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On public stigma of posttraumatic stress disorder (PTSD): Effects of military vs. civilian setting and sexual vs. physical trauma

Ryan Thibodeau
St. John Fisher University, rthibodeau@sjf.edu

Eileen M. Merges
St. John Fisher University, emerges@sjf.edu

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Disciplines

Psychology

On Public Stigma of Posttraumatic Stress Disorder (PTSD): Effects of Military vs. Civilian Setting and Sexual vs. Physical Trauma

Ryan Thibodeau and Eileen Merges

St. John Fisher University

Corresponding Author

Ryan Thibodeau, St. John Fisher University, 3690 East Avenue, Rochester, NY 14618. Email: rthibodeau@sjfc.edu.

Declarations

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Abstract

Some research indicates that public stigma of posttraumatic stress disorder (PTSD) may be relatively benign compared to other psychiatric conditions. However, the severity of PTSD stigma may vary as a function of the setting—military vs. civilian—for a traumatic event and the type of trauma—sexual assault vs. physical assault—that a person experiences. In an online experiment, 870 participants read vignettes in which a woman protagonist experienced a traumatic assault. The vignettes systematically varied as to (1) the military vs. civilian setting of the assault, (2) the type of assault—sexual vs. physical—that she experienced, and (3) whether she was diagnosed with PTSD in the aftermath of the assault. Measures of self-reported social distance and several affective, attitudinal, and behavioral dimensions of stigma were administered. Results indicated that the presence vs. absence of a PTSD diagnosis substantially increased public stigma across several measures. Less consistent but nevertheless noteworthy effects of setting and type of trauma also emerged. The current results valuably add to the small body of knowledge on PTSD stigma and highlight avenues for future research on this damaging phenomenon.

Keywords: public stigma; posttraumatic stress disorder; sexual assault; military veterans

On Public Stigma of Posttraumatic Stress Disorder (PTSD): Effects of Military vs. Civilian Setting and Sexual vs. Physical Trauma

Individuals with mental illness face a two-pronged struggle (Rüsch et al., 2005). First, they must manage the symptoms of their illness, and second, they are likely to confront public stigma characterized by highly damaging stereotypes, prejudice, and discrimination (Corrigan & Watson, 2002). This public stigma (see Hinshaw & Stier, 2008, for a review) limits the opportunities available to individuals with mental illness in a wide variety of life domains. Indeed, individuals with mental illness routinely struggle to secure employment (Stuart, 2006), obtain housing (Page, 1977), pursue education (Mowbray et al., 1999), and establish meaningful social connections documented to moderate the deleterious consequences of mental illness (e.g., Schön et al., 2009). Reducing public stigma is a key target of policy aimed at enriching the lives of individuals with mental illness (Hogan, 2003; World Health Organization, 2013).

The severity of public stigma varies across different psychiatric conditions. Schizophrenia, which has been the focus of a large volume of research, is subject to especially harsh public stigma (Angermeyer & Dietrich, 2006). Substance use disorders are stigmatized to a similarly high degree (Barry et al., 2014). Our central focus in this article is on public stigma of posttraumatic stress disorder (PTSD), a psychiatric condition characterized by a traumatic event that leads to re-experiencing of the trauma, avoidance of trauma-related stimuli, negative alterations in cognition and mood, and alterations in arousal and reactivity (American Psychiatric Association, 2013). Less is known about public stigma of PTSD compared to other psychiatric conditions (Hipes & Gemoets, 2019).

Public Stigma of PTSD

Much of the available published research suggests that PTSD is subject to less severe

public stigma compared to other psychiatric conditions. One large study (Reavley & Jorm, 2011) that evaluated the degree of public stigma associated with several psychiatric conditions found that PTSD was associated with relatively low levels of stigmatizing attitudes. Two smaller studies (Arbanas, 2008; Sorsdahl & Stein, 2010) yielded similar results. Recent commentary by Grinker (2022) further reinforces the view that PTSD may be associated with fairly benign public attitudes. Some researchers have suggested that attribution of PTSD to an external or uncontrollable cause (i.e., the traumatic stressor) may help explain relatively low levels of public stigma (e.g., Reavley & Jorm, 2011). Some published evidence supports this view (Corrigan et al., 2003; Weiner et al., 1988; see also Jones et al., 1984). These important findings notwithstanding, we speculate that the severity of public stigma of PTSD may vary as a function of certain parameters of a traumatic stressor. This study focuses on parameters that have heretofore received only scant attention in experimental stigma research: (1) the setting—military vs. civilian—of a traumatic stressor and (2) the type of trauma—sexual assault vs. physical assault—that a person experiences.

Setting—Military vs. Civilian

The American public seems to possess a complicated slate of attitudes toward military servicemembers and veterans. On the one hand, a widespread "support the troops" mentality (Hipes et al., 2015; MacLean & Kleykamp, 2014) leads many Americans to value military service and to confer social capital on both current and former servicemembers. On the other hand, the public may see combat veterans as "ticking time bombs" (MacManus et al., 2019) prone to dangerous volatility and unpredictable violence (Mittal et al., 2013). However, experimental inquiry into the stigma-related implications of the military vs. civilian context of a traumatic stressor is surprisingly lacking. One study (Hipes et al., 2015) found that military

experience was associated with increased social status, whereas military experience along with a PTSD diagnosis was associated with decreased social status. In another study (Hipes & Gemoets, 2019), PTSD from combat led to inflated public perceptions of dangerousness and incompetence, whereas PTSD from an auto accident did not. Other research suggests that links between combat PTSD and public stigma may be moderated by the gender of the servicemember (Caldwell & Lauderdale, 2021).

A critical aim of the current study is to generate new data on the stigma-related implications of the military vs. civilian context of a traumatic stressor, a research question that has heretofore received only minimal empirical attention.

Type of Trauma—Sexual Assault vs. Physical Assault

A large body of mostly qualitative research indicates that sexual assault survivors commonly confront damaging rape myths (Burt, 1980; Lonsway & Fitzgerald, 1994), stigmatizing public reactions (see Kennedy & Prock, 2018, for a review), and other negative responses from especially formal sources of support (Filipas & Ullman, 2001). Perceived or anticipated stigma has been shown to be a barrier to disclosure among survivors (Ahrens, 2006; Blais et al., 2018; Miller et al., 2011). Moreover, negative social reactions to disclosure are related to worse mental health outcomes among survivors (Hakimi et al., 2018).

