

Canadian Institutes of Health Research Instituts de recherche en santé du Canada

Submitted by CIHR Déposé par les IRSC

Psychol Trauma. Author manuscript; available in PMC 2014 June 25.

#### Published in final edited form as:

Psychol Trauma. 2014 September 01; 6(5): 519–526. doi:10.1037/a0033193.

# Overt Social Support Behaviors: Associations With PTSD, Concurrent Depressive Symptoms and Gender

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# Abstract

Women are twice as likely as men to develop a posttraumatic stress disorder (PTSD). Gender differences in social support after a traumatic event might partially explain this disparity. However, the portrait of the links among PTSD, depression, social support, and gender is still unclear. This study examined behaviors of individuals with PTSD and their significant other in relation to PTSD and concurrent depressive symptoms, and tested gender as a moderator of these associations. Observed overt supportive and countersupportive behaviors of 68 dyads composed of an individual with PTSD and a significant other in a trauma-oriented discussion were coded with a support coding system and analyzed according to gender. Gender was revealed to act as a moderator of the links between interactional behaviors of individuals with PTSD and their concurrent depressive symptoms. More specifically, women were less implicated and less likely to propose positive solutions compared with men. On the other hand, men were more implicated and less likely to criticize their significant other than were women. PTSD and concurrent depressive symptoms were related to poorer interpersonal communication in women. Hence, women and men with PTSD and concurrent depressive symptoms might benefit from gender-tailored interventions targeting symptoms and dyadic behaviors.

## Keywords

posttraumatic stress disorder; gender; social support; depression; direct observation

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Women are twice as likely as men to develop a posttraumatic stress disorder (PTSD; Van Ameringen, Mancini, Patterson, & Boyle, 2008). However, the reasons underlying this disparity remain unclear. Women's higher risk cannot be attributed to higher rates of exposure to traumatic events or to more frequent sexual assaults. In fact, women's higher risk for PTSD remains even when the type of trauma is controlled for (Gavranidou & Rosner, 2003; Tolin & Foa, 2006). Andrews, Brewin, and Rose (2003) were the first to propose that women's higher risk for PTSD might involve gender differences in social support after a traumatic event.

# Gender Differences in Social Support

Two meta-analyses showed that social support was among the three strongest predictors of PTSD (r= .28 and.40; Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2008). Theoretical models also sustain the influence of social support in the development and maintenance of PTSD. For example, talking about the traumatic event to a supportive other can promote the habituation process and help recovery (Brewin, Dalgleish, & Joseph, 1996).

Furthermore, up to 50% of women and men with PTSD present a secondary major depressive disorder (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). Depressive symptoms often negatively affect individuals' social network and cause interpersonal conflicts. They are associated with negative feedback and excessive reassurance seeking, negative attributions, ruminations, and poor social skills (Joiner Jr., 2001). A prospective study found that negative social interactions after a traumatic event were associated with PTSD and concurrent depressive symptoms in a civilian trauma sample (Zoellner, Foa, & Brigidi, 1999). More precisely, a subsequent study showed that concurrent depressive symptoms play a larger role in the interpersonal strain after a traumatic event than do PTSD symptoms (Beck, Grant, Clapp, & Palyo, 2009).

Studies on gender differences in social support are numerous, but results remain inconsistent. In general, studies show that women perceive and benefit more from social support, which is strongly related to their well-being, compared with men. However, their important social implication elicits more opportunities for negative social interactions, leading to higher distress (Kessler & McLeod, 1984; St-Jean-Trudel, Guay, & Marchand, 2009; Turner, 1994). Very little is specifically known about gender differences in social support within clinical trauma samples (Guay, Billette, & Marchand, 2006). Andrews and colleagues (2003) have examined the relations among social support, gender, and PTSD symptoms in 118 men and 39 women victims of violent crime, 1 and 6 months postcrime. They found that women reported more negative social interactions (e.g., criticism) from relatives and friends. They also found that negative social interactions mediated the relation between gender and PTSD symptoms. In addition, gender moderated the relation between social support and PTSD symptoms. The negative interactions and support satisfaction had a stronger effect on PTSD symptoms in women compared with men. Nevertheless, a single item was used to measure negative social interactions, and concurrent depressive symptoms were not examined. The use of self-report did not reveal information on interactional exchanges between individuals with PTSD and significant others, therefore limiting our

understanding of the associations between PTSD and concurrent depressive symptoms, gender, and social support.

