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Gender Differences in PTSD in Israeli Youth Exposed to Terror Attacks

Avital Laufer
Netanya Academic College

Zahava Solomon
Tel-Aviv University

Differences between boys' and girls' exposure to terror and posttraumatic symptoms were examined in a sample of 2,999 Israeli adolescents. Gender differences were also assessed regarding perceived social support, religious beliefs, and ideological commitment. Results indicate that girls reported more posttraumatic symptoms than boys, although boys reported twice the rate of very severe symptoms. Differences were also found between boys and girls in levels of fear, religiosity, ideological commitment, and social support, but not regarding exposure. Path analysis revealed that gender is not a direct predictor of posttraumatic stress disorder (PTSD); however, it does have an indirect effect, especially through fear, which was the best predictor of PTSD. Social extrinsic religiosity and ideological intolerance were positive predictors of PTSD. The study concludes that gender differences in PTSD are largely the result of differences in levels of fear and are not due to differences in political ideology, religiosity, or social support.

Keywords: *gende; post trauma; adolescence; terror*

In recent years, Israel has experienced one of the most horrific waves of terror it has ever known. All segments of the Israeli population have been exposed to terror, whether directly or indirectly, through the injury or death of friends, family, or neighbors and through the ceaseless media coverage of the attacks. Prolonged exposure to war and terror has been implicated in a host of psychiatric problems and disorders among children and adolescents

Authors' Note: This study was supported by the Adler Research Center, Tel-Aviv University. Correspondence concerning this article should be addressed to Avital Laufer, Natanya Academic College, Haoniversita St. Kiryat Yitzhak Rabin, Netanya 42365 Israel; e-mail: laufea@netanya.ac.il.

(e.g., Papgeorgiou et al., 2000; Thabet, Abed, & Vostanis, 2002) including psychiatric and posttraumatic symptoms (e.g., Allwood, Bell-Dolan, & Husain, 2002; Thabet et al., 2002).

Posttraumatic stress disorder (PTSD), which is one of the most common anxiety disorders that emerges following exposure to a traumatic stressor like war or terror (American Psychiatric Association, 2000), was found to be gender dependent among adults (e.g., Breslau et al., 1998; DeLisi et al., 2003; Stein, Walker, Hazen, & Forde, 1997) and among adolescents (Brosky & Lally, 2004; Davis & Siegel, 2000; Groome & Soureti, 2004; Pat-Horenczyk, 2004; Stallard, Salter, & Velleman, 2004). These studies have consistently shown that females have higher rates of PTSD than males, regarding a vast diversity of traumatic experiences.

At the same time, contradicting evidence has also been found. Several studies reported no gender differences (e.g., Seedat, van-Nood, Vythilingum, Stein, & Kaminer, 2000) or even a higher likelihood of male adolescents to endorse posttraumatic symptoms (e.g., Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004) than females. It may be that youth's gender differences in PTSD are related to age and level of exposure. Korol, Green, and Gleser (1999), for example, found that girls' posttraumatic symptoms tended to increase with age, whereas boys' symptoms decreased with age. In a study of Israeli children during the first Gulf War, the authors found that 7th- and 10th-grade girls reported higher levels of posttraumatic distress than boys, whereas 5th-grade boys reported higher levels of posttraumatic symptoms than girls (Schwartzwald, Weisenberg, Waysman, Solomon, & Klingman, 1993). These findings indicate the need to closely examine the predictors of PTSD among adolescents and their interaction with gender.

This study aims to examine the difference in boys' and girls' level of PTSD, according to their level of exposure and different social resources. The level of exposure to traumatic stress was found in numerous studies to be an important factor affecting the level of posttraumatic distress. Individuals who were exposed to more traumatic events were at an increased risk for PTSD (e.g., Garbarino & Kostelny, 1996; Macksoud & Aber, 1996). However, differences in exposure to traumatic events can not explain why women tend to report distress more than men, since male adults (Gavranidou & Rosner, 2003; Solomon, Gelkopf, & Bleich, 2005; Stein, Walker, & Forde, 2000) as well as adolescents (Muldoon & Trew, 2000) reported higher levels of exposure to most traumatic events, except for sexual assault and rape. In fact, the gap between males and females experiencing distress remains constant even when the variable of sexual assault and rape was controlled for.