Quantitative research on attitudes toward sexual assault survivors has overwhelmingly focused narrowly on the public's tendency to blame survivors (e.g., Abrams et al., 2003; Brems & Wagner, 1994; Felson & Palmore, 2018). Much less is known about the broader array of stigma-related reactions—affective, attitudinal, and behavioral—that might characterize public responses to sexual assault. The stigma-related consequences of physical assault, a comparison trauma against which we evaluated public responses to sexual assault, are themselves unclear.

Do different types of trauma lead to different patterns of public stigma of PTSD? This study aims to contribute new evidence bearing on this important but largely neglected research question.

The Current Study

Participants in this online experiment read vignettes in which a woman protagonist experienced a traumatic assault. We utilized a woman protagonist because women are more likely to be victims of both sexual violence and physical violence resulting in injury (Tjaden & Thoennes, 1998). Thus, our woman protagonist embodies the normative experience of trauma in the United States. The vignettes systematically varied as to (1) the military vs. civilian setting of the assault, (2) the type of trauma—sexual assault vs. physical assault—that she experienced, and (3) whether she was diagnosed with PTSD in the aftermath of the assault. Public stigma was measured using tools that captured desired social distance and affective, attitudinal, and behavioral dimensions of stigma. Hypotheses were as follows:

(1) The military setting for the trauma would lead to lower public stigma than the civilian setting.

(2) Invoking a sexual assault would lead to higher public stigma than invoking a physical assault.

(3) A diagnosis of PTSD subsequent to the assault would lead to higher public stigma than no diagnosis.

Method

Participants

A total of $N = 1276$ participants participated in the study using an online survey application (Qualtrics; Provo, UT). One thousand forty were recruited via Amazon's Mechanical Turk and paid $0.75 for participating. Two hundred thirty-six were recruited from an

introductory psychology course at a small college in the northeastern United States and given course credit for participating.

Participants were excluded from data analysis on the basis of several criteria. Our primary exclusion criterion centered on participants' attentiveness to the vignettes. Participants were excluded if, in a series of multiple choice items administered at debriefing (see Procedure subsection below), they were unable to identify the vignette they were randomized to read in the 2 x 3 x 2 experimental design. Application of this criterion resulted in the exclusion of a large number of participants (n = 319). However, meaningful tests of study hypotheses required participants who were at least minimally attentive to the experimental manipulation.

Participants were also excluded if they (1) failed to complete all study procedures (n = 37), (2) failed to correctly complete two attention check items; that is, identify the first President of the United States (n = 19) and select the number 4 from a dropdown menu (n = 3), (3) completed the study unreasonably slowly (i.e., over 1 h; n = 3) or quickly (i.e., under 2 m; n = 22), and (4) showed clear evidence of response bias in their completion of measurement scales (i.e., recording of the same Likert scale response on all items of all measures; n = 3).

Application of these exclusion criteria resulted in a final sample of n = 870 (429 women, 440 men, 1 non-binary); 78.7% White; 54.5% single, 36.2% currently married; 50.0% with at least a Bachelor's degree; M age = 35.2, SD = 13.2). They were randomly assigned, using the Qualtrics randomization tool, to one of 12 groups that resulted from fully crossing all levels of the 2 x 3 x 2 between-subjects design.

Measures

Four self-report measures of psychiatric stigma were administered. The Social Distance Scale (SDS; Link et al., 1987) includes seven items that measured participants' willingness to

engage, at varying degrees of closeness (e.g., neighbor, roommate) with the target person ("Sandra") described in the vignette. Responses were recorded on four-point scales (1 = definitely willing, 4 = definitely unwilling). The variable subjected to analysis was computed as a mean of the seven SDS items ($\alpha = .93$).

A 10-item measure of participants' emotional reactions (Schomerus et al., 2013) to Sandra was administered. Items were grouped into fear (e.g., "I feel afraid"), anger (e.g., "I feel angry"), and prosocial (e.g., "I feel sympathy") subcategories based on published procedures (e.g., Schomerus et al., 2013; Thibodeau, 2017). Responses were recorded on five-point scales (1 = strongly disagree, 5 = strongly agree). The three variables subjected to analysis were computed as means of the items in the fear ($\alpha = .85$), anger ($\alpha = .67$), and prosocial ($\alpha = .74$) subcategories.

A six-item semantic differential tool (Olmsted & Durham, 1976) was administered to measure stereotyped attitudes. Participants rated both Sandra and the "average woman" on seven-point scales anchored by bipolar adjectives (e.g., predictable-unpredictable, valuable-worthless). Difference scores for all six items were then computed by subtracting ratings for the "average woman" from ratings for Sandra. The six difference scores ($\alpha = .76$) were then averaged to form an overall index of stereotyped attitudes.

To measure the behavioral dimensions of psychiatric stigma, we asked participants whether they would be willing to make a small donation ($0.75) to a fictional organization, the American Society for Traumatic Stress, which reportedly researches "causes of, and appropriate treatments for, psychological trauma" (see Corrigan et al., 2002, for description of a similar measure). Responses were coded on a dichotomous scale: 1 = yes, 0 = no. During debriefing, participants were informed that no donation would, in fact, be solicited.

Procedure

First, participants provided informed consent to complete the study, which was approved by the local institutional review board. Second, participants read the vignette appropriate to the group to which they had been randomly assigned (see Appendix). A photograph of Sandra, shown with a neutral expression and forward gaze, accompanied presentation of the vignette (338 x 458 JPEG; image AF11NES from the Karolinska Directed Emotional Faces database; Lundqvist et al., 1998). Participants read one of twelve vignettes generated by fully crossing all levels of the 2 x 3 x 2 between-subjects design. To manipulate the military vs. civilian setting of the trauma, the vignette informed participants that Sandra experienced the traumatic assault (1) while deployed in the Army or (2) without referencing military service. To manipulate the type of trauma that Sandra experienced, the vignette either (1) informed participants that she was sexually assaulted, (2) informed participants that she was physically assaulted, or (3) did not disclose a specific traumatic event. To manipulate the presence vs. absence of PTSD, the vignette either (1) disclosed Sandra's diagnosis of PTSD, along with a description of specific symptoms with which she struggles, or (2) did not invoke a PTSD diagnosis.

Third, participants completed the four psychiatric stigma measures in a fixed order. Fourth, participants completed a short demographic questionnaire that included the two attention check items described previously. Fifth, participants read a debriefing statement and completed three multiple choice items that asked them to identify the level to which they had been assigned for all three group manipulations embedded in their vignette. Finally, participants terminated their participation in the study.

