

Use of Social Media Among Individuals Who Suffer From Post-Traumatic Stress: A Qualitative Analysis of Narratives

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Abstract

Suffering from post-traumatic stress impacts and restricts the life situation of the individual on several levels, not least regarding social difficulties. Social media on the Internet facilitate new possibilities for interaction and communication. Earlier research has demonstrated that people use social media to seek support and to discuss health-related issues. The current study aimed to describe how individuals suffering from post-traumatic stress use social media to convey authentic narratives of their daily lives, including illness, and further, to analyze the content of this media use. The data comprised YouTube videos, blogs, and forum discussions. Five categories cover the findings: (a) structure of the narrative, (b) narrating the trauma, (c) restrictions in life, (d) strategies in everyday living, and (e) online interaction. We stress that sharing narratives online facilitates a "verbalizing" of the life conditions of the sufferers and can be used as a self-care activity.

Keywords

Internet; narratives; mental illness; post-traumatic stress disorder; qualitative research; recovery; social media; descriptive research

Introduction

It is well known that post-traumatic stress disorder (PTSD) can be very challenging for individuals who suffer from this psychiatric disability because of the presence of recurrent, involuntary, intrusive, and distressing memories; the avoidance of trauma-related cues; emotional numbing; and simultaneous chronic physiological arousal (Hackmann, Ehlers, Speckens, & Clark, 2004; Shepherd & Wild, 2014). The nature of PTSD can cause impairment in social, occupational, or other important areas of functioning (American Psychiatric Association, 2013; Nietlisbach & Maercker, 2009). In this study, we conduct an analysis of authentic online-posted narratives from individuals who suffer from PTSD and of their communication with others through posted comments.

Background

Suffering from PTSD causes impairment in the individual's social or occupational activities, or in other important areas of functioning that impact on and impede the person's life conditions (Breslau, Lucia, & Davis, 2004; Ciechanowski, Walker, Russo, Newman, & Katon, 2004; Momartin, Silove, Manicavasagar, & Steel, 2004). Regardless of the

type of trauma, exposure therapy is considered to be a gold standard in achieving symptom reduction (Rauch, Eftekhari, & Ruzek, 2012). Other well-documented treatment options are pharmacological therapy (Bastien, 2010), group therapy, psychoeducation, and supportive counseling (Sloan, Bovin, & Schnurr, 2012). Even though there are several treatment options, a newly published systematic review comprising more than 10,000 participants demonstrated that stable recovery in PTSD was detected only at a rate of 18% to 50% within 3 to 7 years (Morina, Wicherts, Lobbrecht, & Priebe, 2014). The harmful effect of posttraumatic stress reactions on functionality makes recovery and rehabilitation difficult (Perkonigg et al., 2005). However, having resilience factors that may reduce the risk or severity of PTSD can enable coping. Seeking out support from other people, such as friends and family, finding a support group after a traumatic event, feeling good about one's

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own actions in the face of danger, having a coping strategy or a way of getting through the bad event and learning from it, and being able to act and respond effectively despite feeling fear, are some of these resilience factors (Hundt et al., 2015; Karstoft, Armour, Elklit, & Solomon, 2013; National Institute of Mental Health, 2015).

Research has shown that patients suffering from trauma strongly need to talk about the incident, and need social support (Hundt et al., 2015; Karstoft et al., 2013). Psychotherapy, which is accepted by the National Institute of Mental Health (2015) as a kind of talk therapy, has been found to provide substantial improvement in patients (Hundt et al., 2015; Lee, Gavriel, Drummond, Richards, & Greenwald, 2002; Paunovic, & Ost, 2001; Resick, Nishith, Weaver, Astin, & Feuer, 2002). Awareness of one's own psychological problems and searching for solutions for them, such as focused expressive writing (Smyth & Helm, 2003) and memory recalling (Boals, Banks, & Hayslip, 2012), are types of self-care activities. Self-care is "the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health and well-being" (Orem, 1995). Making use of selfcare activities when suffering from PTSD, for example yoga (Libby, Reddy, Pilver, & Desai, 2012) and music therapy (Bensimon, Amir, & Wolf, 2008), has been found to be useful in easing symptoms. However, the body of knowledge that addresses self-care activities via the use of social media for people suffering from PTSD is less developed. We hypothesize that an analysis of authentic narratives about PTSD will yield important insights about the life conditions of individuals who suffer from PTSD, and in addition, insights regarding their use of computer-mediated communication (CMC) to receive support. Therefore, this study aims to describe how individuals suffering from post-traumatic stress use social media to communicate authentic narratives of their life conditions.

Method

A descriptive research design was applied to meet the research purpose (Polit & Beck, 2010). Qualitative research was considered to be well suited, as we wanted to gain a more in-depth understanding of a social phenomenon in which people construct their reality from their social, historical, and culturally situated context (Glaser & Strauss, 1967; Miles & Huberman, 1994; Morse, 1999). We have used the netnographic method LiLEDDA, which was developed by Salzmann-Erikson and Eriksson (2012) for conducting qualitative research online. Langer and Beckman (2005) consider netnography to be a suitable method for accessing a group of people who otherwise would be difficult to assign as research participants.

