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Dissociative Subtype of Posttraumatic Stress Disorder in Women in Partial and Residential Levels of Psychiatric Care

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Abstract

The dissociative subtype of posttraumatic stress disorder (PTSD) is estimated to characterize about 12-30% of those with PTSD. Some research links this subtype with increased severity of PTSD symptoms compared to samples with "classic" PTSD. However, prevalence and severity rates reported in the literature have varied. One possible explanation for these discrepancies could be related to where the populations were sampled. Therefore, we investigated whether these differences are still observed when holding level of care constant. We collected data from 104 women at a partial and residential psychiatric hospital program focused on trauma-related disorders. Participants completed self-report questionnaires assessing trauma exposure, symptoms and provisional diagnosis of PTSD, trauma-related thoughts and beliefs, and feelings of shame. All participants reported a history of childhood and/or adulthood trauma exposure. Eighty-eight (85%) met criteria for PTSD, and of those, seventy-three (83%) met criteria for the dissociative subtype as assessed by the Dissociative Subtype of PTSD Scale. A series of independent t-tests revealed no significant differences between the "classic" and dissociative PTSD groups with respect to lifetime or childhood trauma exposure, posttraumatic cognitions, shame, or overall PTSD severity. Our results suggest that samples with classic PTSD and the dissociative subtype may not differ in some types of symptom severity when holding level of care constant. Importantly, however, we found at partial/residential level of care the majority of patients with PTSD were dissociative. Given the elevated prevalence rate in this sample, these findings support the need to assess dissociative symptoms, particularly in more acute psychiatric settings.

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LAML, JDW, SW, KJR and MLK developed the study concept and design. SBH, CEB, and JDW performed data collection. LAML and SBH performed the data analysis and interpretation. SBH drafted the paper, and all authors provided critical revisions. All authors approved the final version of the paper for submission.

Conflict of Interest

The authors declared no conflicts of interest with respect to the authorship or the publication of this article.

Clinical Trial Registration

NCT02757339 Evaluating the Neurobiological Basis of Traumatic Dissociation in Women With Histories of Abuse and Neglect

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PTSD; dissociation; traumatic stress; women's health

The Dissociative Subtype of PTSD

Empirical Evidence

In 2013, the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) added a new dissociative subtype of posttraumatic stress disorder (PTSD) to better characterize those with PTSD who also experience pervasive dissociative symptoms (American Psychiatric Association, 2013). To meet criteria for the dissociative subtype, one must meet full criteria for PTSD while also experiencing significant symptoms of depersonalization and/or derealization. The DSM-5 defines depersonalization as "experiences of unreality, detachment, or being an outside observer with respect to one's thoughts, feelings, sensations, body, or actions" and derealization as "experiences of unreality or detachment with respect to surroundings" (American Psychiatric Association, 2013). This change in classification arose in response to a growing field of research suggesting that a specific subset of individuals with PTSD and dissociative symptoms can be reliably identified in military and civilian samples. Numerous studies utilizing latent class and latent profile analyses report a 3-class model, in which one group represents those with low/no PTSD symptoms and low/no dissociation symptoms, another represents those with high PTSD symptoms but low/no dissociation symptoms, and the final group represents individuals experiencing high levels of both PTSD and dissociative symptomatology (Blevins, Weathers, & Witte, 2014; Hansen, Ross, & Armour, 2017; Wolf et al., 2012a, 2012b). Neurobiological and clinical research in PTSD also support the existence of a dissociative subtype. The dissociative and "classic" PTSD groups show opposite patterns of brain activation in regions associated with arousal and emotion regulation – patterns that are consistent with clinical presentations (see Lanius, Brand, Vermetten, Frewen, & Spiegel, 2012 for a review). In general, individuals with dissociative PTSD have a pattern of "emotional overmodulation," with increased activity in the rostral anterior cingulate and medial prefrontal cortex, areas of the brain that are generally involved in regulating emotion and arousal. Those without significant dissociation, on the other hand, demonstrate "emotional undermodulation" with decreased activity in the aforementioned areas. Additionally, those with dissociative PTSD often have decreased activity in the amygdala and right anterior insula during emotionally charged tasks, while the "emotional undermodulation" group shows increased activity in these brain regions (Lanius et al., 2012). This clinical and neurobiological research provides consistent support for the inclusion of a dissociative subtype.