Results

Social Distance

Analysis of the social distance data yielded significant main effects for all three group

factors (see Figure 1). A small but significant main effect of Setting, $F(1,858) = 5.88$, $p < .02$, $\eta_p^2 = 0.01$, indicated that participants desired less social distance from Sandra when she was described as an Army veteran ($M = 2.1$, $SD = 0.7$) vs. a civilian ($M = 2.2$, $SD = 0.7$).

A significant main effect of Trauma Type, $F(2,858) = 17.11$, $p < .001$, $\eta_p^2 = 0.04$, also emerged. Follow-up pairwise contrasts indicated that no disclosure of a specific trauma ($M = 2.3$, $SD = 0.7$) yielded significantly greater ($p < .001$) social distance than description of physical assault ($M = 2.1$, $SD = 0.7$), which in turn yielded marginally greater ($p < .09$) social distance than description of sexual assault ($M = 2.0$, $SD = 0.7$).

A very large and significant main effect of Diagnosis, $F(1,858) = 195.20$, $p < .001$, $\eta_p^2 = 0.19$, indicated that participants desired more social distance from Sandra when a PTSD diagnosis was present ($M = 2.4$, $SD = 0.7$) vs. absent ($M = 1.8$, $SD = 0.6$). None of the two-way interactions nor the three-way interaction approached statistical significance ($ps > .20$).

Emotional Reactions

Fear

For fear (see Figure 2), a significant main effect of Diagnosis, $F(1,858) = 91.47$, $p < .001$, $\eta_p^2 = 0.10$, indicated that participants self-reported greater fear when a PTSD diagnosis was present ($M = 2.4$, $SD = 1.0$) vs. absent ($M = 1.8$, $SD = 0.8$). None of the other main effects or interactions approached statistical significance ($ps > .13$).

Anger

For anger (see Figure 3), only the Setting x Trauma Type interaction achieved statistical significance, $F(2,858) = 7.47$, $p < .001$, $\eta_p^2 = 0.02$. When Sandra was described as an Army veteran, no trauma disclosure led to significantly lower self-reported anger ($M = 1.7$, $SD = 0.6$) than disclosure of both physical assault ($M = 1.9$, $SD = 0.8$; $p < .02$) and sexual assault ($M = 1.9$,

SD = 0.6; $p < .03$). When Sandra was described as a civilian, no trauma disclosure led to significantly higher self-reported anger (*M* = 1.9, *SD* = 0.7) than disclosure of physical assault (*M* = 1.7, *SD* = 0.7; $p < .01$) and marginally higher self-reported anger than disclosure of sexual assault (*M* = 1.8, *SD* = 0.7; $p < .08$). Figure 3 gives the visual impression that this effect was amplified when Sandra was described as having PTSD; however, the three-way interaction approached but did not achieve statistical significance ($p < .09$).

Prosocial Emotion

For prosocial emotion (see Figure 4), there was a significant main effect of Trauma Type, $F(2,858) = 84.90$, $p < .001$, $\eta_p^2 = 0.17$. Follow-up pairwise contrasts indicated that disclosure of both physical assault (*M* = 3.8, *SD* = 0.8) and sexual assault (*M* = 3.7, *SD* = 0.7) led to greater prosocial emotion than no disclosure of a specific trauma (*M* = 3.1, *SD* = 1.1; both *p*s < .001).

A significant main effect of Diagnosis, $F(1,858) = 154.30$, $p < .001$, $\eta_p^2 = 0.15$, indicated that participants self-reported greater prosocial emotion when PTSD was present (*M* = 3.8, *SD* = 0.7) vs. absent (*M* = 3.1, *SD* = 1.0).

Both of these main effects were qualified by a significant Trauma Type x Diagnosis interaction, $F(2,858) = 57.37$, $p < .001$, $\eta_p^2 = 0.12$. For both physical assault ($p < .001$, $\eta_p^2 = 0.04$) and sexual assault ($p < .02$, $\eta_p^2 = 0.02$), the effect of diagnosis was significant but modest in size. On the other hand, when no specific trauma was disclosed, the effect of diagnosis was significant and very large ($p < .001$, $\eta_p^2 = 0.44$).

Stereotyped Attitudes

For stereotyped attitudes (see Figure 5), there was a significant main effect of Trauma Type, $F(2,857) = 6.44$, $p < .01$, $\eta_p^2 = 0.02$. Follow-up pairwise contrasts indicated that disclosure of sexual assault (*M* = 0.4, *SD* = 0.7) was subject to weaker stereotyped attitudes than disclosure

of both physical assault (M = 0.5, SD = 0.7) and no specific trauma (M = 0.6, SD = 0.9; ps < .04), which did not differ from one another (p = .17).

A significant main effect of Diagnosis, $F(1,857) = 143.00$, $p < .001$, $\eta_p^2 = 0.14$, indicated that stereotyped attitudes were stronger when PTSD was present (M = 0.8, SD = 0.8) vs. absent (M = 0.2, SD = 0.6).

Willingness to Donate to Trauma Research

The proportion of participants willing to donate to trauma research is displayed in Figure 6. A significant effect of Setting, $\chi^2(1) = 3.98$, $p < .05$, indicated that a higher proportion of participants were willing to donate when Sandra was described as an Army veteran (21.5%) vs. a civilian (16.3%).

The effect of Trauma Type was not significant, $\chi^2(2) = 3.52$, $p = .17$. However, a visual inspection of Figure 6 suggests that Trauma Type was a significant predictor of willingness to donate when Sandra was described as having PTSD. Exploratory analyses confirm that view. When Sandra was described as having PTSD, disclosure of a sexual assault led to the lowest willingness to donate (13.2%) compared to disclosure of a physical assault (22.1%) and no specific trauma (25.3%), $\chi^2(2) = 7.79$, $p < .02$. Diagnosis was not, by itself, a significant predictor of willingness to donate, $\chi^2(1) = 1.24$, $p = .27$.

Discussion

This study aimed to evaluate the effects of several parameters of a traumatic assault—the military vs. civilian setting in which it occurs, the sexual vs. physical nature of the assault, and the presence vs. absence of subsequent PTSD—on public stigma. We obtained strong and consistent evidence that the presence of a PTSD diagnosis substantially increased public stigma. Our manipulation of setting and trauma type yielded less consistent but nevertheless intriguing

effects on public stigma.

