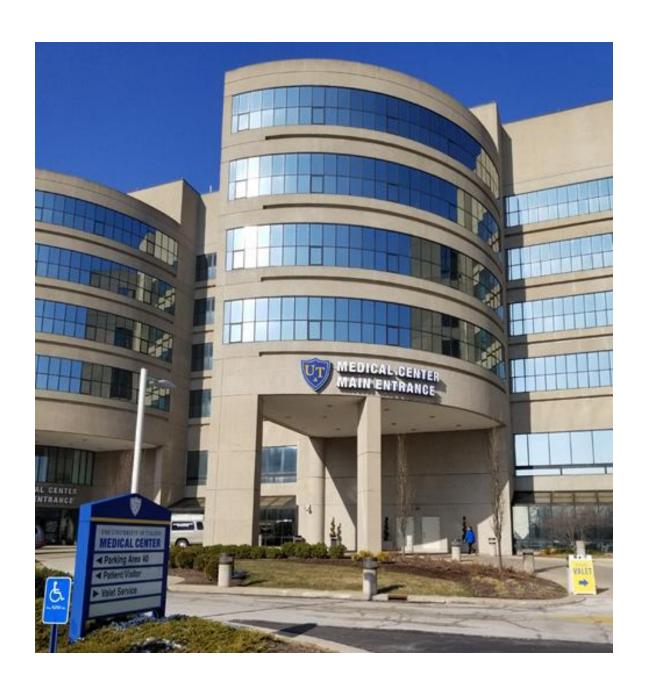


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## Civilian Social Support and Posttraumatic Stress Disorder Symptoms among National Guard Members

Xin Wang  $^1$   $^a$  Laura Prince  $^a$  Juhi Rattan  $^a$  Neal L. Swartz  $^a$  Vipul Shukla  $^a$  Tory A. Durham  $^b$  Tracey L. Biehn  $^b$  Jennifer L. Drue  $^a$  Gowri Ramachandran  $^a$  Christine Sutu  $^a$  Amber J. Benton  $^a$  John L. Luckoski  $^a$  Andrew Ding  $^a$  and Marijo B. Tamburrino  $^a$ 

<sup>a</sup>The University of Toledo Health Science Campus, Department of Psychiatry, 3000 Arlington Ave., Toledo Ohio 43560, and <sup>b</sup>The University of Toledo, Department of Psychology, 2801 W. Bancroft St., Toledo Ohio 43606

Increasing evidence suggests that posttraumatic stress disorder (PTSD) symptoms are highly prevalent and pervasive among National Guard members who served in recent wars. Previous meta-analyses report a lack of social support as one of the strongest risk factors for the development of PTSD symptoms. Social support among military members is typically categorized into two types: assistance and support which is received from military leaders and fellow members of one's unit and civilian social support which is obtained from civilian family and friends. Prior research has demonstrated that unit support is associated with less severe PTSD symptoms. In addition to unit support, the influence of civilian social support was also considered a potent buffer for PTSD symptoms. Civilian social support is important to National Guard members because their experiences integrate military and civilian life more than active duty soldiers. Unlike intensive studies in active duty military personnel, fewer studies have examined the role of social support in National Guard members, and civilian social support is rarely investigated in these limited studies. This review article examines the role of civilian social support in National Guard members as a potential protective factor against the development of PTSD symptoms.

osttraumatic Stress disorder (PTSD) symptoms are a major mental health issue in military personnel who have been deployed to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). A systematic review of the literature yielded a PTSD prevalence estimate of 4-17% among OEF/OIF veterans (1), while another group's meta-analysis of 33 studies of OEF/OIF veterans estimated a PTSD prevalence as high as 23% (2). Factors that contribute to variability in PTSD prevalence numbers include differences in study methodology such as choice of PTSD measurement tools, timing of the assessments in relationship to timing of deployment, number of deployments, and combat intensity. More recently, PTSD research has begun to focus specifically on the National Guard population. The Guard and Reserves refer to the reserve components of the United States military, who augment fulltime or active duty troops as needed during war or national emergencies. The Guard and Reserve forces composed up to nearly 40% of the troops in OIF and OEF (3). Goldmann et al. conducted hour long structured interviews with 1668 Ohio Army National Guard soldiers, and reported a deployment-related PTSD rate of 9.6% (4). In another study of 522 Army National Guard soldiers who completed the 17 item PTSD checklist 3 months following return from OIF deployment, 13.8% were found to have new-onset probable PTSD (5). Guard/Reserve troops could be especially at risk for