Prevalence

Reported prevalence rates of the dissociative subtype of PTSD vary. Studies have assessed the prevalence rate of the subtype within community samples, veteran populations, traumaexposed individuals (with or without PTSD), and individuals with PTSD due to specific types of trauma exposure (e.g., sexual assault, childhood abuse). Among these studies,

reports generally show that 12-30% of those with PTSD also have marked dissociative symptoms as described above, with one study showing prevalence rates as low as 6% and another showing rates as high as 45% (see Hansen et al., 2017 for a review). Some studies suggest that females may be more likely than males to have the dissociative subtype (Hagan, Gentry, Ippen, & Lieberman, 2018; Wolf et al., 2012a). However, other studies report no gender differences between the PTSD subtypes (Ross, Baník, Dědová, Mikulásková, & Armour, 2017; Wolf et al., 2017). The authors will propose possible explanations for these varied reports in greater detail in the discussion section.

Symptom Severity

In addition to investigating the prevalence of this subtype of PTSD, there is a growing body of literature that explores differences in symptomatology among patients with the dissociative subtype and those with classic PTSD. There are conflicting reports about whether the dissociative subtype correlates with increased clinical symptomatology. Several studies indicate that those with the dissociative subtype report higher overall scores on well-established diagnostic interviews and self-report measures of posttraumatic symptoms (Cloitre, Petkova, Wang, & Lu, 2012; Blevins et al., 2014) and report more severe personal, occupational, and social functioning impairments and elevated risk of suicidality than those with classic PTSD (Stein et al., 2013). However, studies by Steuwe, Lanius, & Frewen (2012) and by Wolf, Lunney, & Schnurr (2016) indicate the opposite. Both studies report, instead, that the classic PTSD group had higher overall PTSD symptom severity than those with the dissociative subtype. Blevins et al. (2014) found no differences between dissociative and classic PTSD groups in severity of any individual symptoms of PTSD. Differences in sample populations, study design, and measures may contribute to these disparities in findings.

Predictors of the Dissociative Subtype

Differences in factors that predict the dissociative subtype may also speak to its severity. One study by Tsai et al. (2015) notes that a higher number of trauma types experienced is associated with the dissociative subtype of PTSD, while others report no differences in number of trauma types (Cloitre et al., 2012; Hagan et al, 2018; Wolf et al., 2012a, 2017). Similarly, several studies indicate that experiencing sexual trauma is associated with the dissociative subtype (Blevins et al., 2014; Cloitre et al., 2012; Hagan et al., 2018; Wolf et al., 2018; Wolf et al., 2012b). However, other studies do not find this to be a significant difference between the subtypes (Wolf et al., 2012a, 2017). The most consistent finding in the literature at present is that childhood abuse, including childhood sexual abuse, may be a predictor of the dissociative subtype. Several studies indicate that those with the dissociative subtype have greater exposure to childhood abuse than those with classic PTSD (Cloitre et al., 2012; Hansen et al., 2017; Stein et al., 2013; Steuwe et al., 2012), while only one study reports no significant differences in childhood abuse exposure (Wolf et al., 2017). The authors will discuss these discrepancies in the discussion section.

Current Study

To date, much of the research examining the severity and/or prevalence of the dissociative subtype of PTSD draws study samples from either community samples or groups of trauma-

exposed individuals who may or may not be seeking any psychiatric care. Previous work typically does not control for level of care among participants at the time of the study, and often does not limit the dissociative subtype prevalence rate calculations to those who meet criteria for PTSD. Instead, they often include all trauma-exposed individuals, which may artificially deflate prevalence rate calculations.

In the present study, we assessed for the prevalence of the dissociative subtype in a sample of women, most of whom report histories of childhood abuse and maltreatment, receiving partial or residential hospital level of psychiatric care. The distinction between partial hospital and/or residential level of care and either outpatient or inpatient level of care is clinically significant. Generally, the higher the level of care, the more disabling or dangerous a patient's symptoms, with inpatient care indicating the patient is experiencing symptoms that greatly interfere with functioning, while outpatient care would indicate less symptom acuity. Partial hospital settings are used for patients needing more support or containment, perhaps a refresher on symptom management skills or medication adjustments, but they are not assessed to be in immediate danger. Residential hospital settings are used when patients need regular cues and reminders for activities of daily living or medication adherence, or may have rapid escalation in symptoms of suicidality that requires nearby, accessible supports. Many patients need all levels of care over the course of their illnesses, often requiring more acute services early in treatment and fewer acute services as symptoms improve. Therefore, common sense suggests that patient samples from different treatment settings would demonstrate different symptomatology. This study further expands upon the present literature by investigating whether differences in symptoms or severity exist between classic PTSD and the dissociative subtype when holding the level of psychiatric care constant.

