

# PTSD Symptoms, Forgiveness, and Revenge Among Israeli Palestinian and Jewish Adolescents

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*Exposure to political terror and its psychological toll were assessed in 276 Israeli Palestinian and 1,469 Jewish adolescents using self-report questionnaires. Israeli Palestinians displayed more posttraumatic symptoms, higher levels of objective exposure to terror, more negative life events, lower ability to forgive, and a higher need for vengeance than their Jewish counterparts. Although the two groups did not differ in fear levels, Israeli Palestinians expressed more favorable attitudes toward peace. Ethnicity played a major role in explaining the variance of posttraumatic symptomatology. Israeli Palestinians displayed increased vulnerability to mental distress when compared to their Jewish counterparts. The unique roles of subjective fear, attitudes towards peace, forgiveness, and revenge among Israeli Palestinians are discussed.*

Since the al-Aqsa Intifada broke out in September 2000, Jewish and Palestinian youth residing in Israel have been repeatedly exposed almost daily to terror attacks. Such prolonged exposure to political violence has often been implicated in posttraumatic stress disorder (PTSD; e.g., Thabet, Abed, & Vostanis, 2002). Studies showed that over half (53.1%) of the Israeli youth who were exposed to multiple terror incidents reported moderate to very severe posttraumatic symptoms, and 20.5% met criteria according to the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV*; American Psychiatric Association [APA], 1994) for PTSD (Lavi & Solomon, 2005).

Although certain aspects of political violence (i.e., level of exposure) were found to predict subsequent posttraumatic symptoms (Macksoud & Aber, 1996), considerable unexplained variance in casualties' symptomatology suggests that additional factors are associated with resilience and vulnerability (Punamaki, Qouta, & El-Sarraj, 2001). Several studies suggest that being part of a minority is associated with higher risk of developing posttraumatic symptoms (e.g., Brewin, Andrews, & Valentine, 2000).

The present study examines posttraumatic symptoms and their correlates among a large sample of both Israeli Palestinian and

Israeli Jewish youth. Israeli Palestinians constitute approximately 20% of Israel's population, and reside in cities and villages within the "green line" (i.e., Israel's internationally recognized borders). The status of the Israeli Palestinian minority in the face of the ongoing political violence is particularly complex. During the al-Aqsa Intifada, the Israeli Palestinian youth were relatively safe from terror attacks, which mainly targeted Jewish cities and settlements. However, these youth helplessly witnessed Israel's military retaliation, which targeted their kin within the occupied territories. Because Israeli Palestinians are Israeli citizens who view themselves as having a Palestinian nationality, many of them identify with the Palestinian uprising (Ben Meir, 2002). This, in turn, may have led to secondary traumatization and to a dual allegiance dilemma. In addition, Israeli Palestinians were also exposed to direct violence carried out by Israeli security forces. In October 2000, 12 Israeli Palestinians and 1 Palestinian were killed by an Israeli police force dispersing a riot.

Studies conducted among the Israeli Palestinian minority have found higher rates of PTSD and depression compared to the Jewish majority (Hobfoll, Canetti-Nisim, & Johnson, 2006). The same pattern was found among a younger sample (Mussalam, Ginzburg,

Lev-Shalem, & Solomon, 2005). Anderson (1991) attributed this vulnerability to acculturative stress, in which the traditional paternalistic Israeli Palestinian society is forced to face the predominant Jewish culture and Western democratic institutions. This vulnerability may also originate from lower educational and financial resources compared to the Jewish majority.

Israeli Palestinian adolescents and their Jewish counterparts are ultimately products of highly different cultures and social values. This disparity requires an elaboration of the scope of comparison beyond mere exposure to terror and subsequent symptomatology. This study will therefore incorporate additional relevant variables within its assessment to gain a broader perspective.

Alongside ethnicity, gender is also often associated with posttraumatic distress (Solomon, Gellkopf, & Bleich, 2005). This finding was also reported specifically among adolescent victims of trauma. For example, in a study by Laufer and Solomon (2006), Israeli female adolescents reported a higher number of posttraumatic symptoms than Israeli male adolescents. This vulnerability will be examined in light of the different role of men and women in both ethnic groups. The Israeli Palestinian society is mainly patriarchal; however, the Jewish society has less strict gender boundaries.

