

BRIEF REPORT

Ways of Coping and Sense of Belonging in the Face of a Continuous Threat

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This study examined the contribution of ways of coping and sense of belonging to stress responses among students in a conflict zone. Students at a college situated in an area exposed to continuous threat were divided according to their place of residence: locations inside and outside of the conflict zone. Rate of posttraumatic stress disorder (PTSD) was similar to rates in previous studies conducted among Israelis who had been exposed to terror. Acceptance as a way of coping and sense of belonging contributed to reducing PTSD symptoms, whereas use of alcohol and seeking support contributed to increasing stress responses. The discussion examines the results in light of the literature on ways of coping and sense of belonging in the face of continuous threat.

Since 2001, the southern region of Israel has been the target of Qassam rockets. Qassams are fired at all hours and have introduced considerable uncertainty and anxiety into the lives of the residents of this area (Dekel & Nuttman-Shwartz, 2009). These situations can lead to a variety of adverse responses, including emotional distress and psychiatric disorders such as depression and posttraumatic stress disorder (PTSD; Bleich, Gelkopf, & Solomon, 2003; Somer, Ruvio, Soref, & Sever, 2005). Despite these emotional reactions, many tend to maintain their usual routine (Pat-Horenczyk, Schiff, & Doppelt, 2005), and adapt to life in the face of constant threat (Quarantelli & Dynes, 1985). The ability to continue their everyday life under these trying circumstances raises questions about ways people adapt.

Ways of coping are basic units designed to capture how people respond to real-life problems. Coping strategies that have been examined to date include instrumental action, problem solving, support seeking, distraction, escape, opposition, and social withdrawal (Skinner & Zimmer-Gembeck, 2007). The question of what constitutes a good way of coping, however, is still subject to debate, especially under continuous threat. Studies of people under ongoing threat suggest that social action tends to exacerbate anxiety, whereas a certain positive detachment might be a better way of coping (Gelkopf, Solomon, Berger, & Bleich, 2008).

Recent research on the effects of traumatic events has found that the environment and community in general, and the individual's sense of belonging in particular, may protect the individual from the negative consequences of adversity (Masten, 2001) and

may positively affect coping. A sense of belonging is characterized by mutual concern, connection, loyalty, and trust that personal needs will be met through commitment to the group as a whole (Chavis, Hogge, McMillan, & Wandersman, 1986). A sense of community belonging has been found to facilitate coping with adversity and to moderate pathological responses. Schools and colleges also tend to become communities, providing not only education, but also school bonding and support systems for their students (Kia-Keating & Heidi-Ellis, 2007).

The objectives of the present study were to examine the level of the student posttraumatic symptoms and to examine the contribution of ways of coping and sense of belonging to the college to the severity of PTSD symptoms.

METHOD

Participants

The sample consisted of 500 students at the college, which is situated in an area under recurrent rocket attacks. The students were from three main localities: the town of Sderot ($n = 69$), settlements adjacent to the border of the Gaza Strip (henceforth, referred to as rural settlements; $n = 73$), and localities outside of the confrontation zone ($n = 358$). Although the actual representation of the first two groups in the college was lower (5% and 4%, respectively), we included a larger number of participants from those groups in the study to ensure that they would be represented in the sample.

Significant differences between groups were found in levels of personal exposure to rocket attacks $\chi^2(2, N = 500) = 24.53, p < .01$. Ninety-four percent of the students from Sderot ($n = 65$) had been directly exposed to an attack compared with 88% of those from rural settlements ($n = 64$), and 70% of the students from other areas ($n = 245$). No significant differences were found among the three groups in any of the sociodemographic variables—age, gender, religiosity, year of study, family status, exposure to other traumatic events, and self-reported economic and occupational status. Most of the participants in the overall sample were women (71%, $n = 331$), who ranged in age from 19 to 33 ($M = 25, SD = 2$); the majority of participants were born in Israel (79%, $n = 373$), and 17% ($n = 80$) were born in the Commonwealth of Independent States; most were never married (89%, $n = 420$); 70% ($n = 330$) were in their first year of college, and 30% ($n = 142$) were in their second or third year.

Measures

Posttraumatic stress disorder (PTSD) was measured by the Post-Traumatic Stress Disorder Inventory (Solomon et al., 1993), a self-report scale consisting of 17 statements that correspond to the 17 core PTSD symptoms listed in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV)*; American Psychiatric Association, 1994).

Participants were asked to indicate whether they had the symptom described in each statement, on a scale ranging from 1 (*not at all*) to 4 (*very often*). Participants were identified as having PTSD if they endorsed at least one intrusive symptom (Criterion A), three avoidant symptoms (Criterion B), and two hyperarousal symptoms (Criterion C). In addition, PTSD distress was calculated as the mean number of symptoms endorsed by the participants. The scale has been found to have high convergent validity compared with diagnoses based on structured clinical interviews (Solomon et al., 1993). In the current study, the Cronbach's alpha for the 17 items was .91.

Sociodemographic characteristics identified were gender, age, marital status, education, employment, and economic status. Exposure to attacks was assessed by a question in which participants were asked to indicate whether they had ever been exposed to the rockets (no/yes).

Ways of coping were assessed by the modified version of the COPE questionnaire (Carver, 1997) used by Bleich, Gelkopf, and Solomon (2003) to examine how the Israeli population copes with terror. