

Sex Differences in Symptomatology from Continuous Missile Exposure

Avital Laufer, PhD,¹ Yafit Levin, PhD,² Marc Gelkopf, PhD,⁴ Laura Crompton, MSW,^{2,3} and Zehava Solomon, PhD^{2,3}

¹ Department of Behavioral Science, Netanya Academic College, Netanya, Israel

² Bob Shapell Social Work School, Tel Aviv University, Tel Aviv, Israel

³ I-CORE Research Center for Mass Trauma, Tel Aviv University, Tel Aviv, Israel

⁴ Department of Community Mental Health, University of Haifa, and NATAL, and Israel Trauma Center for Victims of Terror and War, Tel Aviv, Israel

ABSTRACT

Introduction: The study assessed sex differences in symptomatology resulting from continuous traumatic stress (CTS). In CTS the trauma is ongoing and seemingly endless.

Method: The sample comprised 384 Israelis (41% males and 59% females) who were exposed to nine years of rocket attacks. Measures: Objective exposure (personal exposure, near miss, loss of close other); Subjective exposure (sense of helplessness, loss of bodily control); Posttraumatic stress checklist; BSI-18 (examining anxiety, depression, and somatization).

Results: Sex differences were found in subjective but not in objective exposure. Three profiles were found: "Resilient with some somatization," "Symptomatically moderate" and "Symptomatically high."

Higher percentages of women were found in the more symptomatic profiles. Comparisons indicated that women who were classified as resilient had more symptoms than resilient men, and that symptomatic women had elevated symptoms compared to symptomatic men.

Conclusions: Study findings indicate that women pay a heavier price for their CTS exposure.

(1, 2). This finding has resulted in the notion that women are more psychologically vulnerable to traumatic stress than are men. Several explanations have been suggested to account for this finding, including physiological differences (3), differences in cognitive appraisal and coping (4), socialization and social factors (5), exposure to different types of trauma (6), associated risk factors (7), and acknowledgment of symptoms (8). Whatever the reason may be, women have been found to endorse more posttraumatic stress symptoms and to be twice as likely as men to report PTSD in their lifetimes (1).

The psychiatric reaction to trauma is not limited to PTSD and often includes other co-morbid psychiatric symptoms such as depression, anxiety, and somatization (9, 10). Recently, studies have suggested that it would be better to examine psychopathological variables, including co-morbidities, as a whole, rather than assessing different distress disorders separately (11-14). This is an especially important point when considering sex differences in manifestations of psychopathology. It appears that women are more likely than men to express co-morbid symptoms of PTSD and other mental health disorders (16), specifically depression and anxiety. Women are also more likely than men to present partial symptomatology of PTSD (17). It was for this reason that Christiansen and Elklit (18) concluded that a broader symptom analysis should be conducted in order to capture the vast scope of sex differences in response to trauma.

Most of the studies examining sex differences in response to trauma exposure have been conducted in regard to traumas that occur only once (19). Continuous Traumatic Stress (CTS), on the other hand, is a unique situation of trauma exposure in which the exposure is ongoing: That is, it started in the past, persists in the

There is overwhelming evidence to suggest that, although men have more exposure to traumatic events than women do, women are more likely to develop Post-Traumatic Stress Disorder (PTSD) following a traumatic experience

present, and has the potential of recurring in the future. The stressors involved in CTS tend to be extreme, multiple, and all-encompassing; the individual therefore has little chance of escaping or avoiding them. Continuous Traumatic Stress represents situations in which the trauma and the threat are constant and ever-present and also, unsurprisingly, generate anxious anticipation (15, 20).

CTS was a term initially coined three decades ago to address civil conflicts, in particular the apartheid policy in South Africa (20), but it has recently attracted renewed attention in the context of protracted man-made traumas such as urban violence, prolonged military conflicts, and terror (15, 21-23). In all of these situations, the ramifications of living in situations of CTS may be far more complex and enduring than is currently understood, and may potentially lead to psychological outcomes other than PTSD (23-25).

