess it is almost like I'm two people, my vampire self in [the DVRE] and the real me. I step from one into the other effortlessly and I am not aware of my other self. Well, I shouldn't say that. I am aware but it is like I see my other self in the third person. Right now, for the first me, I'm seeing my [the DVRE] self as a form of dissociation. I can talk about my real life while I'm in [the DVRE] but it's like I'm talking about someone else. I guess I really can't answer the question of how I feel physically (in real life) while I'm in the DVRE? The dissociation prevents this. I can say that as my vampire self I feel safe, powerful and undefeatable. I feel good. It is like I don't have PTSD in [the DVRE] but I could talk about that other person who does. I never thought about how I feel when I get up from the computer. I have studied that the last couple of days so I could answer this question. When I log on, I instantly become my vampire [the DVRE] self. When I log out, it takes 20-30 minutes for me to gradually revert to my RL self. The hypervigilance and everything fades back in over that me.
P05	I feel happy and excited to be in a Virtual World. I feel rejuvenated and relaxed after being in [the DVRE]. For me, this is a very rare thing as I'm almost hypersensitive to everything in RL because of my PTSD.
P06	First, let me clarify, I have CPTSD. I had PTSD from childhood/adolescent abuse and bullying at home, school and church. The abuse was physical, emotional and sexual. It 2006, after a failed surgery for my chronic illness, which first manifested October 28, 2004, I was told I had PTSD from having to now live with a debilitating illness the rest of my life. The disease I have took so much from me and continues to rob me every day. There are two things I can technically do in [the DVRE] that I can no longer do in RL; however, I do not experience the same emotional response. These are swimming and hiking. One thing I loved doing in RL that quickly ended is dancing. I was still able to work when I first found [the DVRE] and was working my normal overnight shift. I clicked on something in [the DVRE] and slid away in my chair to tend something on the other side of the room. When I returned, I saw my avatar dancing for the first time. I cried for twenty minutes watching this little cartoon character called [self, avatar name] dancing. It was as if things the illness took away from me were given back to this little representative of me. It still makes me a little giddy. My illness causes me to get tired and have dizziness. Being in [the DVRE] more and more causes me to feel physically ill, which is why I had to give up regular DJing and spending so much time in world. Because of this, I am torn. On one hand, I got part of my life back in [the DVRE] that was taken from me in RL along with so much of my independence. Now, I am being robbed of this as well and it triggers the CPTSD.
P07	There are days I'm totally worn out, because the DVRE turned from support into a partial trauma, socially seen (see earlier). Today I avoid being online a lot, but I go online because of friends. Maybe that will change.
P08	[The DVRE] is my social networking. It's my therapy, counseling, creative outlet all from my bed in my jammies. No interactions with RL people in reality. Yes I know

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	these avatar running around are real people too. But I am not intimidated by them, most of them. If situations get out of hand I can always teleport home and regather myself. After I leave for the night or to do something in RL I miss it. I feel safe there. I feel in better control of my life and not judged because physical and mental ailments I deal with on a daily basis. They don't know if I have to take meds for this or that. I am just cute there
P09	I feel calm and happy for the most part in real life while vising the DVRE. My PTSD is stress related from having been in the military. Noise triggers. I don't live in a "quiet room" but it is real close to it. When I leave the DVRE, I am pretty relaxed and don't get as upset as I would if I did not have that outlet.
P10	I sometimes disappear into [the DVRE] for a break from real life. Maybe a friend did not call or it rained too much to go out and I will just enjoy a few hours building, decorating or chatting in there. Then I will feel creatively fulfilled and socially a bit more awake. However when I finish I need to keep a limit on my time inside [the DVRE] as sometimes I can feel emptier or frustrated after using it. I don't think that [the DVRE] is any substitute for RL experience but I do know I can regardless loose myself inside it longer than intended. I do always have a worry about the time I spend in it because it can be so all encompassing.
P11	I feel less stressed in the physical world while I am engaging in the virtual world. The virtual world becomes very real to me, and the environment do not require me to be so alert and stressed.
P12	I usually feel very good physically while in the DVRE, and it is very rare for me to get triggered while I am there. How I feel in RL afterwards vary a like depending on what I have been doing. Mostly I feel very fulfilled after doing something meaningful or enjoying the company of friends, while other times I feel drained and exhausted if there has been a lot going on. I have a secret avatar that only my absolute inner circle know about, which gives me the possibility of surrounding myself with my closest friends if things get too much, or be alone completely as they never disturb me on that avatar. It allows me to go to my happy spaces when I feel the need, and I find this extremely helpful when it comes to my PTSD symptoms. Oftentimes just knowing that I have the option is enough to alleviate mild to moderate anxiety, irritability, sadness, etc.
P13	Playing in [the DVRE] makes me feel relaxed. My anxiety lessens. I can find sims to suit my mood, either tranquil or peaceful where I can soak up the scenery and be meditative, or exciting and adventurous to distract myself from my real life symptoms. Both of these can be exactly what I need at the time for my real life self to find a sense of peace. I laugh more playing [the DVRE] than I do at any other me of the day, which is important to note as I have also been diagnosed with major depressive disorder. It is a wonderful tool to help me cope with both the physical and psychological symptoms of PTSD.
P14	Depends on what's going on. In a negative sense that relates to PTSD. I'm shaking, angry, upset and I want it to all stop and that source of that triggering moment to leave for good. After all of that, I am still very much upset. It'll replay in my head like a broken video. I avoid it during (if I can), I avoid it afterwards too. You can't change the situation or turn back time. You can only deal with it and try to move on. If anyone brings it up or triggers yet another moment right after it's over, I'll remove myself