# The Assessment of Social Support

To date, the assessment of social support in individuals with PTSD has been limited by the exclusive reliance on self-report methods. Despite the good psychometric proprieties of questionnaires, they only assess the individuals' perception, which may be influenced by their personality, symptoms, cognitions, and affects (Guay et al., 2006; Lakey & Cassady, 1990; Pasch, Bradbury, & Davila, 1997). A meta-analysis found moderate correlations ( $\bar{r}$  = . 35) between perceived and received social support (Haber, Cohen, Lucas, & Baltes, 2007), underlining the fact that they are two partially different concepts. There are only a few social support observational systems that exist, and they are rarely used. Furthermore, results of previous observational studies cannot be generalized to PTSD samples given the absence of nonverbal behavior cues, limited sample size, diversity of the topic chosen for discussion, and the use of nonclinical samples and married couples only (Cutrona & Suhr, 1992, 1994; Pasch & Bradbury, 1998; Pasch et al., 1997). Only one observational study has examined overt social support behaviors in 20 individuals with PTSD and their spouse (Lehoux, Guay, Chartrand, & Julien, 2007). They found that individuals with PTSD described their difficulties and expressed their emotions to a greater extent than their spouse. However, spouses were not more likely to validate and propose solutions, as expected. Again, the effect of concurrent depressive symptoms was not examined, therefore limiting the extent of the results. Preliminary results on the observational system showed good psychometric properties.

Overall, little is known about the relationship among gender, overt social support behaviors and PTSD, and concurrent depressive symptoms. No study has examined overt supportive and countersupportive behaviors between an individual with PTSD and a significant other in a PTSD-oriented discussion. This assessment would allow for a better understanding of the links between overt interactional behaviors of women and men with PTSD and their significant other (Guay et al., 2006).

# The Current Study

The present study aimed to explore and assess the links among overt supportive and countersupportive interactional behaviors, gender, PTSD symptoms, and concurrent depressive symptoms. To do so, we defined three operational objectives. The first objective was to explore the differences between individuals with PTSD and their significant others in regard to the types of behaviors during a PTSD-oriented discussion. Significant differences between the types of behaviors emitted by individuals with PTSD and their significant others were expected. The second objective was to examine the relation between interactional behaviors (i.e., of individuals with PTSD and their significant positive correlations between countersupportive behaviors (i.e., of individuals with PTSD and their significant positive correlations between countersupportive behaviors (i.e., of individuals with PTSD and concurrent depressive symptoms of individuals with a PTSD) and their significant others) and symptoms (i.e., PTSD and concurrent depressive symptoms of individuals with PTSD and concurrent depressive symptoms (i.e., PTSD and concurrent depressive symptoms of individuals with a PTSD) of individuals with PTSD and concurrent depressive symptoms of individuals with a PTSD and concurrent depressive symptoms (i.e., PTSD and concurrent depressive symptoms of individuals with a PTSD) were predicted, as well as negative correlations between

supportive behaviors and symptoms. The third objective was to test if gender moderates the relation between interactional behaviors and PTSD symptoms as well as concurrent depressive symptoms. We also aimed to identify for which interactional behavior gender would be a significant moderator in relation with the symptoms.

# Method

# **Participants**

Participants were recruited at the Trauma Study Center located in Montreal through advertisement and references from hospitals. The inclusion criteria for participants were the following: (a) being aged between 18 and 65 years old, (b) having a primary diagnosis of chronic PTSD, (c) having concurrent depressive symptoms, and (d) having a significant other who agreed to participate. Exclusion criteria included (a) a trauma committed by the significant other; (b) a history of domestic violence by the significant other; (c) the presence of a substance use disorder; and (d) a past or present psychotic episode, a bipolar disorder, or an organic mental disorder.