At the same time, the level of objective exposure is not the only or even the most significant factor that accounts for the unexplained variance in posttraumatic symptoms. Even the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., American Psychiatric Association, 2000) specifically notes that the sense of fear that the traumatic event evokes is one of the key predictors of PTSD. The past studies have found that a subjective sense of fear was more strongly related to posttraumatic symptoms than the actual objective exposure (e.g., Dyregrov, Gupta, Gjestad, & Mukanoheli, 2000; Gavrilovic, Lecic, Knezevic, & Priebe, 2002).

Scrutiny of the perceptions and interpretations that people ascribe to stressful events reveals significant differences between men and women following the same events. It seems that following stressful events, women tend to focus on the feelings of fear and worry that the events evoke, whereas men tend to minimize the threat of the event (e.g., Bar-Tal, Lurie, & Glick, 1994). Gender differences in perception of threat and danger were similarly found even among children and adolescents (e.g., Brody, Lovas, & Hay, 1995; Muldoon, 2003).

Terror attacks take place in a wider social context which also influences the perception and interpretations that people give to the traumatic event. Within the political context of the Palestinian–Israeli conflict, ideology and religious beliefs define who is right and who is wrong and ascribes meaning to the cause of terror. There is evidence suggesting that the political ideology which the adolescent adheres to can affect his or her coping and level of distress. Studies examining both Israeli (e.g., Punamaeki, 1996; Sade-Kadron, 1997) and Palestinian adolescents (e.g., Kostelny & Garbarino, 1994; Punamaeki, Quota, & El-Sarraj, 2001) found that increased exposure to political violence gave rise to emotional problems among adolescents with weak ideological commitment, but not among youth who reported strong identification with political causes.

Religious beliefs were also found to have a similar buffering effect. Studies examining the effect of the Palestinian–Israeli conflict on Israelis found that religious settlers living in the most terror-exposed areas exhibit more resilience in comparison to nonreligious settlers (Soroszki, 1996). Similarly, Solomon and Berger (2005) found that ultraorthodox rescue workers responsible for gathering fragmented body parts from scenes of terror attacks reported an astonishingly low level of posttraumatic symptoms, even when exposed to the most horrific terror scenes.

It has also been found that men and women have different attitudes regarding ideology and religion, which can influence the differential effect of stress on gender. Studies have indicated that men's political identity

tends to be more foreclosed, whereas women's was more diffused (e.g., Archer, 1989; Goossens, 2001). As for religiosity, studies examining gender differences report that women tend to be more religious than men and tend to perceive religiosity as an intrinsic orientation (i.e., as the aim itself) rather than an extrinsic one (i.e., as a mean for some other aim; Donahue, 1985; Milevsky & Levitt, 2004). These findings may have implications for the ways that men and women use ideology and religion differently when coping with the stress following terror.

Another social factor that was found to enhance young people's ability to cope with adversity is social support. Studies of Israeli youth during the Gulf War (Itskowitz, Zeidner, & Klingman, 1994; Zeidner, 1993) showed that children and adolescents with more social support were at decreased risk for posttraumatic distress. Similarly, studies of Palestinian adolescents also revealed that parental support and family cohesion enhanced the resilience of adolescents facing political adversity (Punamaeki et al., 2001; Punamaeki, Quota, & El-Sarraj, 1997).

The gender differences in help seeking and in utilizing social support have been consistently documented. Studies show that girls, more than boys, tend to seek and get emotional support (Geckova, Van Dijk, Stewart, Groothoff, & Post, 2003; Piko, 1998). In a comprehensive literature review, Frydenberg (1997) concluded that while girls use social support as a major way of coping, boys tend to refrain from being assisted by others when confronted with adversity.

It is thus hypothesized that gender differences in the use of social support mechanisms may explain, at least in part, the gender difference in PTSD symptoms in the wake of terror.

The aim of the present study is to examine gender differences in posttraumatic stress in youth resulting from exposure to terror attacks. More specifically, gender differences in levels of exposure, fear, social resources including religiosity, ideology belief, and social support will be examined as well, and the relationship between these variables and PTSD will be evaluated. This will allow the assessment of the unique and combined contribution of exposure to terror and fear, as well as social resources, to PTSD symptoms.