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	entirely from it. Block and/or ignore it. I have that choice in [the DVRE]. No one else is going to give me the same respect I give them 98% of the time.
P15	When I am in [the DVRE] I forget myself, I become talkative, a brat, I am feisty. I cried in [the DVRE]; I laughed. When something in [the DVRE] happened to trigger my PTSD I cried and often logged off, nom I may still cry but learned to use mute and derender to erase the offender from my life. I feel safer here in [the DVRE].
P16	I feel safe on [the DVRE], it takes my mind off of things. I like the meetings in [the DVRE] with [avatar name] and I relatively like everything in it. Except the drama. I try to stay away from that. This is the perfect place when I feel the need to isolate to come and spend some time with friends with boarders. This means my friends are my friends, we don't judge and we don't delve too deep into each other's problems, we just try to have a good time. There have been times when I wake from a nightmare the day before, and then get on [the DVRE] where I feel safe the next day.
P17	When I am in [the DVRE] I physically feel well and relaxed, enjoying the company of friends or the fun with other people. Usually I keep separated what happens in [the DVRE] from RL. Nothing to deal with if the things are positive. But is something goes wrong or make me nervous or anxious, I tend to export this feelings in RL. I would like to ignore those facts but I can't so my mood changes a lot, making me grumpy and in some case wishing to have the powers to react harshly.
P18	I feel really great for the most part when I am inworld seeing good friends and having some great times dancing and talking with other people and sharing some experiences. I feel spending time there really helps to ease my triggers and get a good picture that others out there have similar issues to mine.
P19	I am a person that totally immerses himself or herself in what they are doing. If I am reading a book, I am in the book and the outside world does not exist. Watching a movie, playing my guitar. All are total immersion for me and an escape. [The DVRE] is no different. When I am inworld I am there as deep as I am able and if I am not interrupted I feel very connected to my inworld character. I laugh and cry and love and feel that in me behind the keyboard. This allows me to escape the world of hell I have had in real life. Inworld I don't have a dying daughter or now one that has passed, I don't have a drunk husband. When I hug someone, part of me feels it inside. I have a friend that I am so very much alike at [DVRE group], We are the same age (10 days apart) we are addicted to music, understand each other while joking, talking or crying. I feel like we have lived parallel lives just in different countries. I can stay immersed always while there unless I am triggered, then it is almost worse that real life. I have lots of close friend and support outworld, but I can't be with them all the time and that special person in [the DVRE] has held me together more time than I can count.
P20	I am more relaxed, less stressed about my pain, my anxieties.
P21	I've become more self-aware compared to when I started which has helped a ton. I can feel a range of emotions depending on the situations I've run into either in world or in Real Life on any given day. When interacting with others it can be very panic-inducing especially if I haven't met you before or was the one that engaged the conversation in the first place.

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	I feel a great sense of peace and belonging when I am able to come together with other survivors of trauma that truly get the experience. There is more of a sense of freedom and open acceptance in a virtual space compared to real life for me so there is less struggle and bale with myself over what I can or can't do virtually verses in real life. When I'm able to have a true sense of being supported through something that I struggle with in Real Life from those I know and surround myself within [the DVRE] then I am able to feel taken care of and loved on in real life. I've also gained a great sense of purpose using [the DVRE] to help other people. I think it can annoy people at times because I treat it as real as I do but [the DVRE] truly is a way and a means for me to access the world around me in ways I can't like being able to work. So I definitely feel proud and accomplished. For the most part, nobody knows what exists behind the screen so I never feel judged or pitied in the same way I would in real life due to the disability. I'm definitely more equal and people like me or don't like me based on qualities over appearances. Sometimes even the emotionally rough days can be physically exhausting. Having access to such a place is super important to improve my wellbeing especially during times of the year like winter when accessing the world around me is difficult if not impossible.
P22	I am more relaxed, less stressed about my pain, my anxieties.
P23	It varies. Sometimes I feel fairly well while I'm logged into [the DVRE]. Sometimes (like if I've had an incident or feel like I'm in trouble), I feel anxious, stressed out and scared also while logged into [the DVRE]. At the very least, I can say that by "looking like me" while I'm in [the DVRE] that I feel at least a bit better being in [the DVRE] than not in [the DVRE]. But sometimes that isn't much of a difference. I do know that pretty much anytime I do log out of [the DVRE], even if things are going poorly in there that I regret it, that I logout thinking "If only my RL was a bit more like my [the DVRE]. If only I looked and felt like this in RL." But, despite that, it's not always great. I've been stressed and even a bit scared logging into [the DVRE] since July and the breakdown. I do fear who knows what and what they think of me and whether I have friends left after I came unglued. And despite preferring [the DVRE] to RL because of gender identity, there have been more than a few times where I've logged out of [the DVRE] out of rage after someone's been nasty or said something awful.

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P01	If you think outside the box, are funny, kind, a leader, innovative, dare to dream & inspire, and then you're with me, kid! I am friends with others. Both on [the DVRE], and beyond, especially with those who really matter (like adopted family -official or not). A lot of times you may find this situation happening. I play it by ear. If you are in this with your whole heart, then I won't look back either. Let's make the world a better place together (or at least more enjoyable, LOL)! Believe it or not, making friends in RL is a lot harder than in [the DVRE]. I try to appeal to everyone, honestly. I can make a very entertaining conversation when standing in line or something, no matter what. But I do believe that because I work graveyard, it's hard to meet people + even fathom making friends. The people I work with, I would love to be closer to, but I learned long ago that it's not always a good idea to get too chummy with coworkers (and more importantly, I think they're all aware of that and play that back to me, maybe). So, meh. Not sure what to do about this Catch 22 other than to just continue practicing/escaping and doing the best I can.
P02	I think it has made it harder to face real life and real people. I am 80 percent solo in [the DVRE]. I have a 2 long-time friends who are not online a lot but I have stayed in contact with. The social aspects of the game, sex, shopping, clubs and empty repetitive conversations in them from the poor hosts (the conversation is almost reduced to retardation, people just use emotes and font decorations with annoying noises,) - the fakeness turn me off a lot. My 2 friendships on here are more based on them becoming an actual friend who talks about anything and everything
P03	During my marriage, I lost myself. My RL therapist said, "Because he doesn't beat you, you think everything is fine." So when I came to [the DVRE], although my career was going great, as a person I had lost a lot of parts of me. The first change in [the DVRE] was that as a younger woman interacting with the environment, I felt sexually aroused in a way that I thought was long gone. Then I learned to flirt which I had never had the confidence to do in RL. Both transferred in RL to men other than my spouse. I probably would never have gotten divorced if I hadn't been in [the DVRE], but it showed me so many things about male-female relationships. I never said anything, but the people who were my closest friends in [the DVRE] began to say that they noticed a big change in me. That I was much bolder and interesting. Much of this seemed to transfer into RL Outside of work, I'm relatively shy and that has carried over to [the DVRE]. I simply am not a group person in RL who initiates social action and I'm not one here. It took me a long time to talk to someone in [the DVRE] and when I did it was someone who was a beast avatar, although a very nice one. Somehow, his being a beast avatar made him less frightening to me. We ended up making love. I hadn't done that in [the DVRE] and he was a good person to [the DVRE] deflower me. The people I am drawn to are intelligent. Because I'm also a writer (technical textbooks on teaching reading), I am only interested in people who can carry on a typed conversation. I very much enjoy getting to know people from other countries who can write well enough in English. In the US we are isolated from other countries and I learn so much when I develop a good friend from another part of the world. (However, I have learned to avoid men from the Middle East…they seem to view all of us American women as whores and I've only had unpleasant experiences with them. I used to think that someone should have a counseling course for them on "How to treat an American or European woman and Have a Relationship." Every woman I've talked to has had the same experiences with them.) I have been interested to discover that typing unintentionally conveys age, and the avatars I've met whom I'm interested in are always about my age or within 10 years of it. I am