The study was part of a larger project that aimed to assess the effect of social support in treatment for PTSD with the same participants. Participants' spouses or significant others were required to take part in the study, which was approved by Institut universitaire en santé mentale de Montréal's Ethics Board Committee. Participants were evaluated through a semistructured clinical interview assessing psychiatric disorders. Clinical interviews were conducted by research assistants who had received extensive training. Self-report questionnaires were also completed. Dyads were then invited to take part in a videotaped discussion with their significant other (e.g., their spouse, a family member, or a close friend). Dyads were invited to start discussing a neutral topic for 10 minutes. They were then encouraged to discuss the effect of PTSD on their life and to support each other for 15 minutes.

In total, 48 women and 20 men with PTSD met the criteria and participated in this study. Significant others included 43 spouses, 14 friends, and 11 family members. They had an average age of 40 years (SD = 13.24). Fifty percent of the sample was in a relationship, 32% were single, and 18% were divorced or separated. Ninety-three percent spoke French as their primary language. Regarding their occupational status, 50% were unemployed, 38% were working, and 12% were students. As a whole, the sample had been exposed to traumatic experiences such as physical aggression (46%), car accident (20%), witness of an event (13%), sexual assault (6%), or others (15%). Only a small proportion of significant others reported a moderate level of distress compared with the general population (Chartier-Otis, Guay, & Marchand, 2009).

#### Measures

The Social Support Interaction Global Coding System (SICS-PTSD; Pizzamiglio, Julien, Parent, & Chartrand, 2001) is a validated behavioral observation system adapted for a dyad formed by an individual with PTSD and a significant other. Participants were filmed for a total of 40 minutes. First, they were invited to discuss a neutral topic for 10 minutes to

Crevier et al.

familiarize themselves with the settings. The second part of the discussion was divided into two 15-minute segments. Individuals with PTSD were encouraged to exchange with their significant other according to the following instruction: "Discuss the impact of PTSD on you and your significant other, what you are doing to support each other, and how you see your future." First, individuals with PTSD were instructed to explain the problem when the significant others offered support the way they normally would. Second, roles were reversed.

The 10 interactional behaviors (i.e., verbal and non verbal) of individuals with PTSD and significant other were grouped under six positive individual dimensions: (a) problem description (i.e., details of the event and consequences), (b) validation (e.g., "I understand that it is difficult"), (c) listening (i.e., visual contact and nods), (d) expression of emotions (e.g., "I feel sad"), (e) positive solution proposals (e.g., "Maybe you could try to go out"), and (f) behavioral implication (i.e., express oneself, voice intonation, active gestures, and facial expressions). There were also four negative individual dimensions: (a) dysphoria (i.e., crying), (b) withdrawal (i.e., looking away), (c) negative solution proposals (e.g., "You should stay home"), and (d) countervalidation (e.g., "You should stop complaining").

Trained raters assessed participants on each dimension using the video-recorded interactions. Raters used a 9-point scale from 1 (*very low*) to 9 (*very high*) according to the frequency and the intensity of behaviors. The two 15-minute interaction segments were divided into three blocks of 5 minutes and a score was given for each dimension on each block. The total score of each dimension was calculated as the mean of the three scores obtained on each block. The scores for the two discussions were combined (i.e., scores ranging from 2 to 18) to increase the variability and to reflect daily discussions in which helper and helped roles are interchangeable. Interrater reliability (i.e., intraclass correlations), completed for 30% of the sample, was adequate (r = .78, SD = .14).

The Structured Clinical Interview for *DSM–IV* Axis I Disorders (SCID-I; First, Spitzer, Gibbon, & Williams, 1996) was used to assess the diagnosis of PTSD and comorbid disorders with regards to criteria of eligibility. This semistructured interview shows a good convergent validity with clinician's judgment ( $\kappa = .69$ ) as well as an interrater's reliability ranging from .77 to .92 (Summer-feldt & Antony, 2002).

The Modified PTSD Symptom Scale–Self-Report (MPSS-SR; Falsetti, Resnick, Resick, & Kilpatrick, 1993) assesses the intensity (i.e., 5-point Likert scale) and frequency (i.e., 4-point Likert scale) of the 17 symptoms included in the three clusters of PTSD according to the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; *DSM–IV*): reexperiencing, avoidance and numbing, and hyperarousal. The Canadian version of the scale demonstrated a good internal consistency for the global scale ( $\alpha = .97$ ), frequency ( $\alpha = .95$ ), and intensity ( $\alpha = .95$ ) in a clinical sample (Guay, Marchand, Iucci, & Martin, 2002). Moreover, the scale showed a good temporal stability on a 5-week interval (r = .72 for the total score).