A number of findings merit careful consideration. As mentioned previously, the presence of a PTSD diagnosis led to a large increase in public stigma across virtually all of the stigma-related outcomes we measured. This study thus contributes additional evidence in support of the widely accepted consensus that individuals with mental illness are subject to damaging public stigma (see Hinshaw & Stier, 2008, for a review). Moreover, it adds to the smaller body of work attesting to the public stigma of PTSD, specifically (e.g., Arbanas, 2008; Hipes & Gemoets, 2019; Hipes et al., 2015; Reavley & Jorm, 2011; Sorsdahl & Stein, 2010).

One possible concern is that our PTSD vignette may have amplified stigma effects by conflating the diagnosis with descriptions of antagonism and volatility that might understandably incline the public toward a negative view of the vignette's protagonist. Indeed, Sandra reportedly struggled with angry outbursts and she was described as perpetrating a verbal attack against a restaurant server. Perhaps, then, the public's desire for distance from Sandra was altogether reasonable in light of the possible threat she was described as posing. On the other hand, irritable behavior and angry outbursts are listed as bona fide DSM-5 symptoms of PTSD (see criterion E1; American Psychiatric Association, 2013). In painting a portrait of PTSD, then, we think we had ample license to cite these critical features of the syndrome. Nevertheless, additional research might address the question of whether the stigma effects we have attributed to PTSD would emerge absent a description of outwardly hostile behavior.

Our manipulation of trauma type yielded a couple of noteworthy findings. No disclosure of a specific trauma led to a greater self-reported desire for social distance than disclosure of either physical assault or sexual assault. One possibility is that disclosure of any specific assault justifies the PTSD diagnosis and renders it normal or perhaps even inevitable. The public may

thus feel less pressure to keep their distance from an individual with PTSD that is perceived to be an expectable response to traumatic stress. Under these circumstances, individuals with PTSD may be low in perceived "otherness," which previous theory (Link & Phelan, 2001; see also Haslam & Kvaale, 2015) and research (e.g., Thibodeau et al., 2018) has repeatedly linked to public stigma of mental illness. However, one problem with this interpretation is that the same effect of trauma type emerged even when the protagonist Sandra *was not* described as having PTSD. So, these findings may simply reflect the benevolence usually extended to people to whom bad things happen, irrespective of PTSD. Again, future research might seek to replicate and then clarify the nature of the trauma type effect we have uncovered here.

Examination of stereotyped attitudes illuminated an unexpected effect of trauma type. That is, disclosure of sexual assault led to weaker stereotyped attitudes than disclosure of physical assault and no disclosure of any trauma. This finding seems contrary to published evidence of harsh public attitudes toward survivors of sexual assault (Burt, 1980; Lonsway & Fitzgerald, 1994). However, this finding notably diverges from our donation data, which more clearly supported our predictions regarding sexual assault. That is, when the protagonist Sandra was described as having PTSD, participants were least likely to agree to a donation when she was reportedly sexually assaulted. Thus, there is a striking disconnect between participants' self-reported stereotyped attitudes and a measure that more obviously tapped behavioral intentions. These disparate findings suggestive of benign attitudes but limited prosocial behavior may reflect the ambivalence that people reportedly commonly feel in relation to sexual assault survivors (e.g., Buddie & Miller, 2001). Other evidence attests to similar measurement discrepancies. For example, self-reported prosocial impulses were uniformly high but willingness to make a very modest ($0.75) donation was uniformly low.

We obtained only very modest evidence that our manipulation of the military vs. civilian setting of a traumatic assault predicted stigma. Participants self-reported that they desired less social distance and they indicated a greater willingness to donate to the fictional trauma organization when Sandra was described as an Army veteran vs. a civilian. Both effects were small. The directions of these effects are opposite those obtained in one recently published study (Correll et al., 2021), which found that an individual with PTSD pictured in a military uniform was subject to greater stigma along several dimensions. Possible reasons for these discrepant results are worth pondering. Our protagonist Sandra was described as a veteran, not a current servicemember. Indeed, the vignette made it clear that, post-discharge, she had settled into an unremarkable civilian life. Moreover, Sandra was a woman; perhaps this implied that she carried out a noncombat role less likely to trigger severe posttraumatic disturbance (Murphy & Smith, 2018) and thus harsh public attitudes. In any event, further study of the factors that predict these conflicting public evaluations of servicemembers with PTSD seems worth pursuing.

The current study had a number of strengths. First, we gathered a large sample that should inspire confidence in the robustness of our results. Second, our vignette-based methodology permitted a tight experimental manipulation and precise control over the variables at the foundation of our research questions. Third, we utilized multiple measures of public stigma, including a novel measure of participants' behavioral intentions; that is, their willingness to donate to a fictional trauma organization (see also Corrigan et al., 2002). Thus, this study brought to bear the wide array of evidence required to capture the multifaceted character of public stigma.

Two key limitations should also be noted. First, we speculated that discrepancies between the current results and published findings (e.g., Correll et al., 2021) could be attributable to the

gender of the target person subject to participants' evaluation. The current study is ill-equipped to address this possibility because we failed to manipulate the gender of the protagonist of our vignettes, who was always a woman. Of course, fully crossing gender with all levels of our three factors would have yielded 24 separate variants of our vignette and thus an unwieldy experimental manipulation. Systematic investigation of gender effects should be a priority for future research on PTSD stigma. Moreover, the extent to which other demographic variables (e.g., race, class, sexual orientation) predict PTSD stigma remains an open question. Second, our PTSD manipulation was limited insofar as participants randomized to the PTSD present vs. absent conditions confronted substantially different tasks. That is, some participants read a lengthy text that described Sandra's PTSD whereas others read no text at all. Thus, these conditions were not matched with respect to, for example, overall reading requirements and cognitive effort expenditure.

Although a small body of published research suggests that PTSD is subject to relatively low levels of public stigma (Arbanas, 2008; Reavley & Jorm, 2011; Sorsdahl & Stein, 2010), the present results nevertheless indicate that public stigma of PTSD is a real phenomenon that merits the attention of clinicians, researchers, and the wider public. Stigma has been explicitly cited as a key barrier to treatment-seeking among individuals with PTSD (Institute of Medicine, 2014). Stigma reduction programming (see Morgan et al., 2018, for a review) may help to improve public attitudes and, downstream, encourage individuals with PTSD to pursue effective treatment (see Benish et al., 2008, for a review). The contours of such programming are unclear, but in the current study, we found that public stigma of PTSD was reduced when details of the traumatic event were disclosed. Moreover, the measurement discrepancies uncovered here underscore the importance of measuring program outcomes using diverse tools that go beyond mere self-report

(e.g., implicit measures: Peris et al., 2008; Teachman et al., 2006; measures of stigma-relevant behavior: Macrae et al., 1994; Penn & Corrigan, 2002; Thibodeau & Principino, 2019). Diverse measurement approaches are required to capture the different facets of stigma, and thus paint a comprehensive portrait of this complicated phenomenon.