Participants and Methodology

This study examined 2,999 adolescents from grades 7 to 9. We used cluster sampling in which the level of exposure and place of residence

(within and outside the internationally accepted border) were the sampling criteria, resulting in four areas in Israel: (a) areas within the internationally accepted borders that were not exposed to terror incidents, (b) areas within the internationally accepted borders that were exposed to terror, (c) areas in Judea and Samaria that had low levels of terror, and (d) areas in Judea and Samaria and the Gaza Strip with high levels of terror. In each zone, we randomly chose one secular and one religious high school (except for Zone d, which has no secular schools).

After receiving the necessary authorizations and permits from the Ministry of Education and parents, we requested that all youth in grades 7 to 9 present on that particular day fill out a questionnaire. On average, the students completed the questionnaires within 45 min, in the presence of a research assistant. The response rate was 92.1%.

The participants were 42.2% boys and 57.8% girls. Among them, 35.5% were 13 years old, 36.5% 14 years old, 26.9% 15 years old, and 1% were 16 years old. With regard to religiosity, 0.7% classified themselves as ultra-orthodox, 39.0% as religious, 27.4% as traditional, and 32.9% as secular.

Measures

Objective Exposure to Terror

Objective exposure to terror was assessed via Lavi's exposure-to-war and terror questionnaire (Solomon & Lavi, 2005). The modified version used for the present study contains 17 items covering different kinds of trauma-related incidents. For example: "Stones were thrown at a car in which an acquaintance was traveling"; "A relative was shot at"; "I was injured in a terror attack." The objective level of exposure was defined as the total number of terror incidents to which the respondent was exposed; thus, scores ranged from 0 to 17.

Subjective Exposure (Fear)

For every terror incident respondents reported having experienced, they were asked to indicate the level of fear felt at the time of the incident on a 4-point scale, ranging from 1 (*not scared*) to 4 (*very scared*). Subjective level of exposure was defined as the mean of the subject's responses on this scale.

Ideological Commitment

A questionnaire devised for this study assessed ideological commitment regardless of the context of the political view. It comprises 20 statements rated on a 4-point Likert-type scale ranging from 1 (*to a great extent*) to 4 (*not at all*). Factor analysis revealed three factors: (a) practical commitment (e.g., I am willing to participate in demonstrations; $\alpha = .87$), (b) ideological conviction (e.g., I am convinced that I will hold to my current political view when I am older; $\alpha = .68$); and (c) intolerance of other political views (e.g., I think there are some political views that should not be heard; $\alpha = .72$).

Religious Orientation

The revised Religious Orientation Scale (Gorsuch & McPherson, 1989) was used to assess intrinsic and extrinsic religious orientation. The questionnaire was translated into Hebrew using back translation. The questionnaire measures intrinsic religious orientation (I) and two extrinsic religious orientations: personal (EP) and social (ES). It consists of 14 items to be marked on a 5-point scale, from 1 (*not at all*) to 5 (*very much*). The score for each type of religious orientation is the sum of the relevant items. The Cronbach's reliability for the current measures are $\alpha = .77$ (as opposed to .83 for the original scale) for I, $\alpha = .78$ for ES (.58 for the original), and $\alpha = .82$ for EP (.57 for the original).

Social Support

Social support was assessed via the Support Persons Scale (Milgran & Toubiana, 1996). Factor analysis yielded three groups of supporters: family ($\alpha = .75$), professional (e.g., teacher, counselor; $\alpha = .78$), and friends (only 1 item).

Posttramautic Stress Disorder

PTSD was assessed using the Child Post-Traumatic Stress Reaction Index (CPTS-RI; Frederick & Pynoos, 1988). This is a self-report questionnaire that assesses the severity of posttraumatic stress in youth. It contains 20 statements of symptoms reflecting three symptom categories: intrusion, avoidance, and hyperarousal. Respondents were asked to indicate how much each statement reflected their feelings, on a 5-point scale

(0 = *not at all*; 4 = *very much*). The sum of all the items represents the Global Symptom Score (GSS), which can range from 0 to 80. The GSS can be divided into five levels of symptom severity: 0 to 11 (doubtful); 12 to 24 (mild); 25 to 39 (moderate); 40 to 59 (severe); 60 to 80 (very severe). The CPTS-RI has high reliability, with $\alpha = 0.86$ in the Hebrew version (Schwartzwald et al., 1993) and $\alpha = 0.91$ in the current study.