The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) is a 21 item questionnaire measuring the presence and intensity of concurrent depressive symptoms in the last 2 weeks. For each item, the participant chooses one of the four statements that most adequately reflect their state. The scale has been extensively validated and shows an

excellent internal consistency ( $\alpha = .92$ ) and a good temporal stability (1 week; r = .93; Beck et al., 1996; Dozois, Dobson, & Ahnberg, 1998).

#### **Data Analyses**

Correlation analyses and *t* tests were performed to examine the relation between interactional behaviors of individuals with PTSD and significant others. Further correlation analyses were also completed to examine the associations between interactional behaviors and symptoms. The relations among gender, interactional behaviors, and symptoms were examined with Student's *t* tests,  $\chi^2$  tests, and correlation analyses depending on the nature of the variables. Finally, to test gender as a moderator of the association between interactions were performed. According to the variance equivalence in women and men groups, a test of difference between two correlations for each interactional behavior was chosen to test gender as a moderator (Baron & Kenny, 1986; Guilford, 1965). Moreover, results could be represented clearly in a table. The significance level of .05 was used. There were no outliers (i.e., >3 *SD* above the mean). Some variables were log-transformed because of their skewness (i.e., positive solution proposals) and dichotomized (i.e., dysphoria and negative solution proposals). Transformed variables were used for parametric analyses.

# Results

#### Interactional Behaviors of Individuals With PTSD and Significant Others

Table 1 presents means and standard deviations for the 10 interactional behaviors of individuals with PTSD and significant others, respectively, as well as results for t tests. Paired sample t tests showed that individuals with PTSD described their difficulties, expressed their emotions, showed dysphoric affects, and withdrew to a greater extent compared with significant others. On the other hand, significant others were more likely to listen, validate, countervalidate, and propose solutions and were more behaviorally implicated compared with individuals with PTSD.

#### Interactional Behaviors and the Type of Symptoms

Correlation analyses revealed that behaviors of significant others were not significantly related to the traumatized individuals' symptoms (i.e., PTSD and concurrent depressive symptoms). However, interactional behaviors of traumatized individuals were significantly associated with their PTSD symptoms. Specifically, less positive solution proposals (r = -. 28, p = .02) and less validation (r = -.30, p = .01) were associated with more severe PTSD symptoms. Moreover, less positive solution proposals were associated with more depressive symptoms among traumatized individuals (r = -.27, p = .03).

#### Gender as a Moderator of the Relation Between Social Support and Symptoms

Table 2 shows means and percentages for sociodemographic variables, nature of the trauma, and symptoms, respectively, for women and men with PTSD and test value. Pearson  $\chi^2$  analyses and *t* tests were used for gender comparisons depending on the nature of the variables. Cromer and Smyth (2010) proposed to reduce the traumas in two categories, interpersonal (i.e., physical or sexual assault and life threat) and accidental (i.e., car,

Crevier et al.

workplace or health accident, or being witness of an event), to perform comparisons. The same procedure was completed, and no gender differences emerged in terms of frequency. Analysis of variance for gender by type of trauma revealed no interaction effects in regards to PTSD symptoms. Women and men did not significantly differ on any other variables. Because of the absence of gender differences, none of the sociodemographic variables were considered as covariates in the gender comparisons.