In sum, the current study yielded strong, consistent evidence that PTSD is subject to considerable public stigma. We uncovered less consistent but nevertheless intriguing effects of setting and trauma type. The present results point to a number of avenues for future research—including clarification of the trauma type effect we uncovered and interrogation of demographic predictors of PTSD stigma—that promises to further illuminate this pernicious phenomenon.

Conflict of Interest Statement

The authors declare that they have no conflict of interest.

Informed Consent

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all participants for being included in the study.

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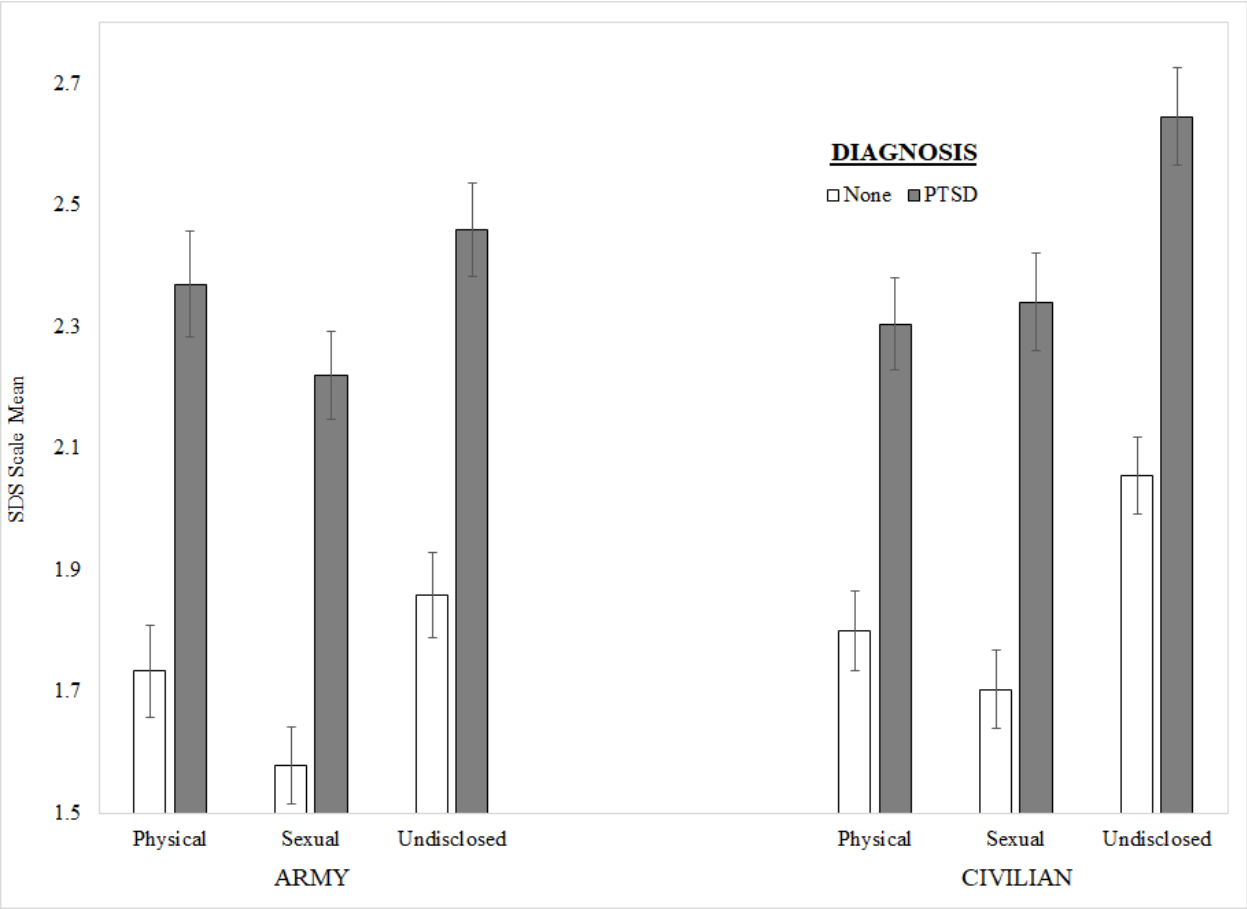
Figure 1

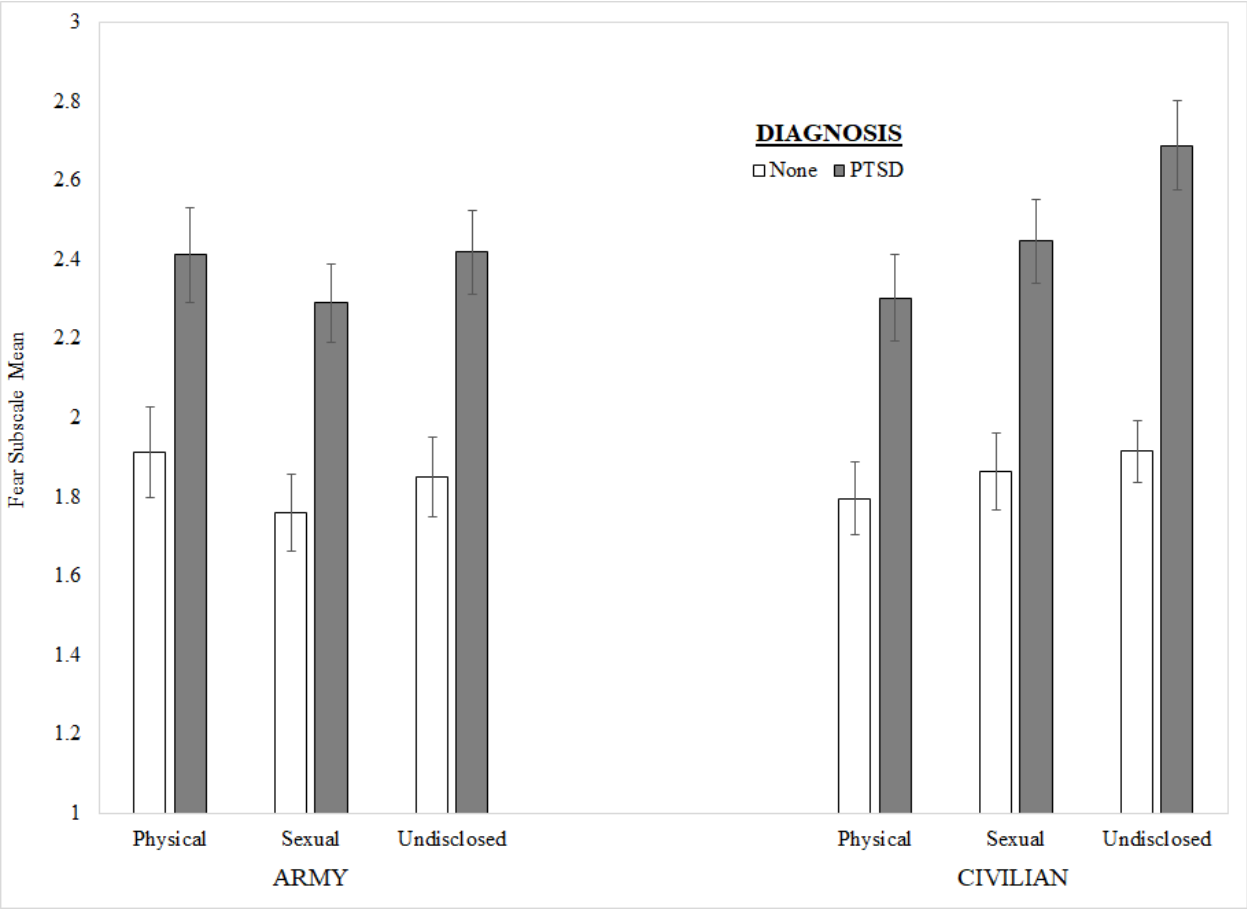
Mean Social Distance Scale (SDS) Scores as a Function of Setting, Trauma Type, and Diagnosis