There are indications to suggest that women may be more vulnerable than men to continuous stress (26). It was found during the Al-Aqsa Intifada, when the civilian Israeli population was under numerous deadly terror attacks, that women suffered from elevated posttraumatic and depressive symptoms, although their level of exposure was lower than that of men (19); similar findings were detected among Israeli girls as compared to Israeli boys (27). However, the role of sex differences in CTS needs further investigation.

In recent years, the lives of Israel's inhabitants along the southern border have been threatened by massive rocket attacks, increasing from a rate of four rockets (killing one person) in 2001, to a peak of 3,716 rocket and mortar attacks (killing 15 and wounding 611) in 2008. At the height of these attacks, the city of Sderot was bombarded on a daily basis (28). During a rocket attack, a siren is sounded, signaling to the area's Israeli residents that they have 15 seconds to take cover and find refuge. This is a perfect example of the kind of situation that engenders CTS among men and women alike. As such, an examination of sex differences will enable us to better understand the unique toll taken on men and women subjected to CTS.

The aim of the current study was to explore sex differences in manifestations of psychopathology resulting from CTS. Most studies in this area (e.g., 1, 2) have addressed the question: "Who suffers more: men or women?" The current study, however, asked a more nuanced question: "Who suffers from what?" This approach allowed us to identify profiles of psychopathology regarding who suffers from what and who suffers to a greater degree. Our assumption was that we would find differences in the symptomatology profiles of men and women subjected to

CTS. Therefore, we 1) hypothesized that men and women would differ in their responses to CTS, and 2) aimed to identify symptoms that were more prevalent among women than men, and to learn more about the symptomatology of women subjected to years of trauma exposure.

METHOD

Data for the current study were gathered from a representative sample of adults living in the southern region of Israel, an area that has been exposed to continuous missile fire for more than a decade. In the current study, only those who had lived in areas that had been exposed to rocket fire were included, namely the city of Sderot, located approximately three kilometres from the Gaza Strip, and the rural communities of the Gaza envelope that lie along the border with the Gaza Strip. Data were collected in 2010, nine years into these individuals' CTS exposure.

PROCEDURE

Participants were recruited through a major polling service using an in-region random digit dialing methodology. The telephone numbers of 3,034 households in Israel's southern region were obtained from the national telephone directory that provides regional and community-specific dialing information. Of the households contacted, 550 were reached; of that number, 384 individuals agreed to participate (69.8% response rate). Telephone interviews were carried out by experienced interviewers in either Hebrew or Russian via the use of a structured questionnaire. Three attempts were made to contact an adult at each telephone number. Participation was anonymous and oral informed consent was obtained before the interview commenced. All participants were above 18 years of age. The institutional review board (IRB) of the Lev Hasharon Mental Health Medical Center approved the study.

PARTICIPANTS

The sample comprised 384 adults (18 years of age and older). Of these, 65.9% were city residents (Sderot), and 34.1% were from rural communities (Gaza envelope); 41% were males, and 59% were females; 31.6% were single, and 68.3% were married. The average age was 45.2 (SD = 15.03). The average number of years of education was 13.15 (SD = 3.14). In these data, there were 0-0.5% missing values.

MEASURES

Demographics. Sex, age, marital status, education, and type of residence (urban/rural) were examined.

Trauma exposure to rocket fire was assessed via eight questions (29). Three types of exposure were assessed on a Guttman scale (0 = no; 1 = yes).

1. *Personal exposure*: 0 = no exposure; 1 = heard or saw a rocket fall; 2 = a rocket fell close to me; 3 = my house was hit; and 4 = I was physically wounded.
2. *Near miss*: 0 = no near miss; 1 = someone I knew was physically injured; 2 = a family member or a close relative was physically injured.
3. *Loss of close other*: 0 = no loss; 1 = an acquaintance was killed; 2 = a family member or a close relative was killed.

The types of exposure were analyzed separately, as participants could score multiple exposures of different types.