In addition to sociodemographic variables, a host of psychological factors was also found to be associated with the severity of posttraumatic distress. One potentially relevant variable may be the casualty's experience of negative life events. Previous exposure to traumatic events was found to entail a greater risk for development of PTSD from subsequent trauma (Breslau, Chilcoat, Kessler, & Davis, 1999). Negative life events were also found to be associated with higher rates of posttraumatic symptoms among adolescents (Joseph, Mynard, & Mayall, 2000).

Another relevant factor may be one's ability to forgive. Forgiveness was found to be correlated with psychological healing and a decrease in depression and anxiety (Hargrave, 1994), whereas being unforgiving was found to entail an increased risk of developing psychiatric morbidity (Kaminer, Stein, Mbanga, & Zungu-Dirwayi, 2001). This pattern was further reinforced by studies that examined the need for revenge. Findings indicated that motivation for revenge was more frequent among individuals with PTSD compared to those without it (Cardozo, Kaiser, Gotway, & Agani, 2003). The inability to forgive and the need for revenge may therefore be associated with an increased vulnerability to trauma.

Another important factor may be the casualty's attitude towards peace. Past studies (e.g., Lavi & Solomon, 2005) have found that negative attitudes toward peace talks were associated with both the level of exposure to terror and posttraumatic symptoms among Jewish youth, but not among Israeli Palestinians. These findings may indicate a potential interaction between the willingness to promote peace and the casualty's ethnicity, and require further research.

The present study aims to answer the following research questions: Is there a difference in posttraumatic distress between Israeli Palestinians and Israeli Jews? What is the contribution of

exposure to terror, attitudes towards peace, forgiveness, and revenge to posttraumatic symptoms? Do these potential predictors of posttraumatic symptoms play a different role among Jewish and Palestinian Israeli youth? Following these research questions, these are the main hypotheses of the present study: (1) Israeli Palestinians will report a higher number of posttraumatic symptoms than Israeli Jews; (2) female youths will report a higher number of posttraumatic symptoms compared to male youths; (3) higher levels of objective and subjective exposure, as well as a higher number of negative life events, will all be associated with a higher number of posttraumatic symptoms; (4) a higher inability to forgive will be associated with higher levels of posttraumatic symptoms; (5) a lower tendency to seek revenge will be associated with a lower level of posttraumatic symptoms; and (6) positive attitudes toward peace will be associated with a lower number of posttraumatic symptoms.

## METHOD

### Participants

The sample consisted of 1,745 Israeli adolescents, aged 16. Two hundred seventy-six adolescents were Israeli Palestinians (177 female and 99 male) from a large Israeli Palestinian city and 1,469 participants were Jewish (909 female and 560 male) from across Israel.

Differences in sociodemographic variables were examined among Israeli Palestinians and Jews. The variables examined were gender, parents' education and occupation, economic status, religiosity, and political stand. Results are presented in Table 1. The table presents separate chi-square values for each comparison. As can be seen, Jews and Israeli Palestinians differed in most sociodemographic variables. Gender was the only variable in which no significant difference was found.

### Procedure

On receiving confirmation from the Israeli Ministry of Education, we contacted 15 high-school principals in cities and rural communities of various sizes. Four principals declined because of work overload and lack of motivation to cooperate. Consenting schools were asked to transfer a form to pupils' parents, explaining the research objectives and the voluntary nature of the study. No parent declined, but 21 pupils declined participation stating that either the questionnaire was too long or that they were not interested in participating.

Questionnaires were administered throughout May 2005, at the beginning of class, in the presence of a teacher. Time allotted for completion was 45–50 minutes (duration of a class). Although the vast majority of pupils completed the questionnaires within the time limit, approximately one pupil per class requested extended time, an average of 10 minutes. These pupils continued filling

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**Table 1.** Socioeconomic Differences According to Ethnicity