Data Collection

In gathering the data set, both text and visual materials were included. The two search engines Google (www. google.com) and YouTube (www.youtube.com) were selected. The search terms were "post-traumatic stress disorder" and "ptsd," together with their use in combination with more specific search terms, such as "my story," "my experiences," and "my life." These terms were used in both search engines. Inclusion criteria were (a) the material should originate from a publicly available venue, as the sample should not require any registration, login, or password to access and (b) the material should contain a first-hand experience from an individual with the experience of post-traumatic stress. Exclusion criteria were (a) professionals who lectured about PTSD; (b) children; (c) cloaked video recordings; (d) second-hand experiences/narratives that were not self-reports, that is relatives; (e) advertisements; (f) professional actors; and (g) directed role-plays (Figure 1). To obtain our purposeful sample, we carefully selected the sample based on the aim of the study. The intention was that the data should provide us with a unique and rich content. For example, posters differed in various aspects, such as types of experienced trauma (e.g., sexual harassment, car accident, childhood trauma, burglary, and war-related trauma), gender, ethnicity, ages, and seemingly different stages in the recovery process.

Data Analysis

The data set comprised of 16 YouTube videos from 12 different posters, the videos together containing 166 minutes of recordings, eight blogs from different persons, and nine large threads in social forums. As guided by the LiLEDDA method (Salzmann-Erikson & Eriksson, 2012), the data from text-based webpages was copied and pasted into a separate Word document holding 109 pages. In addition, all the URLs to the raw data were filed in a spreadsheet, which enabled the researchers to go back and replay the material. Both researchers had access to the document holding the text-based data and the URL spreadsheet. The videos were repeatedly viewed and extensive notes were taken of the spoken words. In addition, notes were also taken about body language, gestures, and mimics, as well as other information about the recordings, such as the setting. To analyze the data, both researchers conducted line-by-line coding to tag and label segments (Miles & Huberman, 1994). Conceptual codes and sub-codes were used to identify key concepts in the data (Bradley, Curry, & Devers, 2007). The two researchers came to an agreement about the key concepts that would be presented as categories in the results. We constructed deductive questions that were

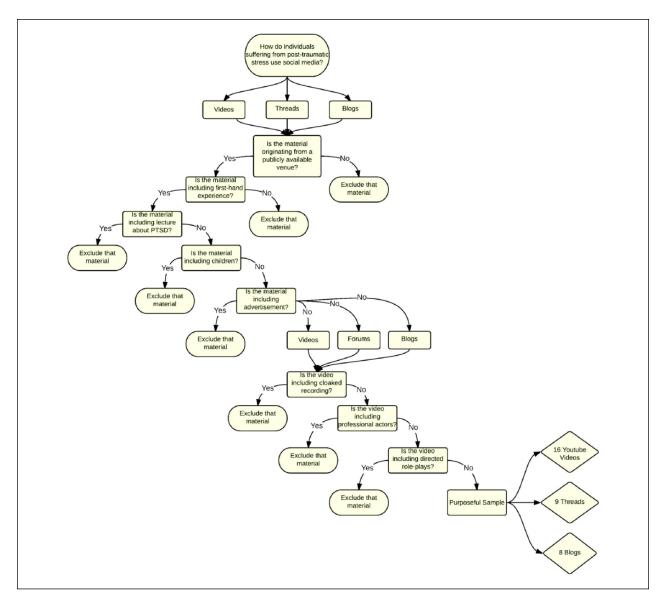


Figure 1. Decision tree of data collection. Note. PTSD = post-traumatic stress disorder.

based on the categories, for example "What kinds of structures do the narratives contain?" and "What are the kinds of restrictions?" From such deductive questioning based on our categories, we were able to go back to the data and more thoroughly ensure that all aspects in the data set were included in each category. Moreover, by doing so, we were able to compare their similarities and differences within the categories. Excerpts from posts were selected purposefully to display the content of each category. Because we cannot know that the posters had been specifically diagnosed with PTSD by a professional, we refer to their symptoms as "post-traumatic stress," but we do sometimes refer to their PTSD in situations in which they explicitly refer to the diagnosis.

Ethical Considerations

No ethical vetting was needed as all data were gathered from publicly accessible venues and were strictly archival and cross-section observational, without any intervention or interaction with the posters (cf. Kozinets, 2010; Salzmann-Erikson & Eriksson, 2011; Wilkinson & Thelwall, 2010).

Results

The individuals who have published written or recorded information will throughout the results be called "posters" and the published information will be termed "posts" or "excerpts." Posters use different mediating tools to communicate, as both text-based and visual materials were posted. We interpret the use of video recordings, blogs, and forum postings as being a fast and technically "simple" way to share authentic narratives and to communicate, and it also makes it possible for the posters to receive feedback through comments. A typical YouTube video was recorded in the private home, bedroom, or living room of the poster and the poster's webcam was used to record the video. Furthermore, the videos do not convey staged, directed, or professional recordings; rather the quality of audio and video is homemade. These characteristics strengthened the sense of authentic narratives and conveyed that the posters wanted to tell their "naked story," the purpose of which is informing others.