Subjective exposure was measured using the following two items: 1. Whether the participant felt a sense of helplessness that resulted from the tense security situation, and 2. Whether the participant felt a loss of bodily control during the sounding of the siren. The scale was a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*to a great extent*). Overall the subjective exposure was calculated as low (1), medium (2, 3), or high (4, 5). The scale's median was 3.5. The medians of loss of bodily control and sense of helplessness were 3.9 and 3.2, respectively.

PTSD was measured by the PTSD Checklist (PCL) (30). The PCL is a well-validated 17-item measure of intrusion, avoidance, and arousal symptoms. Participants were asked how much they had been bothered by a particular item over the past month using a 5-point Likert scale ranging from 1 (*not at all bothered*) to 5 (*extremely bothered*). Due to the prolonged and chronic nature of the stressor, individuals were asked to respond to items in relation to "the security situation" experienced during the previous month. Symptom severity was calculated by summing scores across all items of the questionnaire. The median was 2.2. The PCL has strong psychometric properties and was found to have good internal reliability in the present sample (α ranging between .82 and .90 for all posttraumatic symptom clusters).

The **Brief Symptom Inventory** (BSI-18) (31) is an 18-item questionnaire that was used to assess symptoms of anxiety, depression, and somatization. Respondents reported the degree to which they were distressed by symptoms/problems experienced over the previous month and rated them on a 5-point Likert scale from 0 (*not at all*) to 4 (*extremely*). The median was 2.8 for the overall sum of all the items. Internal reliabilities were: α = .89 for somatization, α = .88 for depression, and α = .92 for anxiety.

DATA ANALYSIS

This study employed a latent profile analysis (LPA) using Mplus version 8 (32). LPA seeks to identify underlying classifications that are related to indicators in continuous terms, a particularly fitting method when studying a heterogeneous population. The use of LPA in this study was exploratory in nature and the main purpose of its application was to examine heterogeneity in the psychological symptomology (1) among residents, overall, of southern Israel, who had been highly exposed to rockets attacks, as well as (2) to identify profiles across sex. The Mplus "knownclass" option allows multi-group LPA to be employed for this purpose. We then used t-tests to examine which symptomatology factors significantly differed between sexes. LPAs were performed across the groups of men and women, using the "knownclass" function in Mplus regarding the symptomatology factors for one to five latent classes. In this manner we were able to examine whether the profiles were predicted by sex and whether there were different profiles for men and women when sex was inserted into the model as a predictor.

It is recommended that multiple criteria be used to determine class enumeration (33). Good classification quality is established if: (1) there is a lower Akaike information criterion (AIC); (2) there is a lower Bayesian information criterion (BIC) value, with a 10-point difference in BIC values, as is required to indicate the best fitting model (34), sample-size adjusted Bayesian information criterion (ssBIC); (3) the Vuong-Lo-Mendell-Rubin likelihood ratio test (LRT) is significant (33); and (4) entropy, an estimate of classification clarity, is close to 1 (32).

We also used the most likely class membership variable, taking into account the rates of classification certainty, to detect the role of external correlates as objective exposure factors. Simulation studies have suggested that for a model with high entropy (>0.80), the covariate estimation of the most likely class membership is a viable alternative to including the covariate in the model (35). Indeed, we had very high entropy. Hence, we used posterior class assignments exported from Mplus 8 to SPSS 24 and utilized them as variables in a series of t-tests.

RESULTS

DO MEN AND WOMEN DIFFER IN OBJECTIVE AND SUBJECTIVE EXPOSURE?

In order to explore whether men and women differed in objective exposure, frequencies of objective exposure were explored and are presented in Table 1. As hypothesized,

no differences were found between men and women in any of the measures of objective exposure.

Chi-square analyses were conducted to assess differences between men and women in the distribution of the frequencies of levels of helplessness and loss of bodily control (Table 2). Women reported substantially higher levels of helplessness and loss of bodily control compared to men. Thus, men and women did not differ in their objective exposure; however, their level of subjective exposure was different, with higher subjective exposure reported by women.

