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The Role of Patient Characteristics in the Concordance of Daily and Retrospective Reports of PTSD

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Research has documented discrepancies between daily and retrospective reports of psychological symptoms in a variety of conditions. A limited number of studies have assessed these discrepancies in samples of individuals with posttraumatic stress disorder (PTSD), with even less research addressing potential covariates that may influence such discrepancies. In the current study, 65 individuals with co-occurring PTSD and alcohol use disorder (AUD) completed daily assessments of their PTSD symptoms for 1 month, followed by a standard retrospective report of PTSD over the same month. Initial analyses explored the mean levels of daily and retrospective PTSD symptoms, while multilevel models assessed the level of agreement between daily and retrospective reports and the role of demographic variables and comorbid psychopathology (e.g., depression) or substance use (e.g., alcohol use) in moderating the association of daily and retrospective reports. Results showed that retrospective reports of arousal and avoidance symptoms were weakly related to daily reports of these symptoms, while reports of reexperiencing and numbing symptoms showed better agreement. Intra-individual alcohol consumption also moderated associations of reexperiencing and avoidance symptoms, such that on days individuals drank more, their daily reports resembled their retrospective reports less well. Future research should explore the degree to which these results generalize to nondually diagnosed samples, as well as the role such reporting discrepancies may play in PTSD treatment.

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DIAGNOSTIC CRITERIA FOR POSTTRAUMATIC STRESS DISORDER (PTSD) specify that symptoms must have been present and significantly impairing for at least 1 month at the time of diagnosis (American Psychiatric

Association; APA, 2013). However, the method by which PTSD symptoms are assessed may influence the recall and therefore the overall severity ratings of an individual's PTSD symptoms. The vast majority of clinical diagnoses are made based on an individual's recall of the past month, either via retrospective self-report or clinical interview. Although there are myriad sound reasons for this approach, including the need to demonstrate persistent impairment, retrospective self-report nonetheless may not be the most accurate reflection of daily symptom severity. Since individuals do not typically reflect on their experiences in month-long estimates, recall of symptoms in other time frames (e.g., the prior day) may be a better reflection of experience. Research suggests that short-term recall is more accurate than long-term recall (i.e., retrospective report), with the latter often resembling semantic rather than episodic memory (Robinson & Clore, 2002).

Indeed, individuals regularly self-report more severe symptoms on retrospective reports as compared to daily evaluations in a variety of psychiatric and health conditions, including panic disorder (de Beurs, Lange, & Van Dyck, 1992), borderline personality disorder (Ebner-Priemer et al., 2006), major depressive disorder (Ben-Zeev & Young, 2010), schizophrenia (Ben-Zeev, McHugo, Xie, Dobbins, & Young, 2012), smoking (e.g., Shiffman et al., 1997), and chronic pain (Van den Brink, Bandell-Hoekstra, & Abu-Saad, 2001). Notably, studies assessing sexual activity and alcohol use have regularly found higher levels of activity reported on daily relative to retrospective reports (e.g., Leigh, 2000; McAuliffe, DiFranceisco, & Reed, 2007), and retrospective underreporting of alcohol consumption may be more common in heavy drinkers (Searles, Perrine, Mundt, & Helzer, 1995).

To our knowledge, only two studies have assessed concordance of daily and retrospective reports of PTSD symptoms using the same measure. One of these studies assessed frequency of daily intrusions and flashbacks (no other symptom clusters were assessed) using bivariate nonparametric analyses in a sample of White, female, substance-abstinent childhood sexual abuse victims in long-term, trauma-focused residential treatment for PTSD (Priebe et al., 2013). In contrast to research in other disorders showing higher symptom levels on retrospective reports (e.g., de Beurs et al., 1992; Ebner-Priemer et al., 2006), this study found that daily reports of intrusions and flashbacks were approximately 50% higher than corresponding retrospective reports.

In contrast, reports of retrospective and daily subclinical PTSD symptoms in a largely White sample of female college students with sexual assault and childhood sexual abuse histories found the opposite pattern, such that retrospective reports of reexperiencing symptoms were 118% higher than average daily reports of these symptoms (Naragon-Gainey, Simpson, Moore, Varra, & Kaysen, 2012). Across the other symptom clusters, retrospective reports were 75% higher for dysphoria, 54% higher for hyperarousal, and 85% higher for avoidance, while overall retrospective PTSD scores were 67% higher. Although the absolute values of daily and retrospective reports demonstrated notable differences, multilevel models (MLMS) that accounted for missing data and captured individual differences in concordance demonstrated reasonably good agreement between retrospective and daily reports. Pseudo-R^2 estimates ranged from .55–.76 depending on the cluster. The contrasting results between the two studies suggest that agreement of daily and retrospective reports of PTSD depends on a variety of factors, which may include the analytic method (e.g., MLMs vs. Wilcoxon tests for paired data), assessment context (e.g., inpatient treatment vs. routine life), and sample characteristics (e.g., whether participants meet full criteria for PTSD or are currently abusing substances). In light of the limited research assessing the concordance of retrospective and daily reports of PTSD symptoms, additional work is needed to better understand these relationships and to ascertain which of the results can be replicated with a more diverse sample.

Moreover, there may be important participant characteristics (e.g., demographic and psychiatric factors) that influence concordance. For instance, one participant characteristic found to influence retrospective symptom reporting accuracy is age. Authors have speculated that younger individuals may be more likely to retrospectively view their lives as more emotionally intense or volatile than older individuals, thereby potentially inflating retrospective reports (Ben-Zeev et al., 2012). In contrast, other research has shown that compared to younger adults, older adults retrospectively *underreport* their level of negative symptom intensity compared to initial reports (Levine & Bluck, 1997). Thus, age may be associated with both retrospectively under- and overreporting symptoms, therefore influencing concordance with daily reports. Conflicting evidence also exists regarding gender, with some research suggesting that women are more likely to retrospectively overreport emotion intensity (e.g., Barrett, Robin, Pietromonaco, & Eyssell, 1998; Levine & Bluck, 1997), while other research has shown that men display worse agreement than women in their daily