Structure of the Narratives

Commonly, posters start by introducing themselves with their name and then "confess" that they are diagnosed with PTSD. For example, one poster clearly stated at the beginning that her intention in posting the video was to relate her story and her experience of living with PTSD for the purpose of supporting others with similar conditions, conveying the message that "you are not alone." She continued by stressing that she is neither a professional, an expert, nor medically trained. Another key feature is that the posters narrate freely, as feelings, emotions, and experiences "comes from the heart in the very moment." The majority of the posters only published one recording, which conveyed a full story, but some publishers had posted a series of recordings, more like a video blog, covering specific topics in relation to their illness in a sequential, date-hierarchical style. The structure of the text-based blogs was similar to that of the videos. In one blog introduction, the poster stated her problems briefly:

I am a 25 year old woman and was diagnosed with Chronic PTSD last summer. I have always known from childhood that there was something wrong with me emotionally. I have always had problems with irritability, temper, and anxiety. I have a hard time expressing my anger, and panic over little things (like not being able to find a shoe, or burning dinner).

After this introduction, the poster went back in time to narrate her background, telling about her childhood conditions: "I grew up in a very dysfunctional family. You could say that my family was non-functional. My mother was a drug addict, and my dad seemed to live in denial about my mothers' behavior."

In the structure of the narratives, nearly half of the posters mentioned that they were in therapy or currently undergoing treatment, such as psychotherapy, eye movement desensitization and reprocessing therapy (EMDR), or psychopharmacological treatment, at a specific point

of their postings. In addition, one poster mentioned being in therapy, not in the posting, but in an online interaction with a commentator.

Narrating the Trauma

In the narratives, the posters build up a dramaturgy in which they refer their present disabilities to a certain point in time in the past—the trauma. Even though the traumatic event or events vary among the posters, it was felt that it was important to convey the origin of their lack of well-being in the present. Trauma could, for example, originate from war experiences, violent childhood memories, being sexually abused, living with a violent partner, experiencing a dramatic pregnancy, or being attacked by a violent intruder. The following excerpt illustrates how a poster portrayed the traumatic event that led to her present psychiatric disability:

About 9 years ago, my husband and I were attacked in our bedroom by an intruder. We were both stabbed multiple times and hospitalized for several days. [. . .] Although we moved to a different apartment (one with a door man), my husband slept with a baseball bat and I had to tour the entire apartment when I would come in to make certain no one was there.

When reporting about the trauma, the performativity of the narratives was presented differently. One major difference between text-based postings and video postings was that the video postings were more dramaturgic, using emotional face expressions. For example, one video included melancholic music playing in the background while the poster narrated. In addition, the tone of the poster also witnessed that strong feelings were associated with the experience. In another video, the voice of the poster is slow, she makes pauses and has "tears in her throat."

Narratives about the trauma also include accounts of how traumas are relived through flashbacks in the present. The flashbacks are narrated as being almost as realistic and vivid as the trauma itself. One military veteran wrote in the blog about such reliving of trauma on a daily basis.

Each flashback event presents me with their own images and many are now on a daily basis. Most flashbacks are vivid when they occur. With people dying, trees blowing apart and my fears and terror.

Flashbacks can be triggered that have both visual and auditory perceptions, and can sometimes occur without any specific triggers. The posters describe flashbacks as being devastating. Nevertheless, at the same time, flashbacks have become a part of their life and therefore the

posters convey a rather platonic relation to flashbacks in their narrations.

Restrictions in Life

The posters convey stories about how different symptoms restrict them throughout their everyday living. Restrictions are associated with relationships with friends, marriage relations, and work relations. One poster described the symptoms that he experienced from the illness, which, furthermore, restricted the daily living profoundly:

Over the past ten years I've suffered nightmares, flashbacks, insomnia, panic attacks, agoraphobia, claustrophobia, paranoia, hypervigilance, extreme startle response, inability to concentrate, hopelessness, suicidal depression, inability to maintain a job, relationship, etc., you name it.

As depicted by the poster, post-traumatic stress affects the life of the individual on multiple levels, during both day and night, and impedes the ability to focus. In the narratives, the posters convey a longing to participate in society on equal terms with others, while they find this difficult and convey a pessimistic view. Based on the content of the narratives, it is our interpretation that the posters seem to know intellectually that social inclusion is a key feature in overcoming isolation and feelings of being alienated. In this effort to take part in society, one posting narrated about an attempt to work.

Over the past ten years, excluding temp assignments, I have had fifteen "permanent" jobs, some lasting only a week or a month to a few months, the longest lasting not much more than a year. Only four of these I left by choice; all the others I have been fired from for absenteeism. Inevitably I use up all my sick days on those days when I am afraid to leave the house, and then I am canned. I hate myself for it.

As demonstrated in the excerpt, the poster displays his efforts. Even though he fails, he keeps trying, which results in a negative spiral of self-loathing. Another restriction in life that is narrated through postings is the inability to maintain relationships.

Even though I've had many personal relationships, lasting several months, I still feel that I am isolated from people and the communities that I have lived in. I feel that every time that someone has tried to be a friend, I push them away so that they don't learn of my past or for fear of losing them later as it happened so many times during my tours of duty in Vietnam.