SEX DIFFERENCES IN SYMPTOMATIC PROFILES

Differences between men and women in their overall symptoms of PTSD and BSI were examined. Results indicated that women had significantly higher levels of symptomatology: PTSD - $t(757)=4.152, p<.001$ ($M=12.78, SD=14.30$ for men; $M=15.90, SD=17.39$ for women); BSI - $t(757)=13.67, P<.001$ ($M=6.85, SD=11.44$ for men; $M=11.90, SD=16.10$ for women).

Table 1. The rates of objective exposure between research groups

Measure	Men N (%)	Women N (%)	
Personal exposure			
No exposure	41 (13%)	47 (10.6%)	$\chi^2(4)=6.3$ $p=.17$
Heard or saw a rocket fall	41 (13%)	65 (14.6%)	
A rocket fell close to me	90 (28.6%)	115 (25.9%)	
My house was hit	129 (41%)	179 (40.3%)	
I was physically wounded	14 (4.4%)	38 (8.6%)	
Near miss			
No near miss	129 (41%)	172 (38.7%)	$\chi^2(2)=.76$ $p=.68$
Someone I knew was physically injured	156 (49.5%)	222 (50%)	
Family member or close relative was physically injured	30 (9.5%)	50 (11.3%)	
Loss of close other			
No loss	192 (61%)	272 (61.3%)	$\chi^2(2)=.37$ $p=.83$
Acquaintance was killed	119 (37.8%)	164 (36.9%)	
Family member or close relative was killed	4 (1.3%)	8 (1.8%)	

Table 2. Sex differences in subjective exposure

Measure	Men M (SD)	Women M (SD)	
Helplessness			
High	80 (42.5%)	173 (61.9%)	$\chi^2(5)=21.9$ $P<.001$
Medium	31 (16.5%)	45 (16.1%)	
Low	77 (41%)	62 (22.1%)	
Loss of bodily control			
High	35 (18.7%)	115 (41%)	$\chi^2(5)=22.9$ $P<.001$
Medium	26 (13.8%)	36 (12.9%)	
Low	127 (67.5%)	129 (46.1%)	

To identify profiles of psychiatric symptoms among men and women, we conducted LPA models for one to five pattern groups in both men and women (Table 3). We found the 3-profile solution to be the most optimal (see Table 4 for the means and SDs of the profiles). The AIC, BIC, and adjusted BIC continued to decrease from 1 to 4 profiles solution; however, from 3 to 4 profiles solution, there was a non-significant LRT. Entropy values were high, indicating high accuracy in the 3-profile solution. The 5-profile solution had a problem of non-convergence. Profile categorization then followed Marsh et al.'s (36) recommendations for a criterion that also reflects qualitative (typological) differences between individuals. The 3-profile models were the most appropriate. In contrast, the four-pattern solution contained subgroups that were not clinically differentiated; it was therefore not taken into account. Profile categorization was done by examining average ranking for each profile.

Profile 1 showed a pattern of low means on all symptom scales (intrusion, avoidance, arousal, depression, and anxiety) except for the somatization scale, which was higher as compared to the scores of the variables (see Table 4). Therefore, consistent with trauma terminology (e.g., 9), this profile was categorized as “**resilient with somatization**” ($n = 256, 67.2\%$ of the sample). Profile 2

Table 3. Model fit indices for LPA

Number of prototypical patterns	AIC	BIC	Sample size adjusted BIC	Entropy	LRT
1	6660.9	6708.4	6670.3	N/A	N/A
2	5300.9	5376.04	5315.7	.98	.00
3	4897.8	5000.5	4918.05	.96	.01
4	4674.3	4804.6	4699.9	.96	.13

Notes. Entropy and LRT values were not available (N/A) for single pattern models; AIC = Akaike information criterion, BIC = Bayesian information criterion, LRT = Likelihood Ratio Test.