Variable		Jews		Israeli Palestinians		$\chi^2$
		<i>N</i>	%	<i>N</i>	%	
Gender	Male	560	38.1	99	35.9	1.02
	Female	909	61.9	177	64.1	<1
Education–mother	Elementary	70	4.8	36	13.1	26.47*
	High school	657	44.7	179	65.1	20.06*
Education–father	Academic	742	50.5	60	21.8	41.49*
	Elementary	106	7.2	52	18.8	34.26*
Occupation–mother	High school	683	46.7	165	59.8	8.15*
	Academic	674	46.1	59	21.4	33.55*
Occupation–father	Works	1165	79.6	53	19.3	101.27*
	Studies	91	6.2	9	3.3	3.46
Occupation–father	Does not work or study	207	14.1	213	77.5	383.41*
	Works	1275	88.4	165	60.7	20.96*
Economic status	Studies	60	4.2	26	9.6	14.53*
	Does not work or study	107	7.4	81	29.8	104.53*
Religiosity	Low	88	6.0	53	19.2	50.71*
	Medium	1105	74.9	155	56.2	11.36*
Political stand	High	282	19.1	68	24.6	3.51
	Ultra orthodox	11	0.7	13	5.0	28.87*
Religiosity	Religious	170	11.6	61	23.4	22.98*
	Traditional	515	35.1	141	54.0	20.97*
Political stand	Secular	772	52.6	46	17.6	57.27*
	Right	621	45.6	17	7.6	68.55*
Political stand	Central	524	38.4	126	56.5	15.23*
	Left	218	16.0	80	35.9	40.30*

\**p* < .001.

the questionnaires in the teachers' lounge in the presence of the researcher.

**Measures**

In the personal details questionnaire, participants were asked about their gender and ethnicity. For the exposure to terror attacks questionnaire, items were drawn (and modified) from several questionnaires used to examine exposure to terror in previous studies and referred to terror-related events to which adolescents in both groups may have been exposed (for more details, see Lavi & Solomon, 2005). Participants were presented with a list of 22 items covering different levels of potential exposure to terror-related events. They were asked to state whether or not they had experienced each event. Accumulative grades were between 0 to 22 (*M* = 3.26, *SD* = 3.53, Cronbach's  $\alpha$  = .84). Those who replied positively were asked to grade their level of fear during the event. Fear was measured on a 1 (*not afraid*) to 4 (*extremely afraid*) Likert scale. The grade used to evaluate fear was the highest one which was reported by the participant (*M* = 1.87, *SD* = 1.31).

The Child Posttraumatic Stress Reaction Index (CPTS-RI; Pynoos, Frederick, Nader & Arroyo, 1987), a self-report questionnaire, was used to assess PTSD among youth aged 10–17. Participants were asked in the beginning of the questionnaire to recall a terror event or a war that deeply affected them. Subsequently, they were presented with a list of 20 possible posttraumatic symptoms, corresponding to *DSM-IV* (APA, 1994) criteria for PTSD. They were asked to indicate on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*very much*) the degree to which they experienced each symptom. The Global Symptom Score consists of the sum of the scores. Possible scores ranged from 0 to 80 and were divided into five rates of severity: 0–11 (*doubtful*), 12–24 (*mild*), 25–39 (*moderate*), 40–59 (*severe*), 60–80 (*very severe*). Scores ranged from 0 to 72 (*M* = 12.28, *SD* = 12.58). This instrument has been widely used in trauma studies in youths and was found as highly reliable and valid. Cronbach's  $\alpha$  was high ( $\alpha$  = .86) in a former study of Israeli children (Schwarzwald, Weisenberg, Solomon, & Waysman, 1997), as well as in this current study ( $\alpha$  = .92).

In the life events questionnaire, pupils were asked to state whether events from the list of possible events (i.e., divorce,

passing away of a close person, severe illness of the pupil) had occurred during the last year. The score was the sum of negative life events reported by the pupil, ranging from 0 to 11 ( $M = 3.20$ ,  $SD = 1.92$ ,  $\alpha = .52$ ).

Attitudes towards peace with the Palestinian authority were measured by a questionnaire developed by Shammai and Kimhi (2006). The questionnaire includes 12 items (i.e., “No agreement with the Palestinians will endure”; “In light of the terror attacks I think we should reach an agreement with the Palestinians as soon as possible”). Upon each item, participants were asked to mark the number which best represented their view on each item on a 1 (*totally agree*) to 5 (*totally disagree*) Likert scale. The score was the mean of the participant responses with the scale ranging from 1 to 5 ( $M = 2.83$ ,  $SD = .87$ ,  $\alpha = .85$ ).