In this excerpt, the poster fears close relationships, as these would risk others becoming too close and "learning about his past." It might be viewed as being paradoxical that in real life he wants to hide the past while he elaborates in considerable detail online about his life, feelings, and inner thought, in a public venue with a much vaster audience than could be expected in real life. Posters express failure in maintaining jobs or relationships, as mentioned above, and they elaborate that the triggers are important leading factors for this condition, as they cause flashbacks and anxiety attacks. This vicious circle of triggers causing anxiety, and anxiety causing failures in work and relationships, creates a negative self-perception, which is shown in a narrative such as the following:

Situations like these are difficult for me to wrap my head around, because I do not maintain a self-concept of being a submissive human being. As a general rule, I feel in control and empowered. I feel confident that I can handle whatever life throws at me. However, when it comes to these triggers, I often feel as though I am in a free fall, grasping for any opportunity to protect myself from what feels like a life-or-death situation. Later, I feel embarrassed at my inability to participate in what I consider to be "typical" circumstances.

Strategies in the Everyday Living

The narratives display how the posters developed strategies for everyday living and coping with post-traumatic stress. These coping strategies included accepting that PTSD is a disorder which necessitates making efforts, such as talking to trusted people or professionals, to protect their mental health.

If you are experiencing postpartum PTSD, it's not shameful, and it likely won't go away on its own. Talk to someone. Whether it's your best friend, spouse, mother, yoetzet halacha, doctor, rabbi, or someone with expert training, share your story with someone else.

In this excerpt, the poster conveys the idea that people can feel shame in having PTSD, expect the problem to solve itself and that this attitude can prevent them from talking about their problem and searching for help. In addition, the poster stresses the view that sharing the trauma story with someone else can help recovery. Posters usually narrate that PTSD is a problem that does not have a specific radical recovery strategy, and that tailor-made strategies for everyday living need to be developed.

PTSD isn't something where there is a magical cure, but learning to live with it, honestly. When new triggers are discovered, it's a matter of finding personalized tools to work through them. At least that's what works for me.

Like last year, I started a flower garden, found a great sense of accomplishment and peace in it. It works like a tranquilizer. Sometimes just listening to relaxing music helps, with candles, and no time constraints.

According to this poster, there is no magical cure for PTSD and learning to live with it by using personalized tools can provide substantial improvement. We interpret this to indicate that the acceptance of the living condition is crucial and necessary. However, accepting impairments is not simply equal to giving up, but rather, it is a way to find strategies that create a kind of stability. Furthermore, the poster claims that these personalized tools can be changed in accordance with the condition and its potential to help.

Online Interactions

Online interactions generally start with thanking the commentators and appreciation of the poster for being brave in publishing the video/blog: "This was very brave of you to talk about. I'm glad you are getting better. I wouldn't wish this on anyone. Stay strong." While appreciating the poster, many of the commentators conveyed that they had a similar experience of trauma. "Thank you so much you are truly helping me out. I thank God for you. I did not know anyone else felt like me. Abused since infant: (really really hard. Keep up the good work." This commentator appreciated the poster for helping her by posting, because the poster rescued her from the belief of being the only person having a trauma such as this. In some of the online interactions, commentators share their own trauma stories and the poster tries to help and support them. There is an example of this kind of interaction below:

The commentator: Thanks for sharing, I grew up with a single mother, she has complex PTSD, when you explained how your mother would disappear and turn into a raging monster, that most definitely was my trigger. [...]

The poster: Sounds like her abuse was pretty bad if everything was her trigger. I am sorry she didn't get proper help and either did you. I'm sorry no one stepped in and said, let me take over, let me help. It wasn't your fault, and it was wrong of her to turn on you. I am so careful of how I act and react with my children for this very reason. I will let family watch them if I am in a bad way. Have you looked into therapy and EMDR therapy, it may be a good treatment for you. I am in therapy, it is a long process with my amount and length of trauma, but I am committed and I am worth it, and so are you.

The comment function not only provides the posters with cherishing comments and supporting comments but also enables them to mirror their experience with others. In the commentaries, tips and advice are also given. The comments also encouraged posters, who may not otherwise have posted their story in the first place. We interpret this as indicating that the use of social media may

have important features for the individual's recovery process. Online communication offers them the ability to narrate their story more anonymously, and in addition, posters are in control and can decide to what extent they want to take part in the feedback. In real life, such feedback from others would be out of the control of the narrator.

Discussion

This study aimed to describe how individuals suffering from post-traumatic stress use social media to communicate authentic narratives about their life conditions. The results demonstrate that individuals use social media via CMC to post narratives that address detailed descriptions of their life situation. Rejnö, Berg, and Danielson (2013) described narratives as "retroactive constructions—representations of things that have happened" (p. 619). The narratives displayed posters who were incapable of fully participating in society. However, the use of CMC facilitates participation in virtual discussions, as the posters are not only able to share their experiences but also can make use of the interactive features of the web-based platforms. As such, they are exchanging coping strategies in their everyday living, by using the commenting functions, which provide them with the ability to make sense of their own experiences through the dynamics of the communication styles (cf. Ziebland, 2004). This exchange of coping strategies via online interactions highlights the occurrence of therapeutic group factors, such as altruism, interpersonal learning, and guidance. Even though we present the benefits of using social media, we think that the downsides are worth reflecting upon. When posting a disclosure text in public venues online, this is done without a safety net. In doing so, the poster has little control over how the text will be received, interpreted, and responded to. Buckels, Trapnell, and Paulhus (2014) described the "Dark Tetrad" of online personalities, referring to those who intentionally post provocative and harassing texts. Furthermore, anonymity may not be certain, as the detailed descriptions of a person's problems may be recognized by others in that person's offline, close surroundings, such as an employer or others who may use the information in a way that was not originally intended. Hence, the anonymity of the Internet may not be real, and instead of protecting the poster, it can involve offline risks and negative consequences.