Results

Objective Exposure to Terror and the Cluster Sampling

To examine the cluster sampling that was conducted in this study, a two-way ANOVA was used, analyzing personal reports of exposure to terror (objective exposure) by place of residence (within and outside the internationally accepted border), and general exposure of the area to terror (moderate vs. high). The ANOVA was significant for place of residence, $F(1, 2980) = 1383.89$, $p < .001$, $\eta^2 = .32$), as well as for general exposure of the area to terror, $F(1, 2980) = 1189.63$, $p < .001$, $\eta^2 = .29$). The interaction of place of residence and general exposure of the area was significant as well, $F(1, 2980) = 498.68$, $p < .001$, $\eta^2 = .14$) , showing that personal objective exposure was the highest in areas of Judah and Samaria and the Gaza Strip with high levels of terror ($M = 6.88$, $SD = 3.13$); medium in areas in Judea and Samaria that had low levels of terror ($M = 2.20$, $SD = 1.99$), as well as in areas within the internationally accepted borders that were exposed to terror ($M = 1.97$, $SD = 2.07$); and lowest in areas within the internationally accepted borders which were not exposed to terror incidents ($M = 0.97$, $SD = 1.63$). This validated the cluster sampling.

Further, fear, the subjective exposure to terror, was significant for place of residence, $F(1, 2995) = 6458.18$, $p < .001$, $\eta^2 = .68$), as well as for general exposure of the area to terror, $F(1, 2995) = 8910.82$, $p < .001$, $\eta^2 = .75$. The interaction of place of residence and general exposure of the area to terror was nonsignificant. That is, fear was higher in Judah and Samaria and in the Gaza Strip ($M = 2.78$, $SD = 0.83$) than in areas within the internationally accepted borders ($M = 1.81$, $SD = 0.82$); and it was higher in areas with high levels of terror ($M = 2.81$, $SD = 0.74$) than in areas with mild levels of terror ($M = 1.58$, $SD = 0.69$).

Table 1
Levels of PTSD Symptoms for Boys and Girls (in percentage)

Level of Symptomatology	% Boys (n = 863)	% Girls (n = 1,273)	χ^2	p
Doubtful	64.1	54.8		
Mild	21.7	29.4	$\chi^2(4) = 24.73$	$p < 0.001$
Moderate	9.7	10.2		
Severe	3.5	5.1		
Very severe	1.0	0.5		

Note: PTSD = posttraumatic stress disorder.

PTSD Symptomatology Among Boys and Girls

Gender differences in PTSD were assessed using a t test. Results show that girls reported a higher average of symptoms than boys, $t(2134) = -3.66$; $p < 0.001$. To assess whether this gender difference is present in all five symptom severity levels, we conducted a χ^2 test (see Table 1). Results show that girls tended to report significantly more posttraumatic symptoms than boys in all levels except for the highest severity level. In the highest severity level the percentage of boys indicating "very severe" was double the rate for girls; however, both were very low (1% for boys compared to 0.5% for girls).

Level of Exposure Among Boys and Girls

Boys and girls' levels of objective and subjective exposure were compared using a t test (see Table 2). Findings reveal no significant differences in objective exposure of boys and girls to terror events. Both groups reported having been exposed to an average of 2.5 incidents.

We also found a similarity between the types of events that boys and girls were exposed to. Boys and girls reported that the three most common stressful events that they had experienced were (a) knowing someone who was injured in a terrorist attack (reported by 34.3% of boys and 39.2% of girls), (b) stone thrown at the car of an acquaintance (30.0% both genders), and (c) knowing a person who had been killed in a terrorist attack (26.4% of boys, 33.4% of girls).

Assessment of subjective exposure to terror revealed a significant gender difference in sensing danger, that is, fear. Overall, girls reported feeling afraid significantly more than boys (see Table 2). Closer scrutiny revealed

Table 2
***t* test, Means, and Standard Deviations for Boys and Girls**

	Boys		Girls		
Variable	*M*	*SD*	*M*	*SD*	*t*(*df*)
PTSD	11.84	12.94	13.65	12.14	3.66(2134)***
Objective exposure	2.52	3.12	2.34	2.52	1.71(2930)
Subjective exposure	1.77	0.82	2.28	0.89	–12.97(2059)***
Intrinsic religiosity	24.34	7.97	25.30	7.63	–2.59(1814)**
Extrinsic social religiosity	5.41	3.22	4.90	2.85	3.53(1805)***
Extrinsic personal religiosity	8.65	3.96	9.40	3.82	–3.98(1788)***
Practical ideology	2.48	1.21	2.46	1.10	.43(2860)
Political conviction	2.35	0.80	2.31	0.71	1.37(2851)
Political intolerance	2.78	1.04	2.64	0.94	3.66(2849)***
Support from family	2.27	0.86	2.80	0.79	–2.52(2867)*
Support from friends	2.66	1.11	3.12	1.00	–11.46(2844)***
Support from professionals	1.60	0.80	1.49	0.64	3.85(2856)***