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	good at remembering clues and so have always figured out (or been told) who the avatar I'm with is. Skyping prevents catfishing. There is only one avatar male whom I've been close to whom I know nothing about in RL. It's interesting that his complete anonymity makes him even more interesting to me. My best friend in RL and [the DVRE] has become an avatar I met during my second year in [the DVRE]. She was a hostess in a DJ club and eventually bought her own club. Now she just DJs. I've been able to help her through a number of traumatic [the DVRE] and RL things and she has done the same. We met once, but most of the time we talk on the phone in RL or in [the DVRE]. We've had some of the same trauma and so she's been a big support for me. After I moved into a small house with my current RL partner, it seemed like betrayal to engage in any type of sexual activity in [the DVRE]. I even felt guilty flirting. But I'm finding other things to do and that is working itself out.
P04	This is another one that I never gave much thought to. I have gathered some close cyber friends and cyber family in [the DVRE]. The club and my vampire clan are the two groups where I get close to people and [DVRE group] is arguably a third. I think what separates [DVRE group] is that it is limited to weekly sessions mostly, while I spend hours each day interacting in the other two. Some people I interact with are drawn to the dark and Gothic like I am and that is why they join my family. What is interesting is that almost without exception, they came to the club first and then became my friend. Then they joined my clan. You could say that I have a group of friends through the club and a subset of that is my family. If I had to define a characteristic that all my friends and family have in common, I'd say that they all are afflicted in some way. Two of my friends suffer from spina bifida; two are autistic; one is an alcoholic; one has gender identity issues; another has various physical challenges resulting from an accident; another is paralyzed and in a wheelchair courtesy of a drunk driver. The list goes on. The one without afflictions per se is in a loveless marriage and her 26-year-old daughter has come home to die of cancer. Several suffer from PTSD. Yet the vampire me does not have PTSD in [the DVRE] and I nurture and protect all these afflicted people. Interesting…I've never thought about that until just now. As far as telling whether this has helped me make friends in real life, I really can't answer that. I would need to go back to 2010, not log into [the DVRE] and see how my life would change. I began socializing again in real life in 2016. Maybe [the DVRE] helped me and if I hadn't had [the DVRE], I may never had done so. Or maybe [the DVRE] allowed me to put it off and I would have started sooner if I didn't have [the DVRE]. Or maybe it was strictly a function of me and I was destined to start socializing in 2016, with or without [the DVRE], and [the DVRE] made no difference. I can never go back and try things without [the DVRE] in my life and without doing that, I have no clue if it helped, hindered or had no effect at all. All I will say is that I feel [the DVRE] has been fulfilling and rewarding in my life in its own regard.
P05	I have found making friends in [the DVRE] is so much easier than real. I feel I can relate much easier with people I can't see and those who can't judge me because of my mental conditions.
P06	I have next to no friends in RL because I am virtually a shut-in. I have friends in [the DVRE] who are also part of my RL now via Skype, Facebook and text messaging. The people I associate with most in [the DVRE] come from various walks of life and backgrounds, different countries, religions, etc. Love of music, especially jazz and blues is the key ingredient.

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P07	The DVRE has changed me. I have learned to open my eyes for so many other types of people I never met before in real life. It has changed my attitude towards life too. I don't think I make friends easier in real life now, but I do think the quality has changed for the better.
P08	I tend to make friends in DVRE quite easily, but I feel sometimes as if am the collector of people that are as messed up or worse than me. It's like flypaper. But it gives me the opportunity to learn about other conditions and to share my experiences that I have had to deal with. I can't say I make friends easier in RL. I really don't leave my house much. I did take a chance last summer and went to a local Live Music Jam. It was a smaller event but I was able to meet face-to-face some singers that I have become friends with in DVRE. Scary ... ok terrifying, but made my [the DVRE] experiences with them better.
P09	I love talking to other builders and shop keepers. I can only do it for a maximum of an hour before I start feeling the need to be alone. I have friends on my friend list but we rarely do things together. I don't even attempt to make friends in either the DVRE or real life.
P10	I don't find it easier to make friends in RL after using [the DVRE]. I find making friends in both quite difficult however having used the forum and the chat I have found a bit more of a network than I would have if I had to do that all in-world.
P11	I think people in virtual worlds are as diverse as people in the real world. It is just easier for me to set boundaries in the virtual world. I am friends with people in the virtual world, yes. But most are acquaintances because of my trust issues. But those who are patient become friends, which is similar to my physical world experience, although I think the time-to-trust (TTT) is shorter in the virtual world, probably because of the anonymity. I can be more open because I control access to who I am in the physical world. Less than half dozen people in the virtual world know my physical world identity. I do think some of the skills I have learned in support groups have overflowed into the physical world, but I am not sure about the ability to make friends, which is probably complicated by my limited physical abilities too. So this is hard to answer.
P12	I interact with a wide variety of people in DVRE. Two people are my closest friends, we share contact details in RL, and though we haven't made any specific plans to meet, we are open to it should the opportunity arise. They are very friendly, funny, caring, and I consider them my closest friends, even though we haven't met in RL. They have been there for me through some of the best and worst moments of my life. Then in the second tier, I have maybe 10-12 friends that I generally always feel comfortable around, and this includes the management of my peer support group, people that I go sailing with. They are all people I have known for at least a year. I guess I am very guarded about who I let close, even in a DVRE. Outside of that, I have around 200 people on my friends list. About half are contacts I've made through the peer support group, like sponsors, mentors, volunteers, etc. Though very few mentees as I stopped friending the people I help in order to prevent them from seeing me online and assuming I'm available for them to unloading on me. I'm not sure if it has made it easier making friends in RL, but it has been a great place to learn to set healthy boundaries, so while I haven't made many friends in RL, I have definitely improved the quality of those friendships. I used to be a real people person in RL, but ever since the incident I have found it very difficult to interact with people socially, especially in crowded and busy spaces. I have always really enjoyed meeting people from all walks of life, with all sorts of backgrounds