Note. Social Distance Scale (SDS) items were measured on a 0-3 scale. Higher scores reflect greater self-reported desire for social distance. Error bars represent standard errors of the mean.

Figure 2

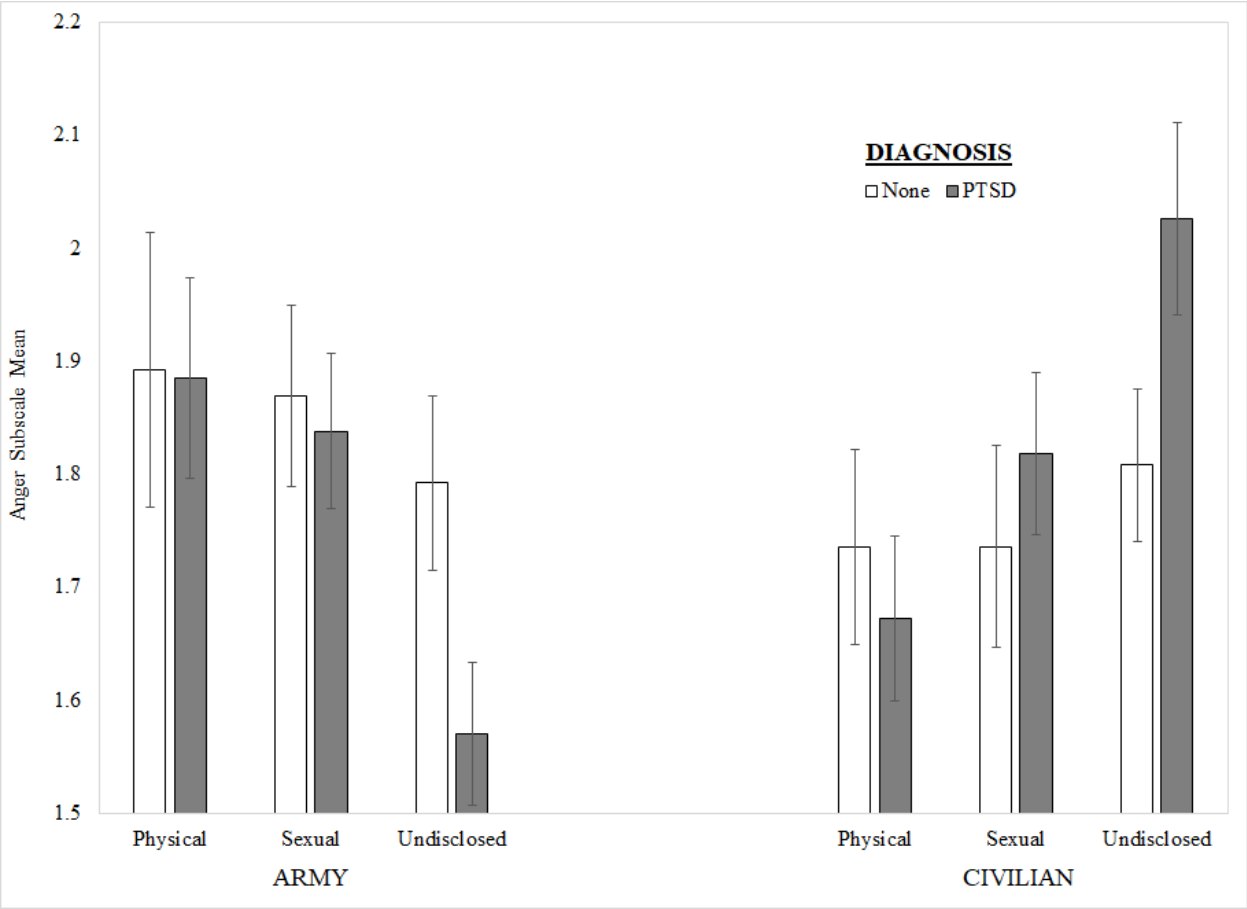
Mean Fear Subscale Scores as a Function of Setting, Trauma Type, and Diagnosis



Note. Fear subscale items were measured on a 1-5 scale. Higher scores reflect greater self-reported fear. Error bars represent standard errors of the mean.