Note: PTSD = posttraumatic stress disorder.
*$p < .05$. **$p < .01$. ***$p < .001$.

that girls reported more intense fear than boys after the following incidents: hiding at home at a time of bombardment or shooting, $t(149) = –3.15$, $p < 0.01$, the occurrence of a shooting at a person closely related to the respondent, $t(292) = –2.61$, $p < 0.01$, and seeing a person who is not an acquaintance being killed, $t(245) = –2.82$, $p < 0.01$.

Gender Differences in Ideology, Religion, and Social Support

A series of *t* tests (see Table 2) were used to assess gender differences in ideology, religion, and social support. Results showed that boys expressed more intolerance to political views different from their own. However, there were no significant gender differences in levels of practical commitment and ideological conviction.

With regard to religion, results revealed that boys reported higher socially extrinsic orientation than girls, whereas girls reported higher personal extrinsic and intrinsic orientation.

Gender differences were found in social support as well. In time of need, girls showed a greater tendency to seek support from family and friends, whereas boys sought support from professional people more than girls.

Gender Interactions

To assess the possible interaction effects of gender by exposure to terror, fear, and social resources on PTSD symptomatology, two-way ANOVAs were conducted. Each ANOVA used PTSD as the dependent variable with gender as one independent variable, and exposure, fear, and social resources serving in turn as another dependent variable. Of these, two ANOVAs were significant—PTSD by gender and extrinsic social religiosity, and PTSD by gender and extrinsic personal religiosity.

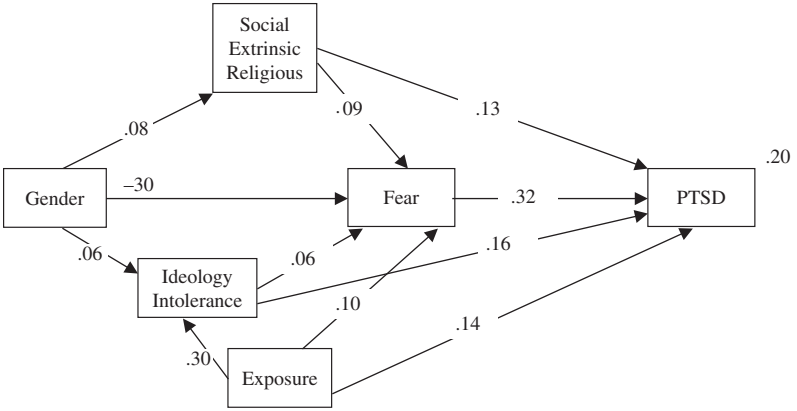
The analysis of PTSD by gender and extrinsic social religiosity was significant for gender, $F(1, 1473) = 13.86$, $p < .001$, $\eta^2 = .01$, for extrinsic social religiosity $F(1, 1473) = 34.99$, $p < .001$, $\eta^2 = .02$, and for their interaction, $F(1, 1473) = 4.24$, $p < .05$, $\eta^2 = .003$. An analysis of the interaction showed that the correlation between extrinsic social religiosity and PTSD was higher for boys ($r = .21$, $p < .001$) than for girls ($r = .10$).

The analysis of PTSD by gender and extrinsic personal religiosity was nonsignificant for gender, $F(1, 1460) = 1.16$, n.s., $\eta^2 = .001$, but significant for extrinsic personal religiosity, $F(1, 1460) = 39.80$, $p < .001$, $\eta^2 = .03$, and for their interaction $F(1, 1460) = 5.48$, $p < .05$, $\eta^2 = .004$). An analysis of the interaction showed that the correlation between extrinsic personal religiosity and PTSD was higher for girls ($r = .23$, $p < .001$) than for boys ($r = .10$).