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	and stories to tell. Virtual worlds allow me to continue with that from the comfort and safety of my own home.
P13	I seek out kindhearted individuals who want friendship with no ulterior moves. I especially enjoy intellectually engaging conversation coupled with humor. I have made several friends in [the DVRE], and I look forward to spending time with these individuals. The strongest bonds I have are with people that I have confided my story; I feel like I don't have to hide behind a screen of mystery and can truly be myself without worry of accidentally alluding to something in my past. I would not necessarily say that I have found it easier to make friends in real life, but I would say that I am more comfortable within myself, as [the DVRE] has helped me expand my own horizons and learn more about the person I am inside. I have developed a sense of confidence in myself that I did not have before playing [the DVRE]. I would hope that moving forward in my real life, this newfound sense of self-awareness and being at ease with who I am will make it easier to make friends in the future.
P14	Intelligently stimulated types. The ones that are deep thinkers, make you think outside of your own closed thoughts and opinions. Or the ones that get your mind going in that direction, even if they meant to or not. Mainly if they share the same suffering as I have. I get that instant connection with them, I feel more comfortable around that person. I have plenty of friends, not many friend cards since I'm still closed off with trust issues, but a lot of [DVRE group] and tinies I buddy around with. I have it found it easier to make friends in real life, after [the DVRE]. I have that insight from both worlds but mainly from [the DVRE]. I use that as my connection to those friends in real life.
P15	Making friends is easier than in real life. I am more open, less introverted, or afraid to be with others; yes I have friends in [the DVRE], people I trust more than my RL friends but yes, [the DVRE] helped me to slowly open with others.
P16	I have some really strong friendships online with people across the world. In RL not so much, I just can't trust other people in RL except for my husband. I want to be left alone in my house and not have to interact with others as much as possible. It has helped me to work at the voices in my head that say bad things to quieting them down when I'm in my safe place.
P17	In my personal experience I have few close friends but also so many persons with whom I share the same interests or purpose, if we are in the same group. It happens to meet these people maybe once in a year but our interaction is always fine, even if shallow I like their friendly approach. No, [the DVRE] does not help me to make new friends in RL, I would say that time-to-time I feel not comfy to face Real Life or people in general, and I tend to close off to feel better, having a tough attitude myself.
P18	I tend to make friends with people who are more intellectual, fun and outgoing types. I have many, many wonderful friends in-world that have been so for many years, and yes I do find it easier to make friends after having been a part of a virtual world for so long.
P19	Friends in real life have always been easy. I am very gregarious and open and talk to strangers easily. Since my daughter got sick I had trouble spending time with people. I wasn't afraid to, I just didn't have the urge or energy to spend time with others. I have some friends in [the DVRE] that I have become close to and can talk to like a real girlfriend. Especially one, with her I can talk as if we are out-world (with still keeping the

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	safety of in-world privacy) and share my real life. She showed me how important contact with people is. It pushed me to keep contact regular in real life instead of letting it slide because of my situation.
P20	I have 'friends' in the DVRE. Mostly they are friends because I help them with their viewer problems. Not really easier, but not harder either.
P21	I don't have any true friendships in real life. Being disabled isn't something that allows for that and can make it difficult for friendship. Caregivers are not always friends and for that matter friendly as well as have been in my case abusers. In [the DVRE] is that I still need extra time for things like the bathroom and have a caregiver that comes certain hours which can be challenging when trying to arrange activities. Those types of things can make it difficult in both worlds to take part in activities and I can be seen as someone who never wants to do anything when the reality of the situation may be the unwillingness to adapt and change or me never being given the opportunity to suggest the best me. It far easier for me to engage with fellow trauma survivors as we are all familiar with similar boundaries and wouldn't do to others what has been done to us that has gotten us hurt. It's a more enjoyable experience overall to help someone and offer support then it is to party and have fun.
P22	I have 'friends' in the DVRE. Mostly they are friends because I help them with their viewer problems. Not really easier, but not harder either.
P23	I like interesting, open-minded people who tend to think and think outside the box at that. The more unique and unusual a person is, the better. Of course, I do like those who like the same music or dress the same way or think the same way, but, even being around people who are different but have a desire to look at things beyond the surface and ponder and debate is appealing to me. I do have a number of friends in [the DVRE]. There are at least a few that I'd definitely say are good, honest, dear friends. There are probably a number of others I'd at least file under friends. Quite a few acquaintances, of course. And then those where, yeah, I do wonder if I'm their "friend" just because they want something out of me. I have nearly 600 people on my friends list, though, I'd honestly say there's maybe 30 or so of them I truly trust and feel are genuine friends. Maybe a bit higher, maybe a bit lower. I don't make friends at all anymore in RL. While that became the case within a year of joining [the DVRE], it wasn't due to [the DVRE]. I lost my partner to cancer on August 9, 2008. I'm still hurting and grieving over that. Within a few months of that, the state of California passed Prop 8, with nearly 65% of the people in my immediate area saying that marriage should only be between a man and a woman. Between the pain of losing my partner, losing a RL friend of 17 years (see the first question) and then the blatant display of bigotry from where I live in RL, I no longer felt safe out there. I now deal with agoraphobia along with PTSD, so, I haven't really been out there a lot to find friends in RL.