Although several studies have examined PTSD symptoms as they relate to the classic and dissociative subtypes of the disorder, there has not yet been substantial investigation into potential group differences in severity of negative posttraumatic cognitions or feelings of shame. Negative posttraumatic cognitions include distorted perceptions about oneself, the world, and blame surrounding what caused the traumatic events to occur (e.g., "the world is a dangerous place" or "someone else would not have gotten into this situation"; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). Shame is an intense, negative feeling of inferiority, powerlessness and self-consciousness that is generally accompanied by the desire to hide one's shortcomings (Andrews, Qian, & Valentine, 2002). When people feel ashamed, they may not be forthcoming about what has happened to them. Often, shame includes a feeling of "badness." For example, rather than the abuser being bad, a child may understand that they are bad, a belief that then becomes the child's general way of understanding the world, which can impact their ability to judge others as safe or unsafe. We investigated whether differences exist between classic PTSD and the dissociative subtype in terms of posttraumatic cognitions and feelings of shame.

Given the high level of psychiatric care and the high levels of childhood and adult trauma exposure typically seen in the trauma-focused recruitment clinic, we hypothesized that most of our sample would meet criteria for PTSD, with a substantial percentage of those also meeting criteria for the dissociative subtype. Further, we predicted that given the relatively

consistent and high level of acuity for all participants, there may not be differences between classic and dissociative subgroups of PTSD in the severity and types of PTSD symptoms, posttraumatic cognitions, or feelings of shame.

Method

Participants

Participants for this study were 104 women receiving care at a psychiatric hospital in the northeast United States. Participants were recruited from a combined partial and residential program for women with histories of trauma and related disorders, borderline personality, mood, and anxiety disorders. Most identified as White/Caucasian (84%) and Non-Hispanic (67%). Participants in this study were between the ages of 18 and 62 ($M_{age} = 34.11$). Although not formally assessed in this study, participants self-reported current diagnoses. The most commonly reported were PTSD (78%), Major Depressive Disorder (63%), Generalized Anxiety Disorder (47%) and Borderline Personality Disorder (25%). All participants reported histories of childhood and/or adulthood trauma exposure on validated self-report measures.

Measures

Childhood Trauma Questionnaire (CTQ; Bernstein et al., 2003).—The CTQ is a 28-item self-report measure assessing five types of childhood traumatic experiences: emotional neglect, emotional abuse, physical neglect, physical abuse, and sexual abuse. The questionnaire also includes 3 validation items designed to assess for tendencies to minimize or deny experiences of childhood abuse. Each subscale has been shown to have moderate to high internal consistency in a variety of clinical and nonclinical populations ($\alpha = -.57-.96$). In addition, the subscales have good convergent and construct validity, as all show significant, positive correlations with scores obtained on the Childhood Trauma Interview (Bernstein & Fink, 1994), as well as scores obtained on other measures of PTSD and dissociation (Bernstein & Fink, 1998). Participants report how often each item was true for them when they were growing up, on a scale of 1 = "Never True" to 5 = "Very Often True."

Traumatic Life Events Questionnaire (TLEQ; Kubany et al., 2000).—The TLEQ is a 23-item self-report questionnaire designed to gather information about participants' history of exposure to traumatic events. It has shown test-retest reliability in a sample of individuals receiving treatment for substance abuse, a sample of Vietnam veterans, and a sample of battered women with a mean overall percentage of agreement of 83-86% (Kubany et al., 2000). In a sample of college students, the TLEQ has shown convergent validity with a structured interview of trauma exposure (Traumatic Life Events Interview), such that the magnitude of difference in disclosure rates between the two were nonsignificant for all trauma types assessed (Kubany et al., 2000). For each event listed, including an option for "other event," participants indicate how many times this happened to them and whether they experienced "intense fear, helplessness, or horror" when it occurred. At the end, participants indicate which of these events currently causes them the most distress.

PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013).—The PCL-5 is a 20item self-report questionnaire that measures symptoms of PTSD in accordance with the DSM-5. The PCL-5 is a widely-used measure of PTSD symptoms, with well-established psychometric characteristics in veteran, active duty, and community samples and has been validated against the Clinician Administered PTSD Scale (CAPS-5) to determine a cutoff score (Bovin et al., 2016). Participants rate how much they were bothered by each symptom in the past month on a scale of 0 = "Not at all" to 4 = "Extremely." This measure determines a provisional PTSD diagnosis, with the current cut-point being a total score of 33. The PCL-5 also produces subscales for each cluster of PTSD symptoms: Criterion B (reexperiencing), Criterion C (avoidance), Criterion D (negative alterations in thoughts or feelings), and Criterion E (arousal and reactivity).

Dissociative Subtype of PTSD Scale (DSPS; Wolf et al., 2017).—The DSPS is a 15-item self-report measure of dissociative symptoms, measuring both lifetime and pastmonth occurrence of these symptoms. Initial evaluations of the measure provide early psychometric support for use of the DSPS in a sample of US veterans (Wolf et al., 2017). Each of the subscales showed discrimination from a measure of absorption, such that the maximum shared variance between absorption and any DSPS subscale was 14.4% (Wolf et al., 2017). Participants report how frequently they experienced each symptom in the past month on a 4-point scale, where response options include "once or twice," "once or twice a week," "3 or 4 times a week," and "daily or almost every day." They then rate the intensity of the symptom in the past month on a 5-point scale, where response options include "not very strong," "somewhat strong," "moderately strong," "very strong," and "extremely strong." Participants scoring 2 or more on the Derealization/Depersonalization subscale are considered to meet criteria for a provisional diagnosis of the PTSD dissociative subtype.

Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999).—The PTCI is a 33item self-report of thoughts after a traumatic experience. The measure includes three subscales: negative cognitions about self, negative cognitions about the world, and selfblame. Participants rate on a scale of 1 = "Totally Disagree" to 7 = "Totally Agree." In initial evaluations of the measure, the PTCI correlated well with another established measure of posttraumatic cognitions, indicating good construct validity (Foa et al., 1999). It has demonstrated internal consistency (PTCI total score, $\alpha = 0.97$; negative cognitions about self, $\alpha = 0.97$; negative cognitions about the world, $\alpha = 0.88$; self-blame, $\alpha = 0.86$) and test– retest reliability (PTCI total score, p = 0.74; negative cognitions about self, p = 0.75; negative cognitions about the world, p = 0.89; self-blame, p = 0.89; Foa et al., 1999).

Experiences of Shame Scale (ESS; Andrews et al., 2002).—The ESS is a 25-item self-report measure designed to assess characterological shame, behavioral shame, and bodily shame. Characterological shame includes shame about personal habits, manner with others, one's character, and personal ability. Behavioral shame includes shame about doing something wrong, saying something stupid, and failure in competitive situations. Bodily shame involves feeling ashamed of one's body. Participants report, on a scale of 1 = "Not at All" to 4 = "Very Much," how frequently they experienced any of these feelings in the past year. The ESS total score and each of the ESS subscales significantly correlated with

another well-established measure of shame, the Test of Self-Conscious Affect (TOSCA) shame scale (all ps < .001), indicating good construct validity (Andrews et al., 2002). The measure has also suggested some evidence of discriminant validity from an established guilt scale (TOSCA guilt scale) during initial testing among university students (Andrews et al., 2002).

Procedure

As part of a larger study on the genetics and biology of trauma-related dissociation, participants were approached in the residential or partial program and gave written informed consent to participate. This study was approved by the institutional review board of the participating hospital. Participants provided a saliva sample for genetic testing, not reported here, and completed a battery of self-report measures. We report on a subset of these questionnaires in this paper, as detailed above: TLEQ, PCL-5, CTQ, DSPS, PTCI, and ESS. The traumatic event indicated at the end of the TLEQ as being currently most distressing to the participant was used on the PCL-5 to assess for provisional PTSD diagnosis. Participants completed questionnaires independently on a desktop computer or iPad while the experimenter was present to answer any clarifying questions about the surveys if needed. Participation lasted approximately one hour, and participants received \$10 compensation.

Data Analysis

To investigate whether differences in symptoms or severity exist between classic PTSD and the dissociative subtype in our sample, we looked at a variety of potential factors. We compared number of lifetime trauma exposures, as defined by total score on the TLEQ; childhood trauma exposure, as defined by total score on the CTQ; posttraumatic cognitions, as defined by total score on the PTCI; feelings of shame, as defined by total score on the ESS; and overall PTSD symptom severity, as defined by total score on the PCL-5. A series of independent samples t tests were performed, with all *p* values two-tailed and Sidak corrected.

Results

All women in this sample (n = 104) reported a history of childhood and/or adulthood trauma exposure, with a mean score of 60.02 (SD = 20.76) on the CTQ and a mean score of 8.28 (SD = 4.16) on the TLEQ. Eighty-eight (85%) met criteria for current provisional diagnosis of PTSD on the PCL-5, and of those, seventy-three (83%) met criteria for the dissociative subtype. A series of independent t-tests revealed no significant differences between those meeting criteria for classic PTSD and those meeting criteria for the dissociative subtype with respect to number of lifetime trauma exposures, t(86) = -0.44, p = 0.658, $d_s = -0.09$, childhood trauma exposure, t(86) = 0.54, p = 0.593, $d_s = 0.11$, posttraumatic cognitions, t(86) = -0.23, p = 0.816, $d_s = -0.49$, feelings of shame, t(86) = -1.40, p = 0.166, $d_s = -0.29$, or overall PTSD symptom severity, t(86) = -0.60, p = 0.547, $d_s = -0.13$. This suggests that samples with classic PTSD and the dissociative subtype may not differ in some of the more common types of symptoms, when the level of psychiatric care is held constant.

Discussion

Prevalence

In our sample of traumatized women seeking treatment at a combined partial and residential hospital program, the majority of patients with PTSD met criteria for the dissociative subtype, with a prevalence rate far higher than previous reports in the current literature (Hansen et al., 2017). In the present study, unlike previous reports, the level of care was limited to a relatively acute psychiatric setting. This may have contributed to the higher rates of the dissociative subtype found in our sample. Previous work often does not control for level of care, particularly in the large-scale online survey studies, in which individuals may or may not be seeking treatment (e.g. Ross et al., 2017; Wolf et al. 2017). Additionally, the majority of our participants had experienced severe levels of childhood maltreatment, which has consistently been identified has a predictor of the dissociative subtype (Cloitre et al., 2012; Hansen et al., 2017; Stein et al., 2013; Steuwe et al., 2012). Moreover, this level of care may by definition select for individuals with more severe histories of trauma, which may in turn be more likely to experience dissociative symptoms (Tsai et al. 2015). Finally, this study sample was recruited from a clinical program known to treat trauma-spectrum and dissociative disorders, potentially affecting the prevalence rate of the dissociative subtype observed.

In previous reports, prevalence rates of the dissociative subtype of PTSD have likely varied due to several sampling and methodological factors. For example, some studies included population samples of any trauma-exposed individuals, including those who meet criteria for PTSD and those who do not (e.g., Stein et al. 2013; Tsai et al., 2015; Wolf et al., 2017), while other studies included *only* those who meet criteria for PTSD (e.g., Cloitre et al., 2012; Steuwe et al., 2012; Wolf et al., 2016). With the relatively low prevalence rates of PTSD in some of these samples, it is unsurprising that the rates for the dissociative subtype would be lower than what was found in the present study. Findings from samples that include all trauma-exposed individuals, i.e., those both with and without a diagnosis of PTSD, would likely demonstrate a lower prevalence of severe symptoms than is found in populations of patients who meet the criteria for a PTSD diagnosis. It would follow that the likelihood of meeting criteria for the dissociative subtype would be greater in patients who have a PTSD diagnosis. Even when previous literature has described the percentage of those with the dissociative subtype based on those meeting criteria for PTSD, the participants are often not as symptomatic as those of the present study.

Most notably, past studies use a variety of different measures of dissociation and methods of assessment (e.g. self-report or interview) for diagnosing the dissociative subtype. The use of differing measures to assess for dissociation could impact the reported rates of the dissociative subtype, as the specific language used in questionnaires or interviews could affect the way in which participants respond. For example, some studies use the Dissociative Experiences Scale (e.g. Steuwe et al., 2012; Blevins et al., 2014), while others use a variety of other measures, including the DSPS (e.g., Wolf et al., 2017), the Multiscale Dissociation Inventory (e.g., Ginzburg et al., 2006) and the Trauma Symptom Checklist (e.g., Armour, Elklit, Lauterbach, & Elhai, 2014), to name a few. Even among studies that use the same measure and method of administration to assess for the dissociative subtype, there is often

fluctuation in the number of items used to make this determination. Many studies use the CAPS-5, yet there are differences in the number of items used. Some use only the two items assessing for depersonalization and derealization (e.g., Tsai et al., 2015), while others also include the item assessing for reduction in awareness of surroundings (e.g., Wolf et al., 2012a, 2012b). Additionally, participants may feel more comfortable disclosing dissociative symptoms in the context of a self-report measure rather than in-person during an interview. On the other hand, it is also possible that interview style measures of the dissociative subtype may more accurately assess these nuanced symptoms. These discrepancies in study methodology, measures, and individual items used to assess for the dissociative subtype may explain the range of prevalence rates reported for this disorder.