PTSD (6). In Milliken et al. study of Active and Reserve/Guard soldiers (7), participants were surveyed with the Post-Deployment Health Assessment (PDHA) immediately upon return from OIF and 4-10 months later were reassessed with the Post- Deployment Health Re-Assessment (PDHRA). Guard and reserve soldiers indicated more PTSD symptoms and interpersonal conflict over the two time periods. Active troops' endorsements of 4 PTSD symptoms increased from 11.8 to 16.7%, while Reserve/Guard's indications of PTSD symptoms grew from 12.7% to 24.5%. Social support is one factor that has been well documented to protect against PTSD risk and severity among populations exposed to various traumas worldwide. (6, 8). High levels of social support are associated with less severe PTSD symptoms (4, 9-17) and other mental health symptoms (4, 9-19). The risk for PTSD in military veterans increases when posttraumatic social support is minimal (20). Of these reports on social support in the military, only two were exclusive to National Guard and Reserves, highlighting the need for more research on the Reserves. Two principal forms of social support are relevant for military personnel: unit support and civilian social support. Prior research has demonstrated that unit support is associated with less severe PTSD symptoms (21, 22). Aside from unit support, the influence of civilian social support was also considered a potent buffer for PTSD symptoms (23). Soldiers with greater perceived civilian social support had an overall lower severity of PTSD symptoms (24). Cross-sectional studies have reported negative correlations between civilian social support and PTSD severity (13, 24-27). A small handful of longitudinal studies confirm this correlation (10, 13, 27). In a study that included veterans of the Vietnam war, Persian Gulf War, and WWII prisoners of war, Ozer, et al (9) reported that low civilian social support was a strong predictor of PTSD symptoms more than three years following the traumatic event [9]. There have been extensive studies of active duty military personnel, but fewer studies have examined the role of civilian social support in National Guard members. This review article will examine the literature documenting the role of civilian social support in National Guard members as a potential protective factor against the development of PTSD symptoms and the possible mechanisms

All authors contributed to this paper.  $^{\,\,1}\text{To}$  whom correspondence should be sent: Xin.Wang2@utoledo.edu

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by which social support alleviates PTSD severity.

## Civilian social support and PTSD symptoms in National Guard members

Civilian social support is particularly important for National Guard members because it involves increased social interaction and intimacy. Compared to full-time active duty personnel, National Guard soldiers may have more opportunities for civilian relationships because they generally spend more time engaged in civilian activities, are often older, and maintain more developed roles within occupational and familial relationships (28, 29). Decreased posttraumatic stress symptoms and enhanced quality of relationships have been reported in returning veterans who have disclosed their experiences of combat trauma to an intimate partner (30). In a CBT couples therapy for PTSD, being able to discuss feelings and memories about trauma with an accepting and non-critical partner helped alleviate numbing and avoidance symptoms common in PTSD (31). However, an early study by Southwick, et al. (32), found that discussing war experiences with family and friends had no effect on PTSD symptoms for National Guard Members two years after deployment, although their study did not directly examine the effects of civilian social support. Additional studies are needed to further examine the relationship between support from civilian social interactions and coping skills for PTSD symptoms in National Guard Members. Studies of OEF/OIF veterans have shown that civilian support is negatively associated with PTSD symptom severity, depression, suicidal tendencies, and psychosocial difficulties in both Active Duty and Reserve troops (12, 23). Martin, et al. (33) found that as time progressed following return from a final deployment for National Guard members, a lack of perceived civilian social support contributed to continued risk of suicidal tendencies. Continued suicidal risk was not observed in veterans reporting high civilian social support. Griffith (34) drew similar conclusions regarding the benefit of post-deployment support in minimizing suicidal ideations amongst military personnel. These findings collectively illustrate more potential beneficial effects of civilian social support following traumatic events. Civilian social support may also be one of the key factors that leads to the utilization of mental health services by National Guard and Active Duty members suffering from PTSD symptoms. Individuals with high levels of social support and encouragement are more likely to seek out mental health treatment and remain retained in care (14, 16, 35, 36). For soldiers with PTSD, receiving acceptance and understanding of their mental condition from significant people in their lives increases their sense of safety and reduces their sense of stigma associated with having PTSD (16, 37). These factors help encourage soldiers to actively seek and maintain professional help to manage their PTSD. Specific therapies, informed by such social support research findings, have been found effective in lessening PTSD symptoms after several kinds of trauma. Disorder-specific couples therapy has been shown to mitigate symptoms in relationships where one partner is diagnosed with PTSD (31). Similarly, structured approach therapy incorporates "trauma education, empathic communication and emotion-regulation skills training, and disclosure-based conjoint exposure sessions" (38, 39) and can also be used with couples who are affected by post-combat PTSD to yield greater reductions in symptoms (39). Preserving bonds between family members and friends (40) and enhancing interpersonal skills of soldiers post-deployment may also prevent the loss of social support due to PTSD (41). Further research assessing availability, access to, and the effectiveness of these therapies in National Guard members is needed.