Table 4. The LPA 3-option solution

	Profile groups M (SD)			F (2,381)
	Resilient with somatization (67%)	Symptomatically Moderate (23.1%)	Symptomatically High (10.5%)	
Intrusion	.22 (.02)	1.69 (.12)	3.01 (.1)	330.2***
Avoidance	.32 (.1)	2.09 (.2)	3.83 (.2)	294.3***
Arousal	.35 (.1)	1.79 (.24)	4.18 (.3)	358.9***
Somatization	1.5 (.03)	1.68 (.06)	1.78 (.1)	357.2***
Depression	.11 (.02)	.83 (.11)	2.29 (.1)	628.8***
Anxiety	.12 (.02)	1.03 (.1)	2.36 (.1)	875.6***

* $p<.05$; ** $p<.01$; *** $p<.001$

yielded relatively medium-low depression and anxiety, medium somatization, intrusion, and arousal, with higher avoidance. All levels of all of the scales in Profile 2 were higher than the levels shown in Profile 1, and with lower PTSD symptoms, depression, and anxiety, than the levels in Profile 3. Therefore, this profile was categorized as “**symptomatically moderate**” (n = 88, 23.1%). Profile 3 showed high levels of all scales with a slight variance: In other words, high levels of somatization, depression, and anxiety, supplemented by very high intrusion and extremely high avoidance and arousal. We, therefore, categorized Profile 3 as “**symptomatically high**” (n = 40, 10.5%).

We found differences in the profile distribution among men and women ($\chi^2 = 13.5$ p < .001). In the “resilient with somatization” profile, the sex distribution was almost equal: 119 (46.4%) men and 137 (53.5%) women. In the “symptomatically moderate” profile, 28 (31.8%) were men, and 60 (68.2%) were women. In the “symptomatically high” profile, only 8 (20%) were men, and 32 (80%) were women. In other words, in the more resilient profile, the distribution was similar between sex groups. However, in the two other more somatized profiles, there was a greater frequency of women than of men.

In order to assess the role of exposure in the psychopathology profile of men and women, we used chi-square analysis to examine the distribution of sex and profile among the different levels of objective exposure. Results indicated that among men, profiles did not distribute differently between exposure levels, chi-square (8) = 10.50 p = .23. However, in the women, the test yielded a significant

result, chi-square (8) = 30.76 p < .001. Women who fell into the category of the more severe personal exposure group (*a rocket fell close to me, my house was hit, and I was physically wounded*) were classified as having more severe psychopathology profiles (“symptomatically moderate” and “symptomatically high”).

In order to identify the strongest psychological patterns that were asserted by men and women, we used the “knownclass” command. Results showed that entropy increased to 0.99, and we found that both men and women presented two profiles, with different proportions on the different scales (see Table 5).

Men and women revealed two patterns. For the men, the first was “resilient,” with relatively low means on all scales (resilient profile n = 129, 83.2%), and the second was “symptomatic,” with low-medium somatization and depression, medium anxiety, and high-very high PTSD symptoms (n = 26, 16.8%). For women, the first profile was “resilient with medium PTSD symptoms,” indicated by low levels of somatization, depression, and anxiety, with medium levels of PTSD symptoms (n = 174, 76%). The second profile of women (n = 55, 24%), “symptomatic,” included medium levels of somatization and depression, medium-high anxiety, and very high PTSD symptoms. T-tests showed that in the women’s “resilient” profile, all means were higher than the means of the men with the “resilient” pattern, indicating that even among relatively low symptomatic men and women, women suffered from higher symptoms on all of the scales. In the “symptomatic” profile, T-tests indicated that all of

Table 5. Estimates for the prototypical profiles in men and women and means and standard deviations of the scales

Sex	Profile	M (SD)						
		N (%)	Somatization	Depression	Anxiety	Intrusion	Avoidance	Arousal
Men	1	129 (83.2%)	.13 (.02)	.19 (.02)	.25 (.02)	.29 (.02)	.30 (.02)	.35 (.02)
	2	26 (16.8%)	1.37 (.06)	1.52 (.1)	2.1 (.1)	3.2 (.1)	3.41 (.1)	3.1 (.11)
Women	1	174 (76%)	.24 (.09)	.3 (.02)	.56 (.02)	.73 (.06)	.62 (.02)	.98 (.08)
	2	55 (24%)	2.04 (.1)	2.1 (.09)	2.8 (.1)	3.5 (.1)	3.7 (.11)	3.97 (.12)
			T(301)	T(301)	T(301)	T(301)	T(301)	T(301)
Resilient groups T-test			13.63***	47.34***	133.4***	80.03***	137.71***	87.41***
Resilient groups Mean differences			-.11 (-.1259, -.0941)	-.11 (-.1146, -.1054)	-.34 (-.3146, -.3054)	-.44 (-.4508, -.4292)	-.32 (-.3246, -.3154)	-.63 (-.6442, -.6158)
Symptomatic groups T-test			31.52***	26.12***	29.41***	12.60***	11.39***	31.26***
Symptomatic groups Mean differences			-.67 (-.7123, -.6277)	-.58 (-.6242, -.5358)	-.70 (-.747, -.653)	-.30 (-.3471, -.2530)	-.29 (-.3407, -.2393)	-.87 (-.9254, -.8148)