	Q09. Who are your favorite creators or vendors in The DVRE? Tell me why their creations appeal to you. Does their work speak to your PTSD feelings? Do these items reflect your thoughts about your PTSD?
P01	I love [DVRE vendor name] (they defined the genre of Gothic style clothing & accessories). I love Imagine (the best Alice In Wonderland type of garden accessories one could ever be proud to own). I love [DVRE location name] (a social networking site for all avatars, & the greatest place to find out about awesome things from all POVs). I love [DVRE vendor name] (the most exquisite & tasteful sexy clothing). Unfortunately, these things are [prey much] gone. Sometimes, it takes a keen eye to spot something very worthwhile. & a lot of the other times, the trend has veered from successfully hunting down that perfect diamond in the rough, to impulsively obtaining a blindly basic chakra item. I do not necessarily believe anyone's work speaks to any PTSD I may have, or reminds me of it at all. Stuff in [the DVRE] actually takes me out of that bubble. Now if I could just practice more impulse control that might save me on the whole debt-tangent-thing! *rolls eyes and laughs* Conversely, I also do not define myself by PTSD (I think that's a horribly demotivating thing for anyone to waste their time on). I do, however, feel that certain creative efforts speak to my style, character, & wave-length - as anything worthwhile should, for anyone, in fact! I enjoy these things for as long as they last, and they will never be forgotten or ever easily replaced by a new "manufactured" fad (although finding new styles are great too -and that does actually happen on occasion, as I do feel some new blog posts coming on!). Let it be known that I am just the type of person/demon who is willing to give as much dedication and appreciation to something that is made/done with my same kind of integrity.
P02	[DVRE vendor name] is a shop that builds houses from historical eras and is beautiful work and [DVRE vendor name], (gone now,) just because they were real works of art.
P03	As you can imagine I love the creators of realistic plants and trees that are often even more beautiful than the real thing: [DVRE vendor name], [DVRE vendor name] and [DVRE vendor name] lead my list of favorites there. The beauty of their plants, cliffs, etc. make me feel happy. The blogger [avatar name] does such high quality work and really helped me through her videos learn how to deal with all this new mesh that stymied me at first. I love buying different hair and have way too much. Recently, [DVRE vendor name], [DVRE vendor name], and [DVRE vendor name] have been my favorites. Their bangs looks good and the quality good. Two clothes stores I often go to are [[DVRE vendor name] and [DVRE vendor name]. I like the details that they put into the outfits. Before mesh [DVRE vendor name] and [DVRE vendor name] were my favorites but they were out of the picture for a long time. It seems that they are now finally conquering mesh. These days I often go to the events that have a number of designers showing one outfit each like [DVRE vendor name], [DVRE vendor name]. Clearly I buy way too many houses. The mesh builders are starting to build higher ceilings which is necessary. [DVRE vendor name], [DVRE vendor name], [DVRE vendor name] and [DVRE vendor name] are some of the best builders. A house shouldn't be too small cut camming is impossible, but I don't like when it's more than 3 big rooms because one never goes into most of the rooms. Who needs a bathroom or a kitchen in [the DVRE]? For fantasy houses, even though she's not building and they are not mesh [DVRE vendor name] are still sold and of amazing quality and imagination. I like the look of Boho furniture and other things for the house. [DVRE vendor name] and [DVRE vendor name] are two stores that have well-made mesh Boho things for the house.

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	I love to go to [avatar name] sandboxes because you get your own and no one else bothers you. (I was put in a cage on my first trip to an [the DVRE] sandbox as I frantically tried to look up how to TP home). [Avatar name] is safe and the bigger areas in the sky are big enough to rez a house. I think some of the most interesting art is in places like [the DVRE]. [DVRE location name] and all its regions is a longtime favorite. [DVRE location name] has always been a peaceful place that I have enjoyed. Although they have two clothing stores on the SIM, the design and forests in [DVRE location name] are stunning and I also feel peaceful there. The [DVRE location name] and [DVRE location name] are two other lovely sims.
P04	I like [DVRE vendor name] because as a vampire, their clothing fits my lifestyle. I have recently converted to a mesh avatar so I can no longer wear my [DVRE vendor name] wardrobe. I'm hopeful they will start creating for mesh avatars. I do a lot of sim-wide building and I like using a lot of things by the same creator to create continuity. A good example of this is [DVRE vendor name] by [avatar name]. He makes so many things in a tropical setting. When I set up AWT, I used so much from him that is gives the sim a unity and seem like a single build. He offers so much that it makes it easy and it is all realistic, quality stuff. Everything I said about [DVRE vendor name], I can say about [DVRE vendor name] [avatar name]. She makes trees and vegetation. Again, there is so much variety that I can do an entire sim with variety and depth yet have a continuity that is pleasing to the eye. Her stuff is realistic and prey good on land impact too. To top it off, it goes well with the [DVRE vendor name] stuff mentioned above. Based on the dissociation I mentioned above, my love of these creators and my PTSD are unrelated.
P05	I love collecting homes, cars, and decorative items from [DVRE vendor name], [DVRE vendor name], [DVRE vendor name], [DVRE vendor name], and places like that. For me, it just makes me so happy that I have control of my own home. I feel like that's because my PTSD is uncontrollable a lot and the reason I have it is that I didn't have that control that I should've felt or allowed to feel at crucial times in my life.
P06	My favorite is no longer in [the DVRE]. She designed and built the original [DVRE vendor name]. She also designed meditation objects and taught the class where I first learned about chakras and meditation. Meditation has helped me the most with my CPTSD.
P07	I have been busy with getting stuff for my island, houses, trees, etc. I am very attracted to nature creations, because it's not only difficult to make, Nature is my Goddess. They do speak to my PTSD feelings because those creations, and me putting them together into one composition, is my way to heal and deal with things.
P08	LOL sorry I had to. You know, I never thought about that in terms of PTSD. We all have our favorites. I mean for my human. [DVRE vendor name]. Clothes vary on the outfit I am looking for. Usually spend the 10L upload and make what I need.
P09	I absolutely adore the unique items made by [DVRE vendor name] of [DVRE vendor name]. [DVRE vendor name] and [DVRE vendor name]. [DVRE vendor name]'s stuff is mainly for house and garden decorations. [DVRE vendor name] and [DVRE vendor name] have items to help build a sim. [DVRE vendor name]'s creations appeal to my sense of creativity and uniqueness. I was wandering an event last year, about this me, and I picked up her gift. It was the most gorgeous Santa, sleigh and reindeer! Since then she has gifted me with a few unique pieces and I have bought some too. [DVRE vendor name], Their