The ability to forgive was assessed by the Forgiveness Scale developed by Mullet, Houdbine, Laumonier, and Girard (1998), which we translated into Hebrew using the back translation method. Participants were asked to mark the number which best represents their view on each item on a 6 (*totally agree*) to 1 (*totally disagree*) Likert scale. The original scale included 26 items that were divided into 3 factors: obstacle to forgiveness, revenge versus forgiveness, and social and personal circumstances. However, Cronbach’s  $\alpha$ s for these factors were very low in the present sample ( $\sim .50$ ). Therefore, a new factor analysis was conducted, which resulted in three parameters: (1) Unwilling to forgive included eight items ( $\alpha = .85$ ), such as “I cannot forgive even if the consequences of the material harm are minimal”; (2) willingness to forgive included six items ( $\alpha = .82$ ), such as “I can easily forgive, even when the offender has not apologized”; and (3) revenge included three items ( $\alpha = .52$ ), such as “I can truly forgive only if I am able to take revenge.” The score for each factor was the mean of the participant’s responses (factor 1:  $M = 2.44$ ,  $SD = 1.01$ ; factor 2:  $M = 3.35$ ,  $SD = 1.05$ ; factor 3:  $M = 2.63$ ,  $SD = 1.11$ ). As can be seen, only 17 items remained out of the original 26. Items that lowered factors’ internal consistencies were omitted.

## Data Analysis

Data were analyzed using SPSS version 13. Analyses included  $\chi^2$ , ANOVA, Pearson correlations, and linear regression.  $p$  Values lower than  $p < .01$  were not considered significant.

## RESULTS

A two-way analysis of variance was conducted to examine hypotheses 1 and 2. ANOVA results are presented in Table 3, with ethnicity and gender as the independent variables. Missing data were handled as pairwise and were excluded from the analysis.

Results indicated significant differences in levels of objective exposure by ethnicity. As can be seen in Tables 2 and 3, Israeli Palestinian adolescents reported a higher level of exposure than Jewish adolescents and male adolescents reported higher objective exposure than female adolescents. In addition, significant interactions were found between ethnicity and gender. Israeli Palestinian male adolescents reported higher exposure levels than Israeli Palestinian female adolescents.

The two most prevalent events among the Israeli Palestinian adolescents were “Having an acquaintance being shot at” (36.8%) and “Hiding at home to avoid bombardments and shootings” (33.5%). Among Jewish adolescents they were “Forgoing activities due to the security situation” (61%) and “Using alternative transportation routes” (32.7%).

There was no significant difference in subjective exposure according to ethnicity. However, a significant difference was found according to gender. Female adolescents reported higher level of fear compared to male adolescents. No interaction between ethnicity and gender was found.

In addition, the level of reported fear among Jewish adolescents and Israeli Palestinian adolescents differed according to different terror exposure. The two events perceived as inducing the highest level of subjective fear among Israeli Palestinian youth were

**Table 2.** Means and Standard Deviations for the Study’s Variables According to Ethnicity and Gender

Jewish Adolescents						Israeli Palestinian Adolescents					
Males $n = 560$		Females $n = 909$		Overall $N = 1469$		Males $n = 99$		Females $n = 177$		Overall $N = 276$	
<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
9.22	11.54	9.56	9.99	9.43	10.61	21.46	14.41	19.62	14.04	20.29	14.16
3.01	3.31	3.06	2.68	3.04	2.93	5.78	6.85	3.67	4.70	4.43	5.65
1.60	1.20	2.05	1.25	1.88	1.25	1.81	1.56	1.90	1.61	1.87	1.59
3.06	1.81	3.08	1.80	3.07	1.81	3.73	2.56	3.89	2.15	3.83	2.31
2.75	.92	2.77	.88	2.76	.90	3.05	.50	3.26	.54	3.18	.54
2.81	1.13	2.34	1.03	2.52	1.09	3.27	.94	3.15	1.03	3.19	1.00
2.53	1.03	2.23	.91	2.34	.97	3.11	1.07	2.86	1.03	2.95	1.05
3.24	1.07	3.56	.97	3.44	1.02	2.87	1.07	2.87	1.02	2.87	1.04

**Table 3.** *F* value for the Study's Variables According to Ethnicity and Gender

	F( $\eta^2$ )		
	Ethnicity	Gender	Interaction
PTSD symptoms	111.11** (.14)	<1	1.05
Objective exposure	146.97** (.08)	40.80** (.02)	11.46** (.00)
Subjective exposure	<1	9.75* (.00)	3.8
Negative life events	32.53** (.02)	<1	<1
Peace attitudes	44.91** (.03)	3.60	2.51
Revenge	75.39** (.04)	16.03** (.00)	6.07
Inability to forgive	80.94** (.05)	16.90** (.01)	<1
Ability to forgive	58.18** (.03)	5.34	5.22

Note. PTSD = Posttraumatic stress disorder.  
 \* $p < .01$ . \*\* $p < .001$ .