*p < .05, **p < .01, ***p < .001

Notes. Resilient groups are the resilient profiles in men and women that are the first profiles (t-test and mean difference for estimation of effect size). Symptomatic groups are the resilient profiles in men and women that are the second profiles (t-test and mean difference for estimation of effect size).

the women's scales' mean levels were higher than the mean levels of the "symptomatic" profile for the men. This finding indicated that the "symptomatic" women suffered from a higher degree of all the reported dimensions compared to the "symptomatic" men.

DISCUSSION

The aim of the current study was to explore the symptomatology profiles of men and women subjected to CTS: a unique situation in which a trauma is repeated and prolonged. Overall, the study results indicated that men and women reported the same objective exposure to years of missile attacks; their subjective exposure and symptomatology profiles, however, differed. Women tended to report higher subjective exposure, meaning feelings of helplessness and loss of bodily control; in addition, a higher percentage of women were found to suffer from elevated levels of psychopathologies including symptoms of PTSD, anxiety, depression, and somatization, compared to men.

Previous findings have suggested that sex differences are a dominant indicator of the response to trauma, with higher symptomatology among women compared to men. However, less is known about sex differences in situations of CTS. There are indications suggesting that most people adjust to living under CTS conditions via a habituation process (15, 29). However, the current study's results suggest that while this may be the case for some men, it is not the case for most women.

An analysis of the symptomatology profiles resulted in three separate profiles. The first, "resilient with some somatization," was almost equal in its sex distribution. The two other profiles – "symptomatically moderate" and "symptomatically high" – applied to a higher percentage of women (68% for the former and 80% for the latter) than men. It was also found that differences between the three profiles represented an increase in the level of all of the symptoms: that is, PTSD symptoms, as well as somatization, anxiety, and depression. This finding may indicate a cluster of symptoms that go hand-in-hand, rather than four different symptoms (i.e., PTSD, depression, somatization, and anxiety). This co-morbidity cluster is similar to findings regarding one-time traumatic episodes (1, 2) indicating a similarity between the effects of a one-time extreme traumatic event and continuous exposure to traumatic stress.

To better understand sex differences, we conducted a multigroup analysis of profiles across sex. Two profiles

were found for men and women alike: "resilient" and "symptomatic." Resilient men showed low means of symptomatology on all scales, while resilient women showed low levels of somatization, depression, and anxiety, with medium levels of PTSD symptoms (i.e., arousal, intrusion, and avoidance). In the symptomatic profile there was also a sex difference. Among men, this profile was characterized by low-medium somatization and depression with medium anxiety and high-very high PTSD symptoms. Among women, there were medium levels of somatization and depression, medium-high anxiety, and very high PTSD symptoms. Overall it was found that resilient women suffered from low but notable symptoms compared to resilient men, and that symptomatic women suffered from a significantly greater number of symptoms compared to symptomatic men.

The difference in the men's and women's symptomatology is not the result of differences in their exposure to stressors, as has been suggested by some researchers (37, 38), given that no differences were found in their objective exposure. Nevertheless, women reported higher levels than men did of subjective exposure, meaning fears for themselves and their families, and feelings of helplessness and loss of bodily control. Moreover, women who reported closer objective exposure (e.g., *a rocket fell next to me*) had significantly greater chances of being classified in the severe somatic profile, a finding that was not found regarding men. It seems that among women, the fear resulting from the exposure, and not the exposure per se, was the main reason for the difference in symptomatic profile, compared to men. Similar findings were observed among Israeli adolescents (27, 39) and adults (19, 26).