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	items are created carefully and they connect together to make a great scene. I use Felix's and Two Moon along with [DVRE vendor name] to create different sim theme.
P10	I love interior designers such as [DVRE vendor name] and [DVRE vendor name]. They create the homes I would love in RL and the decor to go inside them. I am also a dolls house fan in RL and having control over the home and the decor inworld is important. These creators are making items that fit the aesthetics I like. They create cozy and welcoming environments.
P11	I don't really maintain favorites. I like exploring and finding new vendors who make quality goods. But in the artists circles I do have favorites. I like the poetry open mics, but I also like avatars such as [avatar name] who sculpts in [the DVRE] and other virtual worlds such as [DVRE vendor name]. To see his art, which I could not in the physical world because he lives in another part of the world. His sculpts are always a like bit 'off' in shape or emotional expression, which reminds me of myself, especially how CPTSD impacts my life.
P12	My favorite creators in [the DVRE] are [avatar name], [DVRE vendor name], and [DVRE vendor name]. [Avatar name] because of her amazing art installations that challenge the way I view DVRE, and pushing boundaries both for what is possible in a virtual space. She is probably one of the only people I have ever felt star-struck around, and I have met my fair share of RL celebrities. I love how she often delves into the surreal and macabre while capturing human emotions and behavior. Never Totally Dead is a store that makes really beautiful and high quality historical buildings that are often a like outside of the mainstream, often also leaning towards the dark. I have become very close friends with one of their creators, and he has become a mentor and somewhat of a father figure for me. Guiding and encouraging me to try new things when it comes to creating mesh, and constantly reminding me to not make something perfect, and to incorporate flaws and embrace imperfections. I love Apple Fall because of its beauty and realism, and I don't think it really speaks to my PTSD other than maybe help bring a scene to life and make it comfortable and homely.
P13	I have a so spot for JOMO, the creator of my avatar. JOMO anthropomorphic avatars strive to look realistic without a cartoonish or anime feel to them, and I feel like it lends me a quiet dignity.
P14	I have a couple of favorites but the ones I chat with outside of [the DVRE] is rare. [link] I'm in their discord group and they got two people I'm friendly with. Their creations are uniquely odd, really cool, simple but hardworking. [DVRE vendor name] owner, [avatar name], was hugely part of my past when I first started out in [the DVRE]. Not so much anymore now. Now it's just calm casual, distance between us. Always a good friend. Others that I love but don't have much or any interact with personally are; [DVRE vendor name], [DVRE vendor name], [DVRE vendor name], and [DVRE vendor name]. Really anyone that isn't following the female dominance, skinny with giant hips, small waist with New York sized building breasts or the men on steroids with tiny itty bitty hands, will earn my support. I like the stand outish, thinking outside of the box, touch of realism or goofiness, will appeal to me. I like to mix and match, have something cute, sexy maybe but not disgusting looking. Or badass, casual looking. Mostly simple and low lag. I have a really good computer but not many others do. I want to think of others, make them enjoy the same space I'm in and have them comfortable.

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P15	My favorites creators as [DVRE vendor name], [DVRE vendor name], bring me back to my love of anime and fantasy. Heroines with a fate , a destiny; or pure and happy young girls
P16	I really don't have many. I love [DVRE vendor name], their clothing is amazing. It doesn't reflect my PTSD but the children on [the DVRE] kind of freak me out
P17	I like so much anything that is related to Art or creativity, both 2D and 3D. I spend time wandering in search of spots where I can take my pictures, admiring the creators talent and imagination. Often I am jealous of their skills and I regret my inability to create those amazing art pieces or environments. I have no patience in many Things I am not able to apply myself to learn and to practice. I do most of just following my instinct but often with poor results.
P18	I enjoy [DVRE vendor]. The reason is that the clothing speaks to me and says "Take some risk and have fun" It's breaking out of that shell of comfort and doing things differently. I don't know if it really reflects a particular thought about my PTSD other than to say "I'm going to live life now on my terms."
P19	In world I love the products from [DVRE vendor name] and from [DVRE vendor name]. I am not sure it affects PTSD for me, but their work is detailed and requires a great deal of time to create each product. It just appeals to me as a person and seeing and buying them to use makes me appreciate how they are using [the DVRE] positively.
P20	Any good avatar creator. I like to hide myself. Not really. Not really although I wish I could hide myself from my pain in real life.
P21	Many dancers in the dance world are people who do creave things I enjoy. Sometimes they will create dances that express a thought or feeling that I have other mes they will introduce me to music that speaks to me about my experience and I will be flooded with ideas to create and make my own thing out of the song. I love the arts. [Avatar name], who is a live singer in [the DVRE] as well as the band [DVRE name]. [Avatar name] has a wonderful voice that I find soothing as well as he will sign as many requests as I make which makes me feel special. [DVRE name] gives me many concert experiences that I would never be able to have or enjoy far as much if attempting them in real life both due to the physical disability and PTSD. I have DJs as well as dance teachers that through music do support and help me deal with many of the symptoms of PTSD that do pop up in situations. Backstage at a show can be heck on PTSD as can all eyes on me on stage. The good things generally outweigh the bad. Shows have many like details about them that can help support me through anxiety or other symptoms that come up due to the PTSD.
P22	Any good avatar creator. I like to hide myself. Not really. Not really although I wish I could hide myself from my pain in real life.
P23	Most of my shopping in [the DVRE] is for clothing and boots. I'm rather fond of a store called [DVRE vendor name] when it comes to buying boots. For clothing, there was [DVRE vendor name] (don't think they're around anymore), [DVRE vendor name] and [DVRE vendor name]. One of my main concerns in [the DVRE] is my appearance, so, finding places that make nice stuff is important. And, I would say their items reflect how I feel about my true self, so, yeah, that certainly matters.

Q09. Who are your favorite creators or vendors in The DVRE? Tell me why their creations appeal to you. Does their work speak to your PTSD feelings? Do these items reflect your thoughts about your PTSD?
Since most of what else I do in [the DVRE] revolves around talking to people or volunteering, I haven't had a whole lot of need to do much for shopping outside of appearance-related vendors.

Q10. Tell me about how or if your activities and creations in The DVRE might help ease your PTSD symptoms.