Severity

In this study, those with the dissociative subtype did not differ from those with classic PTSD in terms of overall PTSD symptom severity in the past month, number of trauma types experienced in childhood or adulthood, feelings of shame, or posttraumatic cognitions. Some previous work suggests that individuals with the dissociative subtype have more severe PTSD symptoms overall whereas other work does not. The mean PCL-5 score for our study sample was 53.64 (SD = 17.75), which is well above the current cut-point of 33 for a provisional diagnosis of PTSD – in a way, our results provide support for both conclusions. Our study suggests that classic PTSD and the dissociative subtype may not differ in some types of symptom severity when holding the level of care constant. Notably, however, most of the PTSD sample in our study met criteria for the dissociative subtype at this high level of psychiatric care and high severity of PTSD symptoms.

In the present literature on PTSD and its dissociative subtype, discrepancies in findings related to severity of the subtype could be due to a variety of potential influences. For instance, some studies include individuals exposed to a wide range of different traumatic experiences (e.g., Stein et al., 2013), while others include a specific sample of individuals, such as trauma-exposed veterans (e.g., Wolf et al., 2017) or victims of rape and sexual assault (e.g., Armour et al., 2014). Additionally, as noted previously, the differences in study methodology and differences in the measures used to determine inclusion into the dissociative and classic PTSD groups could explain these seemingly contradictory results.

Limitations and Future Directions

One limitation of the present study is the reliance on self-report measures to determine dissociative subtype versus classic PTSD diagnoses. Future work should attempt to replicate these results using gold standard diagnostic interviews of posttraumatic and dissociative symptomology. Also, this study recruited from a single women's-only treatment facility for those with trauma-spectrum disorders. To better generalize these results, future studies should recruit both men and women from a number of psychiatric programs, all with similarly high levels of acuity. This would allow researchers to assess the replicability of these results and determine whether they would be consistent and generalizable across multiple residential and partial programs that treat patients with PTSD and other traumaspectrum disorders. Finally, the present literature has a notable lack of consistency in both measures and specific items used to assess for the dissociative subtype. It is imperative that

future work in this area focus on determining the most psychometrically sound self-report and interview measures for assessing this subtype more consistently.

Conclusions and Treatment Implications

Given the majority of patients with PTSD in this partial/residential level of care were dissociative, these findings support the need to assess for dissociative symptoms, particularly in more acute psychiatric settings. Properly assessing for dissociative symptoms is critical for providing adequate care, as these symptoms may be indicative of a more prominent underlying dissociative disorder and/or may interact with treatment. However, to date, research on the clinical implications of the dissociative subtype remain mixed. Some work suggests that prominent symptoms of dissociation could interfere with treatment outcomes, particularly when considering exposure-based treatments (for a review, see Lanius et al., 2012). Still, other studies suggest that those with the dissociative subtype of PTSD benefit equally from treatment when compared to those with classic PTSD (e.g., Zoet, Wagenmans, van Minnen, & de Jongh, 2018). Another study of female veterans with PTSD indicated that although participants with the dissociative subtype did not respond as well to prolonged exposure or present-centered therapy as those without the subtype, this effect was relatively small, and those individuals still experienced significant reductions in symptoms of dissociation at follow-up, despite the fact that neither of these treatments addressed dissociative symptoms directly (Wolf et al., 2016). This may suggest that even if those with the subtype may not respond as favorably overall to PTSD treatment, this diagnosis may not necessarily be a contraindication to exposure-based treatments.

The mixed literature on treatment outcomes for those with the dissociative subtype of PTSD suggests a need for further research in this area and further assessment of dissociative symptoms in patients with PTSD to better understand the range of symptoms and prognosis for all those who have experienced traumatic life events to provide better, more effective interventions to help those who suffer from PTSD.

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