“Having a close friend killed in a terror attack” (53.5%) and “Having an acquaintance killed in a terror attack” (45.8%). In comparison, for Jewish youth they were “Having a close friend being killed in a terror attack” (66.7%) and “Having a close friend shot at” (52.2%).

As can be seen in Table 3, significant differences in negative life events were found according to ethnicity. Palestinian adolescents reported more negative life events compared to Jewish adolescents. No significant differences were found according to gender or in the interaction.

Results for posttraumatic stress symptoms indicated significant differences according to ethnicity, with Israeli Palestinians reporting more severe symptoms compared to Jews. No significant differences were found according to gender or in the interaction.

Significant differences were found in attitudes towards peace for ethnicity, with Israeli Palestinians reporting a higher willingness to accept the peace process compared to Jews. No differences were found according to gender or the interaction.

Results indicated significant differences in the tendency to seek revenge according to ethnicity and according to gender. Tendency

to seek revenge was higher among Israeli Palestinian youth compared to Jews, and among male adolescents compared to female adolescents. The interaction was not found to be significant.

Significant differences were also found in the inability to forgive according to ethnicity and gender. Israeli Palestinians reported higher inability to forgive compared to Jews, and male adolescents displayed a higher inability to forgive compared to female adolescents. No significant interaction was found. Differences in the ability to forgive were found according to ethnicity, but not according to gender. The interaction was also nonsignificant.

Finally, effects sizes ( $\eta^2$ ) were conducted for all ANOVA effects. As can be seen in Table 3, low size effects were found for the following significant differences: gender differences in subjective exposure, revenge, inability to forgive; ethnicity differences in negative life events, attitudes towards peace, revenge and inability to forgive; interaction effect (Gender  $\times$  Ethnicity) in objective exposure.

Pearson correlations were conducted to examine hypotheses 3 through 6. Correlations are presented for both groups separately in Table 4. Objective exposure and inability to forgive were highly correlated with PTSD among Israeli Palestinian adolescents. Among Jewish youths, negative life events, objective exposure, subjective exposure, and inability to forgive were found to be associated with PTSD.

A linear regression analysis by steps was conducted to assess the unique contribution of each of the independent variables to posttraumatic symptomatology. The first step included ethnicity and gender, as well as the sociodemographic variables (as dummy variables). The second step included objective exposure, subjective exposure, and negative life events. The third step included attitudes toward peace, revenge, inability to forgive, and forgiveness. The last step included interactions between ethnicity and all the above variables. Missing data were handled as listwise.

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Table 5 presents only the variables that retained their significance. Overall, the variables in the model explained 31.6% of the variance,  $F(7, 662) = 69.75$ ,  $p < .001$ . Durbin-Waston test was 1.83. Results indicated that ethnicity had the highest partial

**Table 4.** Pearson Correlation Between the Study Variables for Israeli Palestinian Adolescents and Jewish Adolescents

Israeli Palestinians	Jews	1.	2.	3.	4.	5.	6.	7.	8.
1. PTSD symptoms		1.00	.10	.29**	.10	-.09	.29**	.16	.15
2. Negative life events		.19**	1.00	.14	.12	-.00	.07	.01	.02
3. Objective exposure		.38**	.22**	1.00	.64**	-.08	.18*	.00	.14
4. Subjective exposure		.43**	.13**	.59**	1.00	-.06	.09	.04	.06
5. Attitudes toward peace		.01	.00	.02	.06	1.00	-.00	.20*	-.06
6. Inability to forgive		.12*	.12	.04	.00	-.16**	1.00	.34**	.32**
7. Ability to forgive		-.02	-.03	.01	.06	.18**	-.30**	1.00	-.08
8. Revenge		.04	.13**	.01	-.07*	-.25***	.60**	-.50**	1.00

Note. PTSD = Posttraumatic stress disorder.  
 \* $p < .01$ . \*\* $p < .001$ .