Studies have suggested that women are more likely than men to appraise events as more threatening (19), to report higher perceived stress in terms of loss of personal control (40, 41), and to experience more self blame (42). Women were also found to be less optimistic and have less confidence in their ability to cope (19). As such, it appears that the sex-related differences revealed in this study may be attributed, at least in part, to the differences in men's and women's psychological and social frameworks.

One such notable sex difference is that women have been found to be more likely than men to have a broader social network, a factor which is generally regarded as a positive coping mechanism (43), but which in CTS can be seen as a hindrance. When everyone in the vicinity is threatened by a missile attack, women have a greater number of significant others to worry about – checking on their whereabouts, etc. Consequently, their social

networks may increase rather than decrease their vulnerability to CTS (19). Therefore, although men and women may inhabit the same physical space, they do not seem to experience the same social or psychological environment, potentially resulting in differences in their well-being.

We believe that the current study's results provide a good indication of the fact that women are more affected by CTS than men are, and that their symptom level profiles differ from those of men, with women experiencing elevated symptomatology. Even in the resilient group, the women's profiles were not symptom free. This finding must be taken into account in future research, by clinicians who may overlook women's symptoms if they are not considered to align with "full PTSD," in plans designed to help those living in exposed areas, and among policymakers.

Overall, our findings should be viewed with caution, due to several limitations. First, this study used only self-report measures of distress, and it has been found that men traditionally report less distress than do women. In addition, the use of self-report questionnaires, which are widely used in trauma research, may be subject to social desirability and other reporting biases. Second, the correlative design of the study does not allow us to establish causality. However, the current study was a field study conducted in a specific context in which missiles were actively falling, a scenario which is of course impossible to reconstruct in a laboratory setting. Therefore, future studies should include a longitudinal design in order to investigate developmental pathways in latent class profiles. Furthermore, other situations of continuous trauma should be explored, as military conflicts may amplify sex roles in certain contexts, as noted above. Third, we have included only internalized symptoms: depression, anxiety, and somatization. The analysis profile may differ when looking at externalized symptoms such as substance use and anti-social behavior, which have been found to be more associated with PTSD of men (44) than with women. Furthermore, it would be interesting to explore whether men and women differ in the sociological and psychological domains that lead to their somatization. Such an investigation might reveal different pathways for somatization of men and of women (18). An additional limitation is the fact that we did not control for other traumas; in other words, previous/other traumatic experiences may have affected the results. Also, the fact that participation in the study was voluntary may have biased the results; that is, if highly traumatized individuals chose not to participate because they did not wish to talk about or recall the trauma, this would naturally limit the ability to generalize. Finally,

the method of classifying individuals according to their most likely profile implies some uncertainty regarding the stability of their latent class membership. This issue poses statistical problems when using class membership as an observed variable in further analyses (e.g., regression analysis, 45). Entropy, however, above 0.8 is considered high with regard to the analysis, as it was in the current study. It should also be noted that the term "resilience" was used in the study to indicate low levels of symptoms; it was not measured per se, something which we would recommend for future studies.

CONCLUSION

Clinical implications should consider the fact that men and women may have different thresholds or, alternatively, may require different scanning scores to indicate their distress levels. In addition, if men and women differ in their expression of symptoms, it is reasonable to assume that they might respond differently to treatment as well. This study's results contradict former studies conducted in Israeli society, claiming that resilience and habituation processes are the rule for the majority (e.g., 15, 27). These earlier results may conceal the fact that Israeli women pay a heavier price for living under conditions of political violence over extended periods of time. Intervention programs geared towards societies dealing with continuous trauma should take into account that PTSD symptoms may hide a broader symptomatology, especially among women. Also, it should be noted that even women who may be considered to be resilient show a pattern of higher symptomatology, indicating a lower habituation process as compared to that experienced by men.

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