## Potential mechanisms mediating influences of civilian social support on PTSD symptoms in National Guard members

The findings above suggest beneficial effects of civilian social support on PTSD symptoms of National Guard members. This is consistent with the findings in other active duty military personnel. Researchers have proposed several possible mechanisms by which social support may be beneficial for patients with PTSD following various kinds of trauma. Firstly, the stress-buffering model and main effect model have been proposed to explain the direct benefits of social support. According to the stress-buffering model, increased social support reduces adverse effects of stress exposure, while social isolation leads to increased susceptibility to the symptoms of stress (40, 42). On the other hand, the main effect model states that social interactions are beneficial with or without stress; studies on this model have shown inconclusive results. Some researchers consider the stress-buffering model may explain why PTSD symptoms decrease after years have passed in soldiers with high social support (9). Others suggest that the main effect of social support is only relevant if it occurs close to the time of the trauma (43). The stress-buffering model is relevant for stressors during and immediately after deployment, while the main effect model may be applicable to daily life events. However, there has been no study that has tested these theoretical models of civilian social support in National Guard members. Secondly, the social-cognitive processing model suggests that a person's social environment can encourage or inhibit the individual from discussing traumatic events that led to the onset of PTSD (44). Positive support encourages discussion of the trauma, while negative support or lack of support encourages avoidance (37, 44). As avoidance and withdrawal are key diagnostic features of PTSD, discussing trauma and therefore preventing avoidance behaviors may be a beneficial coping mechanism for a person suffering from the disorder. For example, talking to others about problems has been found to reduce the intrusive thoughts that act to maintain chronic maladaptive responses to the stressful event (45). However, a previous cross-sectional study in a relatively small sample of National Guard members did not find a significant relationship between talking to family/friends and PTSD symptoms (32). Therefore, whether the social-cognitive processing model best accounts for the beneficial effects of civilian support in National Guard members is still inconclusive. Finally, Maercker and Horn (46) propose a socio-interpersonal model of social support and PTSD that analyzes the impact of social relationships on PTSD symptoms. This model takes a broader approach to analyzing the factors associated with PTSD symptom development and alleviation. The socio-interpersonal model includes three layers: 1) social affective states including shame, guilt, or anger; 2) close relationships comprising family and friends; and 3) cultural/societal influences, which include cultural values and the social recognition of survivors and victims. At the level of close relationships, empirical evidence corroborating this model suggests that PTSD symptom severity is associated with disclosure approaches of both patient and significant others (47). For example, the patients with difficulty in disclosure may report more PTSD symptoms if their significant others also have dysfunctional disclosure. Therefore, the sociointerpersonal model suggests a crucial role of family and friends in fostering healing through verbal exchanges. In summary, the theoretical models mentioned above suggest some possible explanations for the beneficial effects of social support on PTSD symptoms in PTSD patients after various trauma. Further studies examining these potential mechanisms in civilian support for National Guard members are clearly needed.

## Conclusion.

Although the beneficial effects of social support on military personnel suffering from PTSD symptoms are well documented, there

is a limited understanding of civilian relationships and PTSD symptoms in National Guard members who have been deployed in recent wars. Civilian social support could be particularly important for National Guard members, as they have to adjust to military and civilian

experiences more frequently than other active duty soldiers. Studies that fill in these gaps in current knowledge may provide a basis for support efforts to enhance civilian relationships of National Guard members and improve soldiers' mental health after deployment.

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