**Table 5.** Linear Regression Analysis to Predict Posttraumatic Stress Disorder Symptoms

Step	Predictor	B	SE B	$\beta$	R <sup>2</sup> change
1	Ethnicity	-3.58	.37	-.34**	.15
2	Objective exposure	2.07	.45	.19**	.11
	Subjective exposure	2.07	.51	.22**	
3	Inability to forgive	1.26	.42	.10*	.01
4 Interaction	Subjective exposure	1.65	.30	.20**	.03
	ethnicity with				
	Inability to forgive	-1.00	.34	-.10*	
R <sup>2</sup>					.32

\* $p < .01$ . \*\* $p < .001$ .

correlation coefficient and the highest explained variance. The exposure variables yielded the second highest contribution to explained variance in posttraumatic symptoms; two interactions yielded the third highest contribution—ethnicity and subjective exposure, and ethnicity and inability to forgive. The weakest, yet significant, predictor was inability to forgive. The contribution of sociodemographic variables was not found to be significant.

## DISCUSSION

The intractable conflict between Israel and the Palestinians has surged in the last years as the al-Aqsa Intifada and Israel's retaliation claimed the lives of thousands, Jews and Palestinians alike. The Israeli Palestinian population, a minority within Israel, was also exposed to this continuous political violence. This study set out to examine the posttraumatic symptomatology among Israeli Palestinian adolescents and Jewish adolescents. A strong emphasis was put on the unique minority status of Israeli Palestinians and its relation to several relevant variables.

The most prominent finding in this study confirms our first hypothesis by revealing higher levels of posttraumatic symptoms among Israeli Palestinian adolescents when compared to their Jewish counterparts. This finding is in line with previous biethnic studies (e.g., Hobfoll, Canetti-Nisim, & Johnson, 2006). Our findings clearly indicate how being an Israeli Palestinian is the main factor that puts an adolescent at an increased risk for posttraumatic symptomatology. In a broader perspective, these results are congruent with previous studies indicating that belonging to a minority group is a risk factor for posttraumatic symptomatology (Brewin, Andrews, & Valentine, 2000).

In line with our third hypothesis, Israeli Palestinians reported higher levels of objective exposure to terror than their Jewish counterparts did. Although this result was to be expected, since objective exposure and posttraumatic symptomatology are known to be highly correlated (e.g. Macksoud & Aber, 1996), it is clearly inconsistent with the actual geographical pattern of the Palestinian

terror attacks. Throughout years of violence, Palestinian attacks targeted Jewish inhabited locations, while stirring clear from Israeli-Palestinian inhabited locations. Therefore, it is more likely to interpret these results as based on exposure to political violence which was not carried out by Palestinians.

This finding may be attributed to the events of October 12, 2000, when 12 Israeli Palestinians and 1 Palestinian were killed by police officers trying to quell riots within Nazareth, the area in which this study's participants dwell. These events are likely to have increased these adolescents' perception of themselves as extremely vulnerable. An additional explanation may be the status of Israeli Palestinians as helpless witnesses to Israel's military actions against the occupied Palestinian population. Witnessing the plight of their kin is likely to have left a significant impact, perhaps in the form of secondary traumatization (Solomon et al., 1992).

The vulnerability of the Israeli Palestinian minority was also reflected in participants' reports regarding the type of events to which they were exposed. The results among the Israeli Palestinian sample revealed a harsh reality. "Having an acquaintance being shot at" was the most prevalent event. In comparison, among Jewish adolescents, "Forgoing an activity due to the security status" was the most prevalent event. These reports, although not representing directly the empirical outcome of exposure to violence, indicate that Israeli Palestinians are experiencing the harsher aspects of the ongoing political violence.

This minority's higher exposure levels were expected to be associated with higher levels of reported fear, in line with previous studies (e.g., Dyregrov, Gupta, Gjestad, & Mukanoheli, 2000). Contrary to our third hypothesis, this expectation did not materialize as no differences were found between the two ethnic groups in relation to the perception of fear. This finding is understandable, considering the nature of political violence in the region. Throughout the ongoing conflict, each side is perceived by the other as negating its basic right to exist. This, in turn, may have induced a feeling among both ethnic groups that their social and cultural integrity is under attack. Thus, subjective perception of danger may arise not merely from a physical threat to oneself and to significant

others, but also from a threat to one's social and national identity. These findings have been supported by a comparative study among a sample of Israeli Palestinians and Palestinians from the occupied territories. Although the groups differed in their objective exposure levels, no differences were found in subjective exposure levels (Lavi & Solomon, 2005). Thus, although Jewish adolescents were less exposed to direct violence and have developed fewer symptoms, it is reasonable to assume that this group perceives itself as attacked not just physically, but also socially and nationally. Finally, we believe that the lack of difference found between the groups in fear responses may be attributed to methodological reasons. Criterion A for PTSD, introduced in *DSM-IV* (APA, 1994), includes both the objective and subjective aspects of trauma exposure. The fact that we did not carefully assess these two aspects may explain the lack of association between subjective and objective exposure in this study.