Previous research has noted the advantage of online narrating and interaction, which provides the benefit of experiencing anonymity and self-disclosure (Joinson, 2001). Recently, DeVault et al. (2014) presented their construction of a virtual human interviewer, called SimSensei Kiosk, which is based on artificial intelligence and is designed to engage in face-to-face interaction

between the SimSensei and the patients. The study revealed that participants were to a large extent willing to share intimate information and that they were comfortable sharing information with the embodied virtual human called "Ellie."

Our findings revealed that the posters had a longing to tell their stories. Sandelowski (1991) considered narratives to be a framework for understanding human beings as subjects. In our findings, we found that a certain structure could be obtained from the narratives and we interpret this structure as being grounded in causality thinking (cf. Trabasso & van den Broek, 1985). The stories mostly originated from the trauma itself, but posters also provided an explanation for their sociocultural background, such as childhood conditions and/or their present societally bounded context. Moreover, the posters narrated their inability to participate in private and professional relationships, such as marriage and work. They related this to their being emotionally vulnerable and that they may be exposed to triggers that make them act in various ways that are not socially accepted. Even though society is becoming more liberated regarding alternative ways of living, and more individualized (Halman, 2009), deviant behavior, such as that resulting from mental illness, is highly stigmatized (Livingston, Rossiter, & Verdun-Jones, 2011).

Individuals experiencing work-related PTSD frequently report symptoms, such as sleep problems due to thinking about the incident, distress in response to internal and external cues that are reminders of the event, and avoidance of the workplace due to the fear of the occurrence of a similar event, negative thoughts about work, introversion and difficulties expressing feelings, and lack of social support and hobbies (Alden, Regambal, & Laposa, 2008; Martin, Marchand, & Boyer, 2009; Yum et al., 2006). In concordance with our findings, research demonstrates that PTSD impairs occupational functioning through absenteeism, unemployment, and work disability (Alden, 2012; Banyard, Potter, & Turner, 2011; Heir, Piatigorsky, & Weisæth, 2010). On the other hand, unemployment because of avoidance can predict the persistence of PTSD symptoms. A study made after the collapse of the towers of the World Trade Center on September 11, 2001, revealed that unemployment at any time following the collapse predicted persistence of PTSD symptoms in individuals with PTSD (Nandi et al., 2004). We stress this aspect as being especially problematic, as there is a nearconsensus in research on the recovery from mental illness regarding the importance of having work, participating in education, or being attached to similar occupations, to find hope and meaning in life (Agaibi & Wilson, 2005; Southwick, Gilmartin, MacDonough, & Morrissey, 2006).

Recovering from mental illness is not a short-term condition, such as recovering from a surgery; it is rather

described as being "a long and winding road" (Aston & Coffey, 2012, p. 262). Consistent with the accounts by the posters in our findings, recovery from mental illness and from psychiatric disabilities is often spoken of as a process that takes a long time, one that takes place over several years or decades (Romano, McCay, Goering, Zipursky, & Boydell, 2010; Slade, 2009). Furthermore, Slade (2009) proposed viewing recovery as a journey in life and not as a final destination to reach. In this study, we argue for the benefit of participating in virtual discussions in the recovery process. Using Slade's analogy, when posters exchange narratives and support each other, they also become a fellow traveler on that journey. Davidson, O'Connell, Tondora, Lawless, and Evans (2005) held that recovery is not just the loss of symptoms, but rather a way of living a satisfying life that includes the symptoms. Such acceptance was also seen in our results. Slade's (2009) model of personal recovery conceptualized four key concepts: hope, identity, meaning, and responsibility. Participating in social and meaningful activities, such as education, support groups, and leisure activities, promotes and facilitates recovery from mental illness and such engagement prevents isolation and depression (Ramon, Healy, & Renouf, 2007; Rhoads, Pearman, & Rick, 2007; Schön, Denhov, & Topor, 2009). Due to the impaired social ability and skills that are part of the range of symptoms among individuals with PTSD, we stress the value of engaging in virtual self-care activities.

According to our results, the posters self-disclose to their audience, via their blogs, videos, and online conversations, in a matter of profound importance to them. When first publishing their videos, they commonly stated that their intention in posting the video was to convey their story and experience, for the purpose of supporting others with similar conditions, conveying the message that "you are not alone." During their online interactions, many of the responders revealed that the posters' stories helped them because they had thought that they were the only person living with this kind of experience and that nobody could help them. By taking advantage of online interactions, the posters and their audience change into a therapeutic group, and all the therapeutic factors outlined by Yalom (Yalom & Leszcz, 2005) start to emerge automatically. The first group of emerging therapeutic factors are universality, instillation of hope, catharsis, self-understanding, and existential factors. Of these factors, the two that are particularly remarkable are "universality," which enables group members to realize that they are not alone in their experience and that there are people who are living with the same problems. Universality was, for example, visualized in the category of "structure of the narrative," in which the posters conveyed a sense to the audience that "you are not alone." Next, "instillation of hope," which enables them to realize "If there are people who cope with this, I can too." This therapeutic factor was, for example, present in the categories of "strategies in the everyday living" and "online interactions." During these online interactions, we can also see some other therapeutic factors, such as altruism, identification, interpersonal learning, and guidance, which were, for example, present under the categories of "strategies in the everyday living" and "online interactions." Within these categories, the posters and commentators identified with each other, learned from each other and provided guidance about "talking to someone" or "taking therapy."