Figure 3

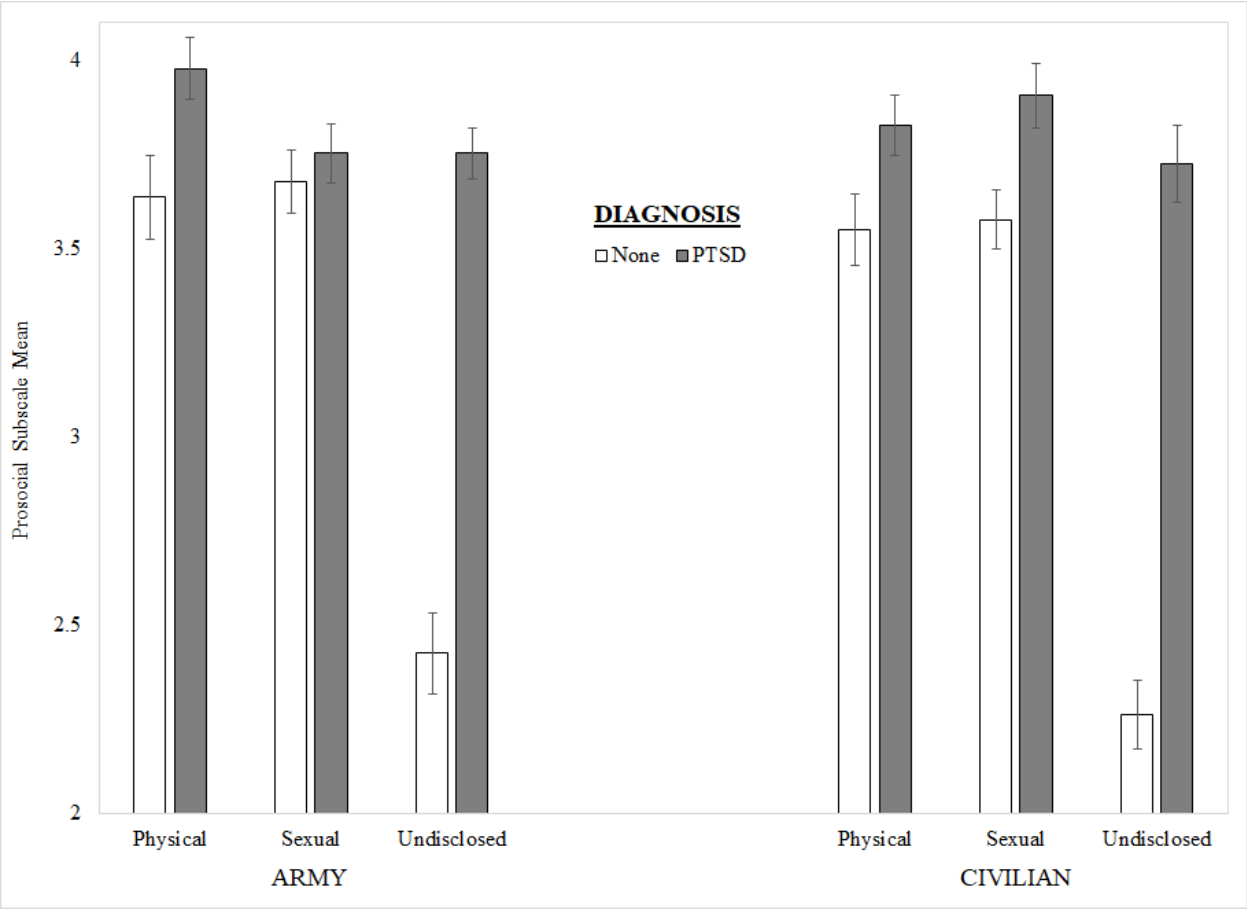
Mean Anger Subscale Scores as a Function of Setting, Trauma Type, and Diagnosis



Note. Anger subscale items were measured on a 1-5 scale. Higher scores reflect greater self-reported anger. Error bars represent standard errors of the mean.

Figure 4

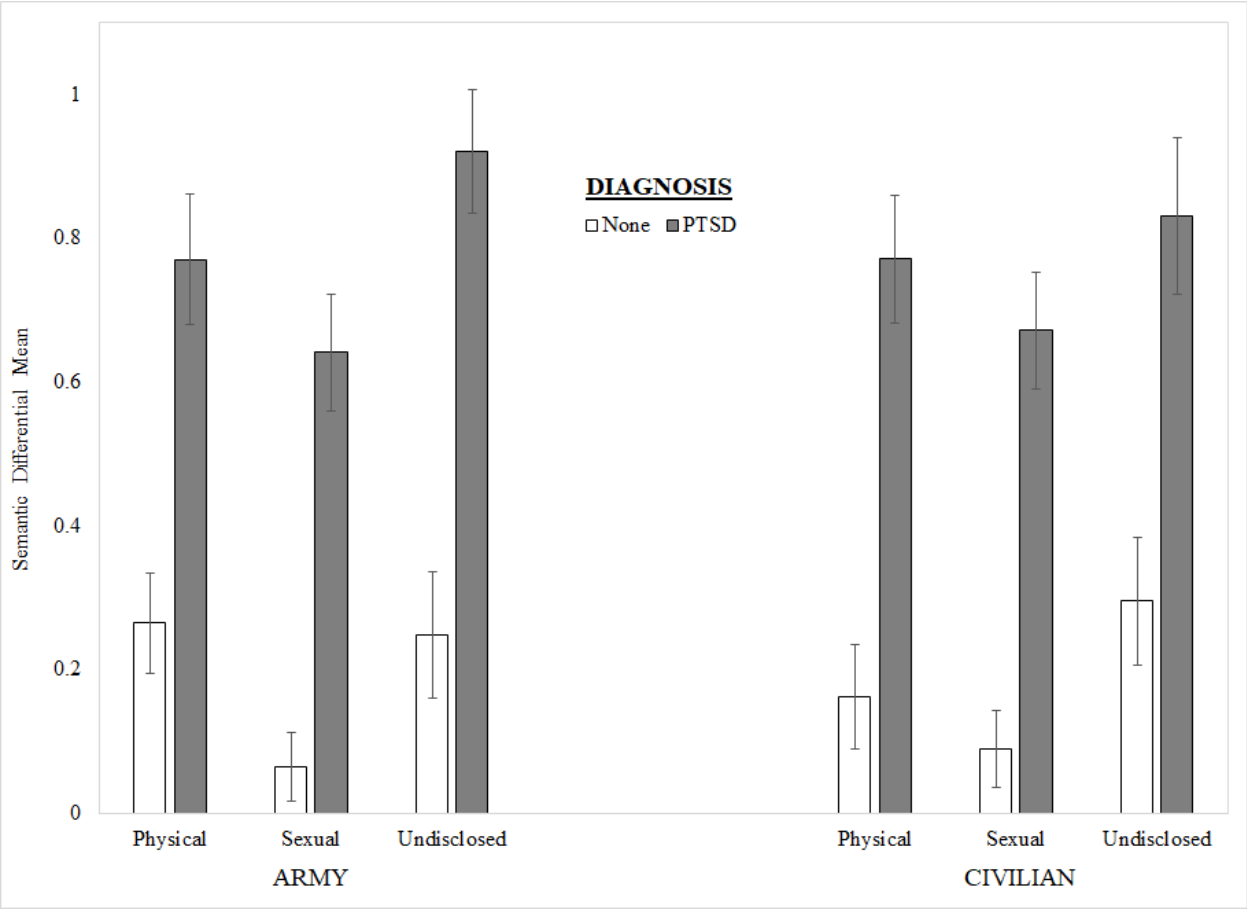
Mean Prosocial Subscale Scores as a Function of Setting, Trauma Type, and Diagnosis