P01	Well, of course, whenever you successfully accomplish a challenge, there's no greater feeling of self-worth/esteem/efficacy.
P02	The avoidance of outside world is what I use [the DVRE] for, if that is a help or not I am not sure. The rare excellent conversation without any of the [the DVRE] falseness is wonderful but they are rare. The friendships I have formed have been good. But often I wish I had never found it.
P03	In [the DVRE] I am in control, the dinosaur chasing me is at bay. When I was in therapy for a year after the semi accident, my therapist said that from what he heard, he felt being in [the DVRE] was beneficial for me and we would often discuss what I'd been doing there. The therapist I had before him a number of years ago, when we were dealing with my PTSD as a child couldn't begin to imagine what [the DVRE] was like so one day I brought my computer and took her in. Halfway through, she asked if she could go and see [DVRE vendor name]. She had heard me talk so much about it and was curious. She had mixed feelings about [the DVRE] because she was older and didn't understand it. In the beginning [the DVRE] without a guide is very frustrating especially with mesh. Younger gamers like my son can jump in and have no problem. But for the rest of us, I think a guide in the beginning is important or [the DVRE] could create more stress than resolve it. But then after that first stage has ended and [the DVRE] is a more predictable, safer environment, one can control experiences to some degree and thus feel safer. However, places like [the DVRE] aren't for everyone without a therapist's guidance and support. None of my RL friends have wanted to go in. They've been fascinated by my experiences and keep asking, but they don't want to go in despite my offers of help. It's scary for them because they don't have the computer skills. One friend who is particularly spunky and lives alone, feels safer on a couch watching TV than being active in [the DVRE] My partner puts up with [the DVRE] and goes to dances when my friend {avatar name} is DJing, but will never immerse himself in it. He doesn't like playing games and isn't very imaginative. When some people in [DVRE group] were discussing free avatars and clothing for new avatars (turns out [the DVRE] screwed up big time in trying to make their initial mesh avatars that couldn't wear any of the new mesh clothing being designed), I kept thinking about how I didn't want to look so crappy when I first was in [the DVRE]. .I only stayed in because I was desperate to Moodle. Otherwise I wouldn't have immersed myself. I think a new avatar who has PTSD needs a basic decent looking mesh avatar with a few outfits that she/he can just click on. Perhaps a fund could provide this. They need a house with one big room and something to sit on and a garlic necklace so all those vampires who are looking for Newbies don't suck them in. One reason I liked living in [DVRE group] was because when something screwed up….my house blew up; particle flowers kept growing over and increasingly large area taking up a larger and larger part of the sim…….I could always IM their [DVRE group] group and someone would come and help me. Something or someone like that is needed. After so many years in [the DVRE], the other day an iron railing became stuck on me and there was no way to get it off. I knew there was a [DVRE group] Q and A group going on and teleported there to ask what I should do. I've known of people who had PTSD and because of that went into the BDSM lifestyle. My gut feeling is that that isn't good for them. Because right now three-fourths of the classes in [the DVRE] are on BDSM and the BDSM clothing market has exploded, for someone with PTSD coming into [the DVRE], there would need to be trips to places that are calming, interesting, and artistic or clubs where most avatars aren't into BDSM. Just like RL, a community group can make the difference. After a few months, people would be

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	ready to split off into whatever direction they wanted to with the skills they need in this place.
P04	They don't really help my PTSD directly. It is more like they enhance my experience in [the DVRE] while I'm in here escaping from my reality.
P05	I like to meditate, listen to music, build, and such to relieve my symptoms in the Virtual World. I also like to go to the meetings at [DVRE name] and [DVRE name]. For me, it makes me smile to know there are others who are like me and have the same struggles. My original avatar's mom of now 10 years is the one who first started to help me by getting me involved in [DVRE name] when she discovered it. I joined her about a year or two later. So, those things make me happy and I can relax.
P06	One thing I haven't mentioned is that [the DVRE] has also been a place for me to engage in and share my writing. I write poetry, short stories and novels. I have written poems attached to [the DVRE] as well as a few short stories, one of which is pretty much why I am in [the DVRE]. Some of my work has been published in [the DVRE] magazines and is on display in a few writing venues. This has been an outlet to help me deal with all aspects of the CPTSD.
P07	It's a double edged sword. What I did in the DVRE really saved my life, helped me overcome several traumas. But I feel I'm very vulnerable because in the DVRE I'm just the same person as in real life. I haven't found a balance between the healing effects of it, and the triggering effects. But I do believe in any case, the DVRE has been a MAJOR positive factor in dealing with trauma. I also found the strength to actually seek help at a therapist, see doctors, thanks to friends I would never have met in any other way.
P08	They block it out most of the time. If triggers happen, then I can breathe on my own and no one has to know. I can spend an entire day making a line of clothes and as long as [the DVRE] is being nice and not crashing me. Then I am calm for the most part. There is always music on which I lose myself in. (wow I just heard Eminem in my head and now you do too). If there is a place or situation that may cause triggers, then I can avoid them. Can't always do that in the real world.
P09	They help me relax, keep me from being angry and upset with real life. Escapism.
P10	My trauma symptoms involve anxiety and worry. [the DVRE] is a great distraction from that as long as I remember to limit my time and if I am learning to build something make sure I don't get frustrated with the process. I find I am quite calm when I have something to create and that it is quite good to have a chat on the forum or the groups because then I can be a part of something social that most people get from their jobs I guess, at the moment I am pensioned and at home a lot.
P11	I have much more stress outside the virtual world than when I am in it. I feel more inclined to express myself and it is easier to trust people because I have the choice to maintain my anonymity if I so choose. My poetic creations, like the beautiful one on [DVRE location name], are other ways to express myself. Even my poetry, which is often written in the first person, I need not worry suggests anything about my physical world life, though it often does. Again, because some do and a few do not, I don't have to fear what I share – I can disclose what I choose to or not. Sometimes my poetic writing is a form of healing form my PTSD too.
P12	The DVRE has been a great tool for me to learn and practice setting healthy boundaries. It is something I have never been very good at in RL, and it has landed me in some difficult