This rather unique status of the subjective exposure factor was further manifested in the lack of correlation between fear and posttraumatic symptomatology among Israeli Palestinians. This result may be interpreted as a prominent example of the reality in which these youth live. Due to the harsh reality in which they live, fear has become an integral part of Israeli Palestinians' daily lives. The implications of this ongoing fear are not necessarily manifested in any formal psychopathological disorder, but rather in an ongoing feeling of distress and frustration. This notion is also in line with a broader field of research that depicts Palestinian social and national identity as being intertwined with this intractable conflict (Elbedour, Bastien, & Brunce, 1997).

The final exposure variable included in our third hypothesis was negative life events. In line with the hypothesis, when compared to Jewish adolescents, Israeli Palestinians reported more negative life events. This may be attributed to the complex reality of the Israeli Palestinian citizens as members of a minority. Since the initiation of the state of Israel, Israeli Palestinians have suffered from continuous hardships in all areas of life. The vast majority of this population has experienced economic, social, and political obstacles, and faced an ongoing day-to-day struggle.

The increased vulnerability of this minority was also supported by other factors examined in this study. Palestinian Israelis reported a higher tendency towards vengeance and a higher inability to forgive. All these factors, as mentioned earlier, are positively associated with higher levels of emotional distress (Breslau, Chilcoat, Kessler, & Davis, 1999). The need to take vengeance and the inability to forgive offer a novel understating of distress among Israeli Palestinians.

The notion of an "eye for an eye" is pervasive within the Arab culture to this day. It is also salient among Israeli Palestinians, and its extreme manifestation is found among the Israeli Bedouin, where taking vengeance is a moral duty (Al-Krenawi & Graham, 1997). Thus, when inability to forgive and the need to take vengeance are entrenched within the social texture, their malignant influence over these youths' mental health may be in-

tensified. Forgiveness, on the other hand, was found to mediate the relationship between PTSD and hostility (Snyder & Heinze, 2005) and to be associated with decreased depression and anxiety (Hargrave, 1994). Youth maturing in a social atmosphere negating forgiveness and condoning vengeance are facing psychological consequences that require further study.

It would seem likely that some of the factors found to contribute to the consequences of political violence, may also be associated with the potential solution for this violence. A correlation was indeed found among the Jewish sample between the reported fear and the attitude towards the peace process. Past findings have also found that both exposure to terror and posttraumatic symptomatology among Jews were associated with their attitude towards peace (Solomon & Lavi, 2005). However, no association was found between any of the factors and the Israeli Palestinian adolescents' attitude towards peace now and then (Lavi & Solomon, 2005). It seems that the manner in which these youth formulate their personal opinion about the conflict's solution is not related to their own exposure to violence.

Several explanations may be suggested for this lack of association between exposure and attitude towards peace among Israeli Palestinians. First, many Israeli Palestinians share a basic feeling of commitment and identification with Palestinians living in Gaza and the West Bank. It is reasonable to assume that these feelings are quite stable, and that they endure regardless of one's exposure to political violence. Second, this finding may also be attributed to a collaborative commitment to a solution that may posit Israeli Palestinians and their kin in a more favorable status in the future. As long as the conflict endures, Israeli Palestinians are suspected as potential traitors and are treated as second-class citizens. A peaceful resolution of the conflict may improve their overall status, and their higher support of the peace process, compared to Jewish adolescents, supports this purposed notion.

Other associations were also not found to be significant. Contrary to hypotheses 5 and 6, posttraumatic symptoms were not associated with tendency for revenge and attitudes towards peace. This finding is inconsistent with previous studies (e.g., Bayer, Klasen, & Adam, 2007). We presume that this lack of association stems from the dominant role of ethnicity in posttraumatic symptoms. It seems that once ethnicity is taken into account, other factors may lose their predictive power for posttraumatic symptoms. However, inability to forgive was found to be associated with posttraumatic symptoms, thus confirming our fourth hypothesis. One possible explanation for this finding has to do with the important role of forgiveness in the Israeli reality. Both ethnic groups—Palestinians and Jews—often feel anger and resentment towards the other group, and have trouble putting past disputes aside. This inability to forgive and forget may increase their emotional distress. The second explanation has to do with the psychological nature of the forgiveness process. It may be presumed that compared to revenge and attitudes towards peace, forgiveness is a more intrapsychic process that has to do with deep

emotional processes. In the charged Israeli political atmosphere, these types of processes may be of particular significance.