Note. Prosocial subscale items were measured on a 1-5 scale. Higher scores reflect greater self-reported prosocial emotion. Error bars represent standard errors of the mean.

Figure 5

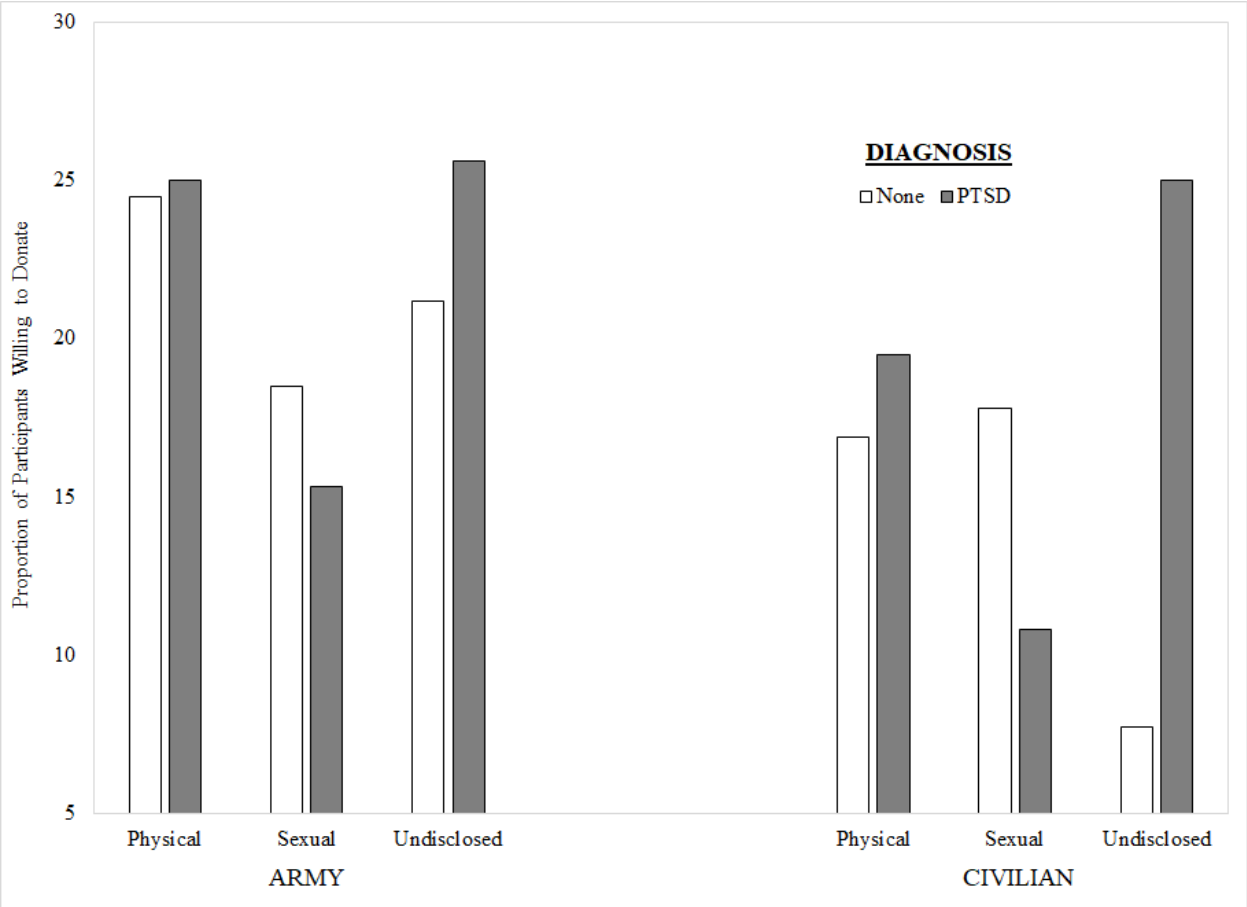
Mean Semantic Differential Scores as a Function of Setting, Trauma Type, and Diagnosis



Note. Semantic differential means reflect difference scores generated by subtracting ratings for the "average woman" from ratings for Sandra. Difference scores ranged from -6 (maximum stereotyped attitudes toward "average woman" vs. Sandra) to +6 (maximum stereotyped attitudes toward Sandra vs. "average woman"). Error bars represent standard errors of the mean.

Figure 6

Proportion of Participants Willing to Donate to the Fictional Trauma Organization, as a Function of Setting, Trauma Type, and Diagnosis



Appendix

Note. The bold type in the text below was presented in the military condition but omitted in the civilian condition.

Introduction

This is Sandra. She is 26 years old **(and she previously served in the United States Army)**. Sandra lives by herself in an apartment in Kansas City, Missouri. She works full-time and she pursues a couple of hobbies.

***

Sexual assault

Nearly six years ago, **(while deployed overseas in the Army)**, Sandra was sexually assaulted.

Physical assault

Nearly six years ago, **(while deployed overseas in the Army)**, Sandra was physically assaulted.

No disclosure of a specific trauma

(Neither of the above texts presented).

***

PTSD present

Five and a half years ago, after experiencing (this/a) traumatic event, Sandra visited a mental health professional who diagnosed her with post-traumatic stress disorder (PTSD). When this problem started several months earlier, Sandra began having terrible nightmares of her traumatic event. She had flashbacks, during which she felt like she was experiencing the traumatic event all over again. She also started avoiding people and places that reminded her of the traumatic event. Sometimes she had angry outbursts at inappropriate times; in fact, once she snapped at a restaurant server who did nothing to provoke a tantrum. She also became unusually aware of possible danger, and this made her feel on edge all of the time.

PTSD absent

(Above text not presented).