Methodological Considerations

This study comprises a relatively small sample of data, which cannot be generalized to a wider population. However, as Kvale (1996) argues, in qualitative inquiries the number of participants is subordinate to other qualities. Hence, the important consideration is the relevancy and sufficiency of the data in meeting the purpose of the study. Due to our purposive sample, we argue that the included data set was rather voluminous, as we encountered repetition in the narratives. One limitation is that we cannot map the demography on the posters, as this might restrict the variety of data. Furthermore, selectivity is another methodological issue, as the posters we selected to be included have all voluntarily posted stories or comments. It could also be argued that the data overrepresented those individuals who have the resources, for example, the technical knowledge, the intellectual capabilities, the mental strength, and/or the economic resources, that are needed to communicate online. We agree that more thorough methods might have provided more in-depth insights. Such methods could be, for example, participant observation, including interaction with the posters to ask questions and verify hypotheses (Spradley, 1979).

Implications

This phenomenon of social support via virtual interactions is of interest as a complement to traditional health care and professional support. Davis, Anthony, and Pauls (2015) stressed that online support conversations offer a unique environment in which to explore social structures. A netnographic study of naturally occurring interactions via CMC can enable both professionals and researchers to better understand individuals and their health care needs, and configure better helping strategies. Therefore, we argue that helping professionals should closely monitor and further explore the CMC activities and trends that are developing, and which with time are becoming important self-care resources for people using the Internet. On

the other hand, posters may sometimes be in a state of crisis, attempting to extend their ability to cope via their self-care activities, and they may need professional support. In these types of situations, continuous monitoring of CMC by helping professionals comes into prominence, and opportunities for referral should be provided for individuals who are experiencing a crisis. The construction of official versions of these kinds of forums, maintained by professional organizations or universities, could be a good solution. In this way, the contact information of professionals or departments that are specialized in working with these types of crises could be provided on forum websites for acute help and referral. Providing this help via official organizations that are guided by strict regulations can also prevent confidentiality issues and provide support that may be totally or partially free from commercial concerns.

Conclusion

The stigmatization of mental illness, and in particular of PTSD, can cause shame for sufferers and prevent these individuals from telling their story to other people and searching for help. The results of our study indicate that CMC provides PTSD sufferers a way to reveal themselves, to experience the universality of the problem, to receive support and help from other people, and to fight against stigma. In particular, the discovery of the universality of their problems and finding hope for recovery can open up new horizons for sufferers. Hence, CMC transforms into a self-care activity for posters and responders.

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References

Agaibi, C. B., & Wilson, J. P. (2005). Trauma, PTSD and resilience. *Trauma, Violence, & Abuse, 6,* 195–216.

Alden, L. (2012). Factors that predict return-to-work in workers with PTSD (Worksafe BC Project). Retrieved from http://www.worksafebc.com/contact_us/research/funding_decisions/assets/pdf/2007/RS2007 IG25.pdf

Alden, L. E., Regambal, M. J., & Laposa, J. M. (2008). The effects of direct versus witnessed threat on emergency department healthcare workers: Implications for PTSD criterion A. *Journal of Anxiety Disorders*, 22, 1337–1346.

American Psychiatric Association. (2013). Desk reference to the diagnostic criteria from DSM-5. Washington, DC: American Psychiatric Publishing.

