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Social problem solving strategies and posttraumatic stress disorder in the aftermath of intimate partner violence☆

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ABSTRACT

Social factors are often associated with the development or maintenance of posttraumatic stress disorder (PTSD) in the aftermath of interpersonal traumas. However, social problem solving strategies have received little attention. The current study explored the role of social problem solving styles (i.e., rational approaches, impulsive/careless strategies, or avoidance strategies) as intermediary variables between abuse exposure and PTSD severity among intimate partner violence survivors. Avoidance problem solving served as an intermediating variable for the relationship between three types of abuse and PTSD severity. Rational and impulsive/careless strategies were not associated with abuse exposure. These findings extend the current understanding of social problem solving among interpersonal trauma survivors and are consistent with more general avoidance coping research. Future research might examine whether avoidance problem solving tends to evolve in the aftermath of trauma or whether it represents a longstanding risk factor for PTSD development.

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1. Introduction

Social factors are often central to risk and recovery models of Posttraumatic Stress Disorder (PTSD; Charuvastra & Cloitre, 2008). For instance, individuals exposed to interpersonal traumas (i.e., those involving the actions of another person) are at a greater risk of developing PTSD than those who have experienced other traumas (Frans, Rimmö, Åberg, & Fredrikson, 2005; Kessler, McGonagle, Zhao, & Nelson, 1994; Kessler et al., 2005; Kessler & Merikangas, 2004). However, this elevated risk is not always apparent immediately after the trauma, but instead can become salient months later (Shalev & Freedman, 2005), perhaps indicating unique social processes. For example, notable social factors in the development and maintenance of PTSD include social support (e.g., Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003), attachment styles (e.g., Scott & Babcock, 2010; Woodward et al., 2013), unsupportive or negative social responses (Andrews, Brewin, & Rose, 2003), interpersonal conflicts (Zoellner, Foa, & Brigidi, 1999), and dysfunctional cognitions about the self and the world (e.g., Beck et al., 2013). Another interpersonal factor that may be important to post-trauma adjustment is social problem solving.

1.1. Social problem solving

Social problem solving refers to strategies employed to solve problems in everyday life and can be characterized as adaptive or maladaptive (D'Zurilla, Nezu, & Maydeu-Olivares, 1996). Adaptive problem solving, also known as rational problem solving, entails a systematic approach to problems such as defining the problem, generating solutions, and evaluating the outcome. On the other hand, maladaptive problem solving can include impulsive or careless styles that involve making a hurried decision without consideration of alternatives or avoidance of problem solving via procrastination, inaction, or waiting for someone else to solve the problem. Problem solving is not only important for psychological adjustment during stressful events (e.g., Bell & D'Zurilla, 2009), but is also salient among individuals who have endured extreme stressors (i.e., trauma survivors). For example, empirical reports document that individuals with PTSD including combat veterans (Nezu & Carnevale, 1987) and mixed trauma samples (Sutherland

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& Bryant, 2008) utilize more maladaptive social problem solving. Notably, similar conclusions can be drawn from the broader coping literature. That is, lesser use of adaptive problem solving strategies (i.e., engagement or active problem coping) and greater use maladaptive problem solving strategies (i.e., disengagement, avoidance, or passive coping) are associated with greater PTSD symptom severity (e.g., Arias & Pape, 1999; Dirkzwager, Bramsen, & van der Ploeg, 2003; Solomon, Mikulincer, & Flum, 1988; Stein et al., 2005).

Problem solving has been assessed using a wide array of measures, some of which are not grounded psychometrically (D'Zurilla & Maydeu-Olivares, 1995). This limitation has curtailed our understanding of the potential role that social problem solving plays following trauma exposure. The Social Problem-Solving Inventory (SPSI; D'Zurilla & Nezu, 1990) has emerged as a popular self-report measure of problem orientation and problem solving skills. A subsequent revision of the scale, the SPSI-revised (SPSI-R) focuses the measure based on examination of factor structure and cross-validation with multiple samples (Maydeu-Olivares & D'Zurilla, 1996). As such, the SPSI-R is empirically grounded, with several examinations of its psychometric properties (Yetter & Foutch, 2014; Wakeling, 2007). The SPSI-R has two dimensions: (1) problem orientation, which refers to one's motivation and attitudes towards problem solving, operationalized as positive versus negative problem orientation, and (2) specific problem solving styles, reflecting how individuals actually attempt to solve problems, operationalized as rational, impulsive/careless, and avoidant.

1.2. Problem solving and trauma

Given the salience of social processes in post-trauma recovery, it is possible that social problem solving strategies play an intermediary role in the relationship between trauma exposure and PTSD. With the exceptions noted above (i.e., Nezu & Carnevale, 1987; Sutherland & Bryant, 2008), PTSD has been examined more extensively in the general problem solving literature than the social problem solving literature. Regarding general problem solving strategies, one study to date has noted that that problem avoidance is negatively associated with all three DSM-IV PTSD symptom clusters (i.e., re-experiencing, avoidance/numbing, and arousal; Ullman, Townsend, Filipas, & Starzynski, 2007). Although preliminary, this report suggests that additional work is warranted, particularly among interpersonal trauma populations such as intimate partner violence (IPV) survivors. As noted, social processes are particularly notable among survivors of interpersonal trauma (Charuvastra & Cloitre, 2008). Some research has demonstrated general problem avoidance coping among abuse survivors (e.g., Leitenberg, Gibson, & Novy, 2004; Swan & Snow, 2003) and found that women who were exposed to greater levels of intimate partner abuse also report greater general problem avoidance coping (Sullivan, Meese, Swan, Mazure, & Snow, 2005). Not only is general problem avoidance coping associated with PTSD severity among IPV survivors (Street, Gibson, & Holohan, 2005), this form of coping following an abusive relationship was found to predict IPV-related PTSD one year later (Krause, Kaltman, Goodman, & Dutton, 2008). Although no previous research has examined the role of social forms of problem solving, one might imagine that social problem solving would be especially relevant in the aftermath of an interpersonal trauma such as IPV.

The experience of IPV is heterogeneous, however, and different forms of abuse may result in different post-trauma reactions. For example, physical abuse is uniquely associated with PTSD even after controlling for other forms of abuse (Babcock, Roseman, Green, & Ross, 2008). Similarly, findings consistently demonstrate a strong relationship between psychological abuse and PTSD regardless of the presence or absence of other forms of abuse (e.g., Mechanic, Weaver, & Resick, 2008; Street & Arias, 2001). Furthermore, Bennice, Resick, Mechanic, and Astin (2003) noted the unique contribution of sexual abuse to PTSD severity. As such, specific forms of abuse (i.e., physical, sexual, and psychological) may uniquely relate to the survivor's social and interpersonal reactions.

1.3. Aims and hypotheses

The aim of the current study was to examine the role of three social problem-solving styles (rational, impulsive/careless, and avoidant) as intermediary variables in the relationship between different forms of IPV (physical, sexual, and psychological) and PTSD severity. To our knowledge, no previous research has addressed this topic. It was hypothesized that avoidance social problem solving would play an intermediary role in the association between physical and sexual abuse and PTSD, based on the literature on more general avoidant coping styles. Psychological abuse has not been examined previously, as it is associated with avoidance social problem solving; therefore, this analysis was exploratory. In addition, rational and impulsive/careless problem solving styles have received little attention in the PTSD literature and these analyses were regarded as exploratory as well.

2. Method

2.1. Participants

The sample included women who had experienced IPV and were seeking mental health assessment and possible treatment from a university-based research clinic. Participants were recruited from churches, advocacy centers, health fairs, community centers, and local college campuses. Women qualified for inclusion in the study sample if they met Criterion A for PTSD as defined by the DSM-IV (American Psychiatric Association, 2000; see IPV interview below). Exclusion criteria included psychotic symptoms ($n = 7$), evidence of cognitive impairment ($n = 8$), inconsistent reporting ($n = 3$), or incomplete data ($n = 74$). The final sample of this study included 105 women.

The average age of the participants was 36.94 years (SD = 12.68 years). The majority of the participants were Caucasian (50.5%) and African American (39.0%). Educational levels ranged from high school to completed graduate training, with the majority (45.7%) reporting some college education. Table 1 includes further descriptive information.

2.2. Measures

2.2.1. IPV interview

A semi-structured interview was used to determine whether a participant's IPV satisfied Criteria A1 and A2 of the DSM-IV definition of PTSD. Criterion A was assessed by inquiring whether the survivor reported experiencing, witnessing, or being confronted with an event that could impose threat of death, serious injury, or threat to physical integrity to oneself or others (A1) that was accompanied by feelings of intense fear, helplessness, or horror (A2) (American Psychiatric Association, 2000). Developed by the last author, this interview consists of a series of questions about physical, sexual, and emotional abuse that may have been experienced from romantic partners as well as specific queries about emotional responses experienced during abuse. Emotional responses were made on a Likert scale ranging from *not at all* (0) to *extreme* (100). Consistent with previous research (Beck et al., 2004), a rating of 50 or above was used to determine whether or not Criterion A2 was met.