Subsequent analyses were performed only with interactional behaviors of individuals with PTSD because they were correlated with their symptoms. As a first step, gender comparisons were completed to compare interactional behaviors of women and men with PTSD. Results showed that women were more likely to be behaviorally implicated, t = 2.76, p < .01, to describe their difficulties, t = 2.17, p = .03, and to express their emotions, t = 2.17, p = .03, and to express their emotions, t = 2.17, p = .03, and the express the emotion of the emotio 2.23, p = .03, compared with men. As for men, they withdrew significantly more during the discussion, t = -2.49, p = .02, than women. The effect sizes were moderate (i.e., between .07 and .10). Subsequently, gender as a moderator of the relation between interactional behaviors of individuals with PTSD and their symptoms (i.e., PTSD and concurrent depressive symptoms) was tested. Correlations by gender between the 10 interactional behaviors and symptoms and the test of difference between two correlations are reported in Table 3. For women, correlation analyses showed that greater PTSD symptoms were associated with less validation, less behavioral implication, and less positive solution proposals. For men, PTSD symptoms were related to less countervalidation. However, the test of difference between two correlations revealed no significant gender differences despite the correlations suggesting two patterns of results. Second, correlations between interactional behaviors of individuals with PTSD and their concurrent depressive symptoms were explored according to gender. For women, more depressive symptoms were related to less behavioral implication, less positive solution proposals, and less description of their difficulties. For men, higher depressive symptoms were associated with lower countervalidation and more behavioral implication. The test of difference between two correlations showed that gender moderated the relation between interactional behaviors and concurrent depressive symptoms. Women with PTSD and concurrent depressive symptoms were less behaviorally implicated (r = .74) and proposed positive solutions to a lesser extent (r = .63) than men. Conversely, men with PTSD and concurrent depressive symptoms were more behaviorally implicated (r = .74) and they countervalidated their significant other less (r = .52) than women did. Differences of correlation were large.

# Discussion

To our knowledge, this is the first study to examine the links among gender, overt interactional behaviors, and symptoms (i.e., PTSD and depressive symptoms).

#### **Overt Interactional Behaviors of Individuals With PTSD and Significant Others**

As expected, we found differences between overt social support behaviors of individuals with PTSD and significant others. Individuals with PTSD were more likely to describe their difficulties and express their emotions. This result is in line with the observational study of Lehoux and her colleagues (2007). However, contrary to this previous study, our findings

indicated that significant others had more listening skills, validation and countervalidation responses, and proposed solutions more often. At first sight, these differences might reflect the nature and instructions of the task, which entails discussing the effect of PTSD. Even if the roles were reversed (i.e., helped and helper), PTSD remained the main concern. Thus, individuals with PTSD show a natural tendency to speak about their PTSD and related issues. They were more likely to describe their situation whereas their significant others were more prone to support them.

#### Interactional Behaviors and the Type of Symptoms

The second hypothesis predicting a significant relation between interactional behaviors and symptoms was partially supported. Findings revealed that the way significant others interact and offer support during the discussion was not related to symptoms of individuals with PTSD. This unexpected result contrasts with previous meta-analyses showing a relation between social support and PTSD symptoms (Brewin et al., 2000; Ozer et al., 2008). However, these associations were found with self-report measures of social support (Pasch et al., 1997). Empirical studies found different associations between received and perceived social support and adjustment after a stressful event (Norris & Kaniasty, 1996; Wethington & Kessler, 1986). These results are in line with two conceptions of perceived and received social support. Individuals with PTSD might compensate for a lack of support from the significant other by soliciting support from relatives or friends. Nevertheless, the findings presented here indicated a negative association between the way individuals with PTSD express their difficulties and interact with significant others and their symptoms. More PTSD symptoms were associated with less validation and less positive solution proposals. More depressive symptoms were related to less positive solution proposals. Thus, for individuals with PTSD, the intensity of symptoms was related to a poorer interpersonal communication when they talked about their difficulties. This result is consistent with studies reporting interpersonal difficulties in a civilian sample of individuals with PTSD (Byrne & Riggs, 2002).

# Gender as a Moderator of the Relation Between Social Support and Symptoms

First, the absence of gender differences regarding individuals' symptomatic presentation seems to corroborate with Gaslovski, Mott, Young-Xu, and Resick (2011) findings. Gender comparisons of interactional behaviors of individuals with PTSD reflected a popular conception in which women are actively implicated in discussing their difficulties whereas men are trying to avoid the subject to some extent. This finding is consistent with a meta-analysis supporting that women self-disclose more than men when they are talking with a significant other on the basis of observational measures (Dindia & Allen, 1992). Correlation analyses showed that higher PTSD symptoms in women were associated with less validation, less behavioral implication, and less positive solution proposals. Higher depressive symptoms were related to less behavioral implication, less positive solution proposals, and less description of their difficulties. An unexpected finding emerged for men: PTSD symptoms were related to less counter-validation. Depressive symptoms were associated with less countervalidation and more behavioral implication. Overall, the links between interactional behaviors and symptoms were the opposite for women compared with men. Thus, PTSD and depressive symptoms are associated with poorer communication in

Crevier et al.

women and better communication in men. The third hypothesis concerning gender as a moderator of the link between interactional behaviors and symptoms was supported, although only for depressive symptoms. Women with PTSD and concurrent depressive symptoms were less implicated and proposed positive solutions to a lesser extent than men. In contrast, men with PTSD and concurrent depressive symptoms were more implicated and countervalidated to a lesser extent. Several explanations could clarify these interesting gender differences.