Path Analysis for Explaining Gender Differences in PTSD

A path analysis was conducted to estimate the effects of gender on variables contributing to PTSD (see Figure 1 and Table 3). Only variables that were found to have a significant contribution to PTSD were included in the model. The final model was well fitted ($\chi^2 = 6.63$, $p > .05$; NFI = .99, CFI = .99, RMSEA = .01) and explains 20% of the variance in PTSD. According to the model, fear was the best direct predictor of PTSD ($\beta = .32$) followed by ideological intolerance ($\beta = .16$), exposure to terror ($\beta = .14$), and social extrinsic religious orientation ($\beta = .13$). Gender had no direct effect on PTSD, yet it indirectly affected it through its effects on fear ($\beta = -.30$), social extrinsic religious orientation ($\beta = .08$), and ideological intolerance ($\beta = .06$). That is, girls had higher levels of fear than boys, which contributed to higher PTSD symptomatology among them. Boys tended to have higher levels of social extrinsic religious orientation and ideological intolerance than girls, which increased the level of PTSD symptomatology among them.

Figure 1
Path Model for Predicting PTSD



Note: Numbers on the arrows are β, numbers on the variables are adjusted R square.

Discussion

This study assessed gender differences in exposure to terror and the posttraumatic symptoms that follow such exposure. Results show that girls tended to report more posttraumatic symptoms compared to boys. These findings are in line with empirical evidence obtained in previous studies of adults (e.g., McMillen & Fisher, 1998; Stein et al., 1997; Stein et al., 2000) and adolescents (Durakovic-Belko, Kulenovic, & Dapic, 2003; Klingman, 1992; Kuterovac, Dyregrov, & Stuvland, 1994; Vizek-Vidovic, Kutervac-Jagodic, & Arambasic, 2000). At the same time, scrutiny of the level of severity of posttraumatic symptoms shows that a higher percentage of boys reported suffering from very severe symptoms, compared to girls. Although it is a small group, this difference should be noted.

Some researchers believe that the gender differences in the expression of posttraumatic symptoms stem from differences in willingness to acknowledge and report distress, but do not necessarily reflect the actual level of experienced distress (e.g., Durakovic-Belko et al., 2003). Girls may more easily admit they suffer since society allows them to be weaker and more passive, while granting them approval to disclose and admit weaknesses and distress (Dindia & Allen, 1992; Gavranidou & Rosner, 2003).

Table 3
Estimated Standardized Regression Weights for Path Analysis

	β
Gender–ideology intolerance	.06***
Gender–social extrinsic religiosity	.08***
Gender–fear	–.30***
Exposure–ideology intolerance	.30***
Exposure–fear	.10***
Exposure–PTSD	.14***
Ideology intolerance–fear	.06*
Ideology intolerance–PTSD	.16***
Social extrinsic religiosity–fear	.09***
Social extrinsic religiosity–PTSD	.13***
Fear–PTSD	.32***

Note: PTSD = posttraumatic stress disorder.
*$p < .05$. ***$p < .001$.

This assumption may be supported by the higher fear levels that were reported by the girls, compared to the boys. This finding is especially prominent since no gender differences were found in objective exposure—the number and type of terror events that were experienced. It may be that the difference in gender willingness to acknowledge and admit fear may account for this discrepancy. Therefore, social sanctions against males to reveal feelings of weakness and vulnerability may account for their reporting of less fear. According to this assumption, the difference in the levels of fear does not reflect any true gender difference in the perception of the event but rather in the reporting of the event.

Another possible explanation for the gender difference in fear is that girls and boys do indeed differ in their interpretation of the event. Some studies found that women and girls tend to perceive certain events as more threatening than males do (Bar-Tal et al., 1994; Brody et al., 1995; Muldoon, 2003). This may stem from social as well as biological reasons. Nevertheless, according to this notion the difference between the sense of fear felt by boys and girls is real, reflecting differences in the interpretation of the danger of the event and not the willingness to admit vulnerability.

Differences between genders were also assessed regarding social variables. Some sociological theories claim that men and women live in different social worlds (Lorber, 1999), and therefore are exposed to different factors that affect their levels of resilience and vulnerability and their ability

to use certain coping strategies. The results of this study show that there were some differences between boys' and girls' social variables. It was found that boys tended to have a higher intolerance toward others' ideology, to have a social external religious orientation, and to seek more professional help, compared to girls.

These differences may reflect the different societal expectations of boys and girls. Ideological intolerance, for example, may be more socially accepted for boys since women are expected to consent to others' opinions (Arrindel et al., 1997). As for religion, religious Jewish boys are obligated to pray three times a day in a group of at least 10 men (which is called a "Minyan"), and this group becomes part of their social network and social control system. This religious commandment is not part of the girls' religious duties. Girls can pray alone or as part of a group. Therefore, girls' religious activities are more private and individualistic, reflecting intrinsic and personal extrinsic religious orientations. Boys may be more prone to regard religiosity as socially motivated.