- Aston, V., & Coffey, M. (2012). Recovery: What mental health nurses and service users say about the concept of recovery. *Journal of Psychiatric and Mental Health Nursing*, 19, 257–263.
- Banyard, V., Potter, S., & Turner, H. (2011). The impact of interpersonal violence in adulthood on women's job satisfaction and productivity: The mediating roles of mental and physical health. *Psychology of Violence*, *1*, 16–28.
- Bastien, D. L. (2010). Pharmacological treatment of combatinduced PTSD: A literature review. *British Journal of Nursing*, 19, 318–321.
- Bensimon, M., Amir, D., & Wolf, Y. (2008). Drumming through trauma: Music therapy with post-traumatic soldiers. *The Arts in Psychotherapy*. Retrieved form http://www.sciencedirect.com/science/article/pii/S0197455607000883
- Boals, A., Banks, J. B., & Hayslip, B. (2012). A self-administered, mild form of exposure therapy for older adults. *Aging & Mental Health*, *16*, 154–161.
- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: Developing taxonomy, themes, and theory. *Health Services Research*, 42, 1758–1772.
- Breslau, N., Lucia, V. C., & Davis, G. C. (2004). Partial PTSD versus full PTSD: An empirical examination of associated impairment. *Psychological Medicine*, 34, 1205–1214.
- Buckels, E. E., Trapnell, P. D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences*, 67, 97-102.
- Ciechanowski, P. S., Walker, E. A., Russo, J. E., Newman, E., & Katon, W. J. (2004). Adult health status of women HMO members with posttraumatic stress disorder symptoms. *General Hospital Psychiatry*, 26, 261–268.
- Davidson, L., O'Connell, M., Tondora, J., Lawless, M., & Evans, A. (2005). Recovery in serious mental illness: A new wine or just a new bottle? *Professional Psychology: Research and Practice*, 36, 480–487.
- Davis, M. A., Anthony, D. L., & Pauls, S. D. (2015). Seeking and receiving social support on Facebook for surgery. *Social Science & Medicine*, *131*, 40–47.
- DeVault, D., Artstein, R., Benn, G., Dey, T., Fast, E., Gainer, A., ... Morency, L.-P. (2014, May 5–9). SimSensei kiosk: A virtual human interviewer for healthcare decision support. In A. Lomuscio, P. Scerri, A. Bazzan, & M. Huhns (Eds.), Proceedings of the 13th International Conference on Autonomous Agents and Multiagent Systems. Paris, France: International Foundation for Autonomous Agents and Multiagent Systems. Retrieved from http://aamas2014.lip6.fr/proceedings/aamas/p1061.pdf
- Glaser, B. G., & Strauss, A. L. (1967). Discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine.
- Hackmann, A., Ehlers, A., Speckens, A., & Clark, D. M. (2004). Characteristics and content of intrusive memories in PTSD and their changes with treatment. *Journal of Traumatic Stress*, 17, 231–240.
- Halman, L. (2009, March). Value change in Western European societies: Results from the European values study. Retrieved from http://www.kwansei.ac.jp/s_sociology/ attached/6511 53857 ref.pdf

- Heir, T., Piatigorsky, A., & Weisæth, L. (2010). Posttraumatic stress symptom clusters associations with psychopathology and functional impairment. *Journal of Anxiety Disorders*, 24, 936–940.
- Hundt, N. E., Mott, J. M., Miles, S. R., Arney, J., Cully, J. A., & Stanley, M. A. (2015). Veterans' perspectives on initiating evidence- based psychotherapy for posttraumatic stress disorder. *Psychological Trauma*, 7, 539–546.
- Joinson, A. N. (2001). Self-disclosure in computer-mediated communication: The role of self-awareness and visual anonymity. European Journal of Social Psychology, 31, 177–192.
- Karstoft, K.-I., Armour, C., Elklit, A., & Solomon, Z. (2013). Long-term trajectories of posttraumatic stress disorder in veterans: The role of social resources. *Journal of Clinical Psychiatry*, 74, 1163–1168.
- Kozinets, R. V. (2010). *Netnography: Doing ethnographic research online*. London: Sage.
- Kvale, S. (1996). Interviews: An introduction to qualitative research interviewing. Thousand Oaks, CA: Sage.
- Langer, R., & Beckman, S. C. (2005). Sensitive research topics: Netnography revisited. *Qualitative Market Research: An International Journal*, 8, 189–203.
- Lee, C., Gavriel, H., Drummond, P., Richards, J., & Greenwald, R. (2002). Treatment of PTSD: Stress inoculation training with prolonged exposure compared to EMDR. *Journal of Clinical Psychology*, 58, 1071–1089.
- Libby, D., Reddy, F., Pilver, C., & Desai, R. (2012). The use of yoga in specialized VA PTSD treatment programs. *International Journal of Yoga Therapy*, 22(1), 79–88.
- Livingston, J. D., Rossiter, K. R., & Verdun-Jones, S. N. (2011). "Forensic" labelling: An empirical assessment of its effects on self-stigma for people with severe mental illness. *Psychiatry Research*, 188, 115–122.
- Martin, M., Marchand, A., & Boyer, R. (2009). Traumatic events in the workplace: Impact on psychopathology and healthcare use of police officers. *International Journal of Emergency Mental Health*, 11, 165–176.
- Miles, M. B., & Huberman, M. (1994). *Qualitative data analysis: A sourcebook of new methods*. Beverly Hills, CA: Sage.
- Momartin, S., Silove, D., Manicavasagar, V., & Steel, Z. (2004). Comorbidity of PTSD and depression: Associations with trauma exposure, symptom severity and functional impairment in Bosnian refugees resettled in Australia. *Journal of Affective Disorders*, 80, 231–238.
- Morina, N., Wicherts, J. M., Lobbrecht, J., & Priebe, S. (2014).
 Remission from post-traumatic stress disorder in adults: A systematic review and meta-analysis of long term outcome studies. Clinical Psychology Review, 34, 249–255.
- Morse, J. M. (1999). Qualitative methods: The state of the art. *Qualitative Health Research*, *9*, 393–406.
- Nandi, A., Galea, S., Tracy, M., Ahern, J., Resnick, H., Gershon, R., & Viahov, D. (2004). Job loss, unemployment, work stress, job satisfaction, and the persistence of posttraumatic stress disorder one year after the September 11 attacks. *Journal of Occupation and Environmental Medicine*, 46, 1057–1064.
- National Institute of Mental Health. (2015). *Post-traumatic* stress disorder. Retrieved from http://www.nimh.nih.gov/