For example, a study showed that depressive symptoms have a more detrimental effect on relationship functioning than PTSD symptoms. Depressive symptoms and emotional numbing had a negative effect on the perception of social support (Beck et al., 2009). Observational studies of individuals with depressive symptoms found that depressed women were providing, soliciting, and receiving support from their husband in a negative manner. However, husbands' depressive symptoms were not related to the way they expressed their difficulties (Cutrona & Suhr, 1994; Pasch et al., 1997). These results suggest that women's interpersonal communication may be more affected by depressive symptoms compared with men. Another observational study examined responses of students when someone disclosed a personal problem. Women talked more about emotions and instrumental actions. Men devoted a greater proportion to talk about the problem and a larger proportion of their problem talk involved denying the problem (Goldsmith & Dun, 1997). It is possible to hypothesize that the denial of problems or symptoms may temporarily help them to communicate more efficiently.

Recently, a study concluded that it is not the exposure to negative events itself that predicts symptoms; on the other hand, it is how individuals make sense of these experiences (Cromer & Smyth, 2010). Gender differences in cognitive style in response to trauma may be an interesting hypothesis to explain women's poorer communication. Rumination is the tendency to focus on symptoms, causes, and consequences in a repetitive and passive manner (Nolen-Hoeksema, 1987). Rumination in individuals with PTSD and/or depressive symptoms aggravates feelings of anger, guilt, and helplessness (Birrer & Michael, 2011); creates interpersonal frictions and discomfort to talk about the trauma (Nolen-Hoeksema & Davis, 1999); and impairs problem-solving abilities (Watkins & Baracaia, 2002). Women tend to ruminate more in response to depressed mood (Nolen-Hoeksema, Morrow, & Fredrickson, 1993). They endorse more self-blame and a greater belief of incompetency and thinking that the world is dangerous after a traumatic event compared with men (Tolin & Foa, 2002). Rumination in women with PTSD and concurrent depressive symptoms may explain why they are less implicated and propose fewer solutions compared with men. Nevertheless, more research in clinical samples with standardized measures would be informative.

#### Strengths, Limitations, and Implications

It should be noted that our moderate sample size was associated with limited statistical power and no control for a. Also, a general regression model was not possible. Therefore, findings need to be interpreted with caution and not overly generalized. However, significant effect sizes were found. The innovative use of an observational measure within a clinical

sample required time and financial investment (e.g., recruitment, diagnosis interview, training and codification). Thus, a sample of 68 participants is practically enough to draw informative conclusions. Future studies could benefit from replicating this study with a larger sample size and comparable groups of women and men. Second, our cross-sectional design did not allow inferences of causality between interactional behaviors and symptoms. A longitudinal design would help clarify the temporal portrait of the associations at study. Third, our laboratory settings and the volunteer participation limited the external validity. Fourth, the study did not use measures of gender. Future studies would benefit from the inclusion of specific measures of gender, such as the Bem Sex Role (Bem, 1974) and the Gender Role Socialization Scale (Toner et al., 2012). Finally, other factors could be explored to explain gender differences in PTSD, such as past traumas. In general, women are indeed more vulnerable to sexual abuse and revictimization (Tolin & Foa, 2006).