Finally, an additional interesting pattern was found with regard to gender. Among both Jews and Israeli Palestinians, male adolescents reported higher levels of exposure and inability to forgive and endorsed a greater need for revenge than female adolescents did. It may be expected that male adolescents' higher exposure will also cause them to suffer from more posttraumatic symptoms. However, in opposition to our second research hypothesis, no difference was found between the symptomatology levels of male and female adolescents. A possible explanation would be that women are traditionally known as "monitors" (Strobe & Strobe, 1983). They tend to focus on the stressful experiences of significant others and consequently suffer from tension and anxiety. Therefore, although men may be exposed more directly to stressful events, women are affected vicariously, from a broad array of events and people in their environment. This may cause them to experience levels of distress similar to their male counterparts. In any case, the roles of gender, forgiveness, and revenge require further research if we are to gain a better understanding of their role in posttraumatic distress.

Several methodological limitations of this study should be noted. First, Israeli Palestinian participants were all drawn from a large Israeli Palestinian city (Nazareth) in northern Israel. However, it should be stressed that the chosen city is well known for its relatively heterogeneous Israeli Palestinian population, and therefore serves as a good study location. Nonetheless, future studies are encouraged to include adolescents from other parts of Israel and other conflict areas worldwide. Moreover, this study is based on a cross-sectional design, and its findings are relevant only to a specific point in time. Future research should employ a longitudinal design to shed additional light on the course of mental distress between both ethnic groups. Finally, as already noted, we did not carefully assess the *DSM-IV* Criterion A for PTSD. The inclusion of the criterion in our PTSD measure may have enabled us to more accurately assess objective and subjective exposure to terror. Future studies focusing on trauma exposure are encouraged to assess this criterion more thoroughly.

Despite these limitations, this study has several important theoretical and clinical implications. First, this study sheds light on a wide variety of factors associated with posttraumatic stress among youth exposed to ongoing political violence. More specifically, our findings provide important information regarding the role of emotional, cognitive, exposure, and attitudes variables. The major practical implication of this study has to do with the increased psychological vulnerability of the Israeli Palestinian minority. Our findings highlight the need for additional resources and professional attention to promote the well-being of this population. In addition, our findings point to the potential role of forgiveness in coping with traumatic stress. Psychotherapists are encouraged to promote the ability to forgive as part of the healing process. This is particularly important among young populations, in which the

ability to forgive is still developing and may be associated with future psychological resilience.

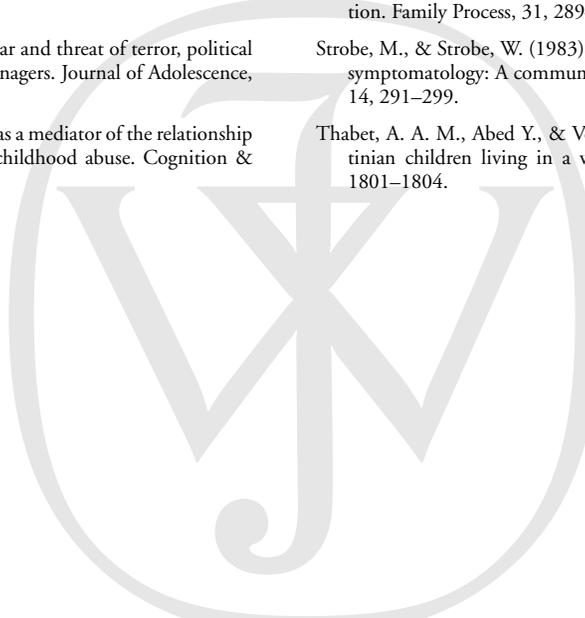
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## Queries

- Q1. AU: Please provide a department affiliation.
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- Q3. AU: Please provide a department affiliation.
- Q4. AU: Please include the Punamaki et al. reference in the reference list.
- Q5. AU: Please indicate in a table footnote what the numbers within parentheses mean.
- Q6. AU: Will “listwise” be understood? Or should the sentence be expanded for clarification?



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