- health/publications/post-traumatic-stress-disorder-ptsd/index_shtml
- Nietlisbach, G., & Maercker, A. (2009). Social cognition and interpersonal impairments in trauma survivors with PTSD. *Journal of Aggression, Maltreatment & Trauma*, 18, 382–402.
- Orem, D. E. (1995). *Nursing: Concepts of practice* (5th ed.). St. Louis, MO: C. V. Mosby.
- Paunovic, N., & Ost, L. (2001). Cognitive-behavior therapy vs exposure therapy in the treatment of PTSD in refugees. Behaviour Research and Therapy, 39, 1183–1197.
- Perkonigg, A., Pfister, H., Stein, M. B., Höfler, M., Lieb, R., Maercker, A., & Wittchen, H. U. (2005). Longitudinal course of posttraumatic stress disorder and posttraumatic stress disorder symptoms in a community sample of adolescents and young adults. *American Journal of Psychiatry*, 162, 1320–1327. Retrieved from http://www.nimh.nih.gov/health/publications/ post-traumatic-stress-disorder-ptsd/index.shtml
- Polit, D. F., & Beck, C. T. (2010). Essentials of nursing research: Appraising evidence for nursing practice (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Ramon, S., Healy, B., & Renouf, N. (2007). Recovery from mental illness as an emergent concept and practice in Australia and the UK. *International Journal of Social Psychiatry*, 53, 108–122.
- Rauch, S. A. M., Eftekhari, A., & Ruzek, J. I. (2012). Review of exposure therapy: A gold standard for PTSD treatment. *Journal of Rehabilitation Research & Development*, 49, 679–687.
- Rejnö, Å., Berg, L., & Danielson, E. (2013). The narrative structure as a way to gain insight into peoples' experiences: One methodological approach. *Scandinavian Journal of Caring Sciences*, 28, 618–626. doi:10.1111/scs.12080
- Resick, P. A., Nishith, P., Weaver, T. L., Astin, M. C., & Feuer, C. A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology*, 70, 867–879.
- Rhoads, J., Pearman, T., & Rick, S. (2007). Clinical presentation and therapeutic interventions for posttraumatic stress disorder post-Katrina. *Archives of Psychiatric Nursing*, 21, 249–256.
- Romano, D., McCay, E., Goering, P., Zipursky, R., & Boydell, K. (2010). Reshaping an enduring sense of self: The process of recovery from a first episode of schizophrenia. *Early Intervention in Psychiatry*, 4, 243–250.
- Salzmann-Erikson, M., & Eriksson, H. (2011). Torrenting values, feelings and thoughts—Cyber nursing and virtual self-care in a breast augmentation forum. *International Journal of Qualitative Studies on Health and Well-Being*, 6, 7378.
- Salzmann-Erikson, M., & Eriksson, H. (2012). LiLEDDA—A six step forum-based netnographic research method for nursing sciences. Aporia: The Nursing Journal, 4(4), 7–19.

- Sandelowski, M. (1991). Telling stories: Narrative approaches in qualitative research. *Journal of Nursing Scholarship*, 23, 161–165.
- Schön, U. K., Denhov, A., & Topor, A. (2009). Social relationships as a decisive factor in recovering from severe mental illness. *International Journal of Social Psychiatry*, 55, 336–347.
- Shepherd, L., & Wild, J. (2014). Emotion regulation, physiological arousal and PTSD symptoms in trauma-exposed individuals. *Journal of Behavior Therapy and Experimental Psychiatry*, 45, 360–367.
- Slade, M. (2009). Personal recovery and mental illness: A guide for mental health professionals. Cambridge UK: Cambridge University Press.
- Sloan, D. M., Bovin, M. J., & Schnurr, P. P. (2012). Review of group treatment for PTSD. *Journal of Rehabilitation Research & Development*, 49(5), 689-702.
- Smyth, J. M., & Helm, R. (2003). Focused expressive writing as self-help for stress and trauma. *Journal of Clinical Psychology*, 59, 227–235.
- Southwick, S. M., Gilmartin, R., MacDonough, P., & Morrissey, P. (2006). Logotherapy as an adjunctive treatment for chronic combat-related PTSD: A meaning-based intervention. *American Journal of Psychotherapy*, *60*, 161–174.
- Spradley, J. P. (1979). The ethnographic interview. New York: Holt, Rinehart and Winston.
- Trabasso, T., & van den Broek, P. (1985). Causal thinking and the representation of narrative events. *Journal of Memory and Language*, 24, 612–630.
- Wilkinson, D., & Thelwall, M. (2010). Researching personal information on the public web: Methods and ethics. *Social Science Computer Review*. Available from http://ssc.sagepub.com
- Yalom, I. D., & Leszcz, M. (2005). Theory and practice of group psychotherapy (5th ed.). New York: Basic Books.
- Yum, B. S., Roh, J. H., Ryu, J. C., Won, J. U., Kim, C. N., Lee, J. E., & Kim, K. Y. (2006). Symptoms of PTSD according to individual and work environment characteristics of Korean railroad drivers with experience of person-undertrain accidents. *Journal of Psychosomatic Research*, 61, 691–697.
- Ziebland, S. (2004). The importance of being expert: The quest for cancer information in the internet. *Social Science & Medicine*, 59, 1783–1793.

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