Specifically, our findings showed that gender is a significant moderator of the associations between interactional behaviors of individuals with PTSD and concurrent depressive symptoms. Women present poorer interpersonal communication compared with men, which can lead to several clinical implications. In effect, this may negatively affect their social network and limit their access to social support when they are vulnerable and in need of help. Thus, gender-tailored interventions would be relevant in improving communication of individuals with PTSD and concurrent depressive symptoms, specifically in women. It could be interesting to include a significant other in some therapy sessions to promote psychoeducation on PTSD, communication, and supportive behaviors. Overall, these results support the relevance of studying gender in clinical psychology. For this purpose, clear definitions of sex and gender are essential (Johnson, Greaves, & Repta, 2009). Sex refers to a multidimensional biological construct including anatomy, physiology, genes, and hormones existing on a continuum. On the other hand, gender is culturally understanding of socially prescribed and experienced dimensions of femaleness and maleness in a society, such as age, race, class, or sexual orientation. Gender includes gender roles, gender relation, gender identity, and institutionalized gender. The use of specific instruments and guidelines to incorporate sex- and gender-based analysis would improve health research (Oliffe & Greaves, 2012).

## Acknowledgments

This research was supported by the Fonds de la Recherche en Santé au Québec.

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Means and SD for the 10 Interactional Behaviors of Individuals With PTSD and Significant Others and t Test

	Individuals with P	$TSD \ (n = 68)$	Significant othe	ers (n = 68)	<u>Mean comparison</u>
Interactional behaviors	Μ	SD	Μ	SD	t
Problem description	11.53	2.97	10.10	2.33	3.27 **
Expression of emotions	5.78	2.04	4.18	1.32	5.95 **
Listening	9.57	2.96	10.35	2.95	-2.13 *
Validation	5.50	2.54	6.78	3.02	-4.38
Positive solutions proposal	3.90	1.97	5.19	2.40	-4.83
Negative solutions proposal	2.69	1.33	3.76	2.64	-4.07 **
Dysphoria	5.42	3.31	2.38	1.15	11.45
Countervalidation	5.87	3.20	6.85	4.00	-2.82
Withdrawal	8.54	3.34	7.31	2.68	2.93 **
Behavioral implication	10.13	3.30	10.96	2.54	-2.14 *

\* *p*<.05.

\*\* p < .01 (all two-tailed).

#### Table 2

Gender Comparisons of Sociodemographic Nature of the Trauma and Type of Symptoms

Variables	Women ( <i>n</i> = 48)	Men ( <i>n</i> = 20)	Test value
Age	37.98 (13.15)	44,00 (12.80)	t(66) = -1.73
Married/cohabiting	47%	60%	$\chi^2(1) = 1.13$
Employed	36%	45%	$\chi^2(1) = 2.76$
Interpersonal traumatic event	33%	21%	$\chi^2(1) = 2.76$
Accidental traumatic event	37%	9%	$\chi^2(1) = 0.46$
PTSD symptom severity	77.04 (22.58)	74.75 (23.95)	t(66) = 0.38
Depressive symptom severity	29.17 (13.66)	26.05 (12.09)	t(66) = 0.89

Note. SD for means appears in parentheses.

# Table 3

Correlations by Gender Among the 10 Interactional Behaviors, PTSD Symptoms, and Depressive Symptoms and the Test of Difference Between Two Correlations

		Psy	chologic	al sympton	SI	
	ISLd	<b>D</b> symptor	su	Depres	sive symp	toms
Interactional Behaviors	Women	Men	Z	Women	Men	Z
Problem description	-0.23	-0.01	0.79	$-0.30^{*}$	0.19	1.76
Expression of emotions	-0.24	-0.13	0.40	-0.10	0.13	0.81
Listening	-0.24	0.19	1.54	-0.06	0.26	1.15
Validation	$-0.36^{*}$	-0.15	0.79	-0.21	0.19	1.42
Positive solutions proposal	-0.42	0.08	1.85	-0.42	0.21	$2.32^{*}$
Negative solutions proposal	-0.05	0.01	0.21	-0.04	0.03	0.25
Dysphoria	-0.23	0.02	0.89	-0.15	0.04	0.67
Countervalidation	-0.10	-0.46	-1.39	0.03	-0.49	$-1.99^{*}$
Withdrawal	0.13	-0.14	-0.95	0.14	-0.26	-1.43
Behavioral implication	$-0.29^{*}$	0.20	1.76	$-0.30^{*}$	$0.44^{*}$	2.75*
Note. Variables transformed fo	r the correla	tions and t	he test of	difference o	of correlat	ions.
p < .05.						
**						

Psychol Trauma. Author manuscript; available in PMC 2014 June 25.

p < .01 (all two-tailed).