Gender differences in social support that were reported in our study indicated that girls tend to seek help from family and friends, whereas boys tend to seek aid from professionals. It may be that while girls may have more social approval to admit their difficulties to close people, such as family and friends (e.g., Olsen & Shultz, 1994; Robinson, 1995) this applies less for boys. Rather than turning to close ones, boys prefer to admit their vulnerability to professionals. Another explanation may be that seeking professional help during adolescence is a decision made by parents or other adults. As many distressed boys do not turn to their families for help, their parents may sense their difficulties and seek professional help for them.

To assess whether gender differences in fear and social variables account for differences in PTSD, we conducted a path analysis. Four dimensions were found to have a direct effect on PTSD: fear, exposure, social extrinsic religiosity, and ideological intolerance. Fear was found to be the strongest predictor of posttraumatic symptoms. Gender was not found to be a direct predictor of PTSD; however it had an effect on PTSD symptoms via fear. Girls tended to report more fear, and as a result tended to report more symptoms.

The significance of subjective interpretation in understanding coping mechanisms was suggested by Lazarus and Folkman (1987). Fear signifies one's personal interpretation of the level of threat that an event poses. Fear has been repeatedly documented to play a key role in posttraumatic symptoms in many studies (Dyregrov et al., 2000; Gavrilovic et al., 2002). Therefore, it seems reasonable to assume that the more intense distress that girls reported over boys stems from their appraisal of terror attacks as more threatening.

Regarding the social variables, it was found that religion, ideology, and social support did not buffer the level of PTSD among boys or girls. Moreover, social extrinsic religious orientation and ideological intolerance for others' political views, which tend to prevail more in boys, were found to have a positive direct effect on PTSD.

This finding, that social mechanisms may increase distress, is consistent with some studies. It was found, for example, that ideology did not decrease distress among South African adolescents exposed to political violence (Starker, 1988), and that religion was positively associated with youth distress during the civil war in Sarajevo (Durakovic-Belko et al., 2003). It seems that when a believer faces negative events that contradict religious expectations (Ellison, Boardman, Williams, & Jackson, 2001) or ideological beliefs (Stein, 2001), then his or her beliefs may become an additional source of stress. It may be that the terror attacks the Israeli adolescents have faced have challenged their religious and ideological assumptions, thus causing them more stress.

Overall, the results of this study indicated that gender has an indirect effect on PTSD especially by influencing one's feelings of threat and fear. It seems that girls tend to recognize events as more frightening than boys and this results in reporting more posttraumatic symptoms in girls than in boys. Another finding of this study was that religiosity, ideological commitment, and social support do not buffer the effect of fear or distress; on the contrary, ideological intolerance and socially extrinsic religiosity enhance the feelings of fear and distress.

Overall, the explained variance of PTSD in the model was 20%. Clearly, this leaves room for other variables to account for the unexplained variance. In light of the importance of subjective interpretation, there is a need for future research to assess the effects of cognitive variables such as coping strategies, repression, and attribution (Asarnow et al., 1999; Foa, Steketee, & Rothbaum, 1989) on fear and PTSD which may cast light on the gender difference. In addition, social stereotypes which affect gender differences in willingness to acknowledge and report distress, weakness, and negative feelings should be assessed further.

Another important result that should be additionally examined is boys' reporting more very severe posttraumatic symptoms and their seeking more professional help, compared to girls. Future studies could take a closer look at the types of variables such as social sanctions and involvement and attachment to social groups during adolescence that may account for these differences.

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Avital Laufer, PhD, is a senior lecturer at the Netanya Academic College. She specializes in political events and their impact on youth's well being. She examines the effects of violence, terror, and internal displacement in a broad context which includes ideological and religious commitment. She has published several articles and chapters dealing with the abilities of ideological and religious obligation to mediate the effects of traumatic events on youth's well being.

Zahava Solomon is a professor of psychiatric epidemiology and social work at the Tel-Aviv University and the head of the Adler Research Center for Child Welfare and Protection. She heads several longitudinal projects on traumatized veterans, ex-POWs, Holocaust survivors, and children, adults, and the elderly exposed to terror.