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	situations to put it mildly. I think this in turn has helped ease my PTSD symptoms as it has allowed me to take more control over my real life, and confidently be able to say no to people. There is also the immediate relief for PTSD symptoms when RL gets too much, that I can retreat into my virtual world and immerse myself into a world where I have full control over what happens to my avatar. There is a very real risk that this becomes an avoidance behavior, so I am very mindful to not neglect my real life in the real world. That said, I would feel extremely isolated and alone without the DVRE and all the very real friends in pixel form I have within it. So there you go! I hope I haven't rambled on too much. Answering these questions has even made me have like realizations of things I hadn't thought of before. I really hope that I taking part could help your study in some way, and I am very much looking forward to seeing the outcome of your study. If you happen to bump into anyone looking to do a study on mental health recovery and peer support through DVRE, let me know!
P13	Having PTSD is a constant battle between wanting peace and chaos. Because of the many varied sims available in [the DVRE], I am able to nurture whichever of those cravings are needing sated at the time. Thank you very much for this opportunity. Again, I am happy to expound further on any of the things I have stated. Consider me an open book at your disposal.
P14	Can't avoid triggers much or at all in general, but the choice in [the DVRE] is easier to get. I want to have that sense of calm, easy going and time to myself and/or with others. I can function under stress but I rather not deal with the heaviness of it. I have zero energy, being depressed for my whole life does that to me. My emotions are often dulled out and I talk about coffee and chocolate a lot, as that's the only way I have small amount of energy. With anything that requires me to put a lot of mental energy in, where I'm on edge, alert, walking on eggshells and my mind running 30 or more tabs at once. Is when I'm running purely on adrenaline. [DVRE activity] with [DVRE group] or tinies requires nothing from me. Dancing idly at a dance, or lazy bingo doesn't force me to do much either. I have my hobby with my marketplace store, work at my own pace and do things how I want to do them. No deadlines, no pressure, nothing heavy. I have little number of friends because I don't have to worry about them harassing me, taking advantage of me in any way or hurting me in any shape or form. I trust them to let them know that I'm online, to IM me or send me stuff or teleport requests. I lend them L$ if they ask me, and they pay me back whenever they can, in any way they can. I trust them and they can trust me. [the DVRE] is my escape. It is my place where I can just be myself to an extent that I am allowed. I have my own place because I am able to earn my own money without hassle. Can't do that in real life. Everything is overly complicated with that system in real life. I can easily choose to leave or stay by one landmark/teleport. I can block people, making them shut up if they're going to cause trouble. I have friends who have that power to boot a trouble maker too. I am very selective in both locations and people. I like the low lag, friendly places and friendly people. I get more triggers happening in real life, than on [the DVRE]. It's a choice and exposure therapy is not going to work at all, in my state right now. I'll get out of my comfort zone from time to time in [the DVRE], regret it instantly afterwards but it's an experience at least.
P15	In life I am afraid of going out, of the crowd of strangers; I never go out alone. In [the DVRE] I can explore ; shop; go to live concerts
P16	I find when I am on [the DVRE], I'm calm, and I enjoy my time. I'm in my safe house with my safe friends and I feel like it keeps me from completely isolating. I have found my

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	talents through [the DVRE] such as creation and singing. I also enjoy the meetings with [avatar name].
P17	Just to be in a safe virtual environment, where nobody cares who you are in RL but interested in what you can bring as benefit for the others, made me more conscious of myself. Moreover the infinite opportunities to try so many different things, make me feel more focused and challenged to experiment with things. I can forget what I struggle for, being who I want to be and nobody judges it. The chance to interact safely with various people coming from other countries, with their own personal attitudes, it's a great emotional lever to open yourself, even if the process can be long and often hard to complete. I can do things that should be impossible to repeat in RL, for many reasons, and that makes me part of a community and not tied to a specific condition, whatever it is. Here following I add something I have wrote to introduce my-self in a recent work shop related to disability and virtual worlds, with an audience of students and nurses at their first impact with [the DVRE]. My Story: Some time ago a friend asked me: "you have been in [the DVRE] for more than 12 years, have you ever wonder why you are still here after this long time"? I said, never... but just a while after my reply I started to think. There are innumerable reasons to list so I will skip them, just to focus on some very personal and intimate benefits I got: I suffer from a PTSD, and the main effect on me was a shutdown to the world around me. No family, very few friends and a strong sense of indifference for people brought me on the top of an ivory tower, untouchable and distant. For a case and just for curiosity I joined [the DVRE] and after the first months I found my path. What a magical spark inspired me and light up my dark and cold essence. To be useful helping others, sharing my skills and learning new ones day by day, gave me the motivation to open myself to unknown people, to socialize again leaving out of the door the suspicion, the fear, the distance. Becoming a Mentor in several groups of help and support, gave me the awareness to be considered and respected, finally ready to consider and to respect my-self once again. To create art pieces, to lock a moment, a landscape using [the DVRE] Photography is also magical for me. However my demons, my regrets, my disillusions are still here, visiting me time to time, an indissoluble and brutal reminder that shakes the cross on my shoulders and brings me back to real life. The consequences for my acts will never leave me alone, but in-world I can forget them. Let me add that I have been in therapy for about 4 years, with small progress, but [the DVRE] gave me the right push to keep talking with my therapist, involving her in my [the DVRE] experiences. My therapy got an happy end, but time to time I have a session to talk about the news in my both lives. [The DVRE] is my therapy and my Neverland! Be Eager Be Curious!
P18	They do! My activities really help focus on what is important, not so much what has happened. Doing what I do inworld has kind of reshaped my personality and thinking over

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	the years and made my symptoms ease up, though I still have the occasional trigger, they are far and few between. So to me the virtual world community has been a worthwhile experience in total since I have been there for 12 years.
P19	Just being in-world allows me to escape my life most of the time. Right now it is harder but still works. Creating my sound effects or decorating and working on my beach house allows me to separate myself from the rest of the world even more so. I believe that viewed in a certain way digital worlds can be a help to people with PTSD or other issues to either completely cope or as a tool to deal with the things that trigger them or bother them. I know adults here who are children and it lets them escape and some who are vampires as a way to protect themselves. They can do this easily and to their own comfort level and with the right friends and/or support in world can function a little easier.
P20	They help me relate to people.
P21	I don't always deal well with or like change; one DJ that I'm very close to developed this fun way to help me deal with that by actually running sets for short periods during the overall set where she would play the same song by different artists then the following song would be the same arts but a different song. I'm very intentional about who I will dance with or get close to within [the DVRE] if it doesn't feel right I just don't go there. I mainly do solos for dances as I don't want to be responsible for other people or get into conflicts with them if things don't work out right or enjoy them as much when they involve other people. All of the ways I create are an "out" for emotional pain and to express the experiences I've gone through even if that's sharing a build, a song or a dance. A new way of creating and sharing with others is coming soon though created content for others to educate on trauma and disability which I'm super looking forward to creating and doing.
P22	They help me relate to people.
P23	Being able to look and "be" how I feel inside in [the DVRE] has often helped ease my issues with PTSD and my other conditions. No, it certainly isn't quite the same as RL, but, it's something. Being able to log into [the DVRE] and like how I look there does somewhat ease the self-loathing I feel when looking into an RL mirror. [DVRE group], when it's going right and I'm not running into trouble, helps me at least feel like I'm fighting back against the cancer that took my partner. That I'm doing something in her name and honor and memory instead of staring at the walls going nuts. DJ'ing allows me to express thoughts and feelings that I might not feel comfortable saying in words – certainly not to most people. It gives me a way to express myself in a few more harmless manner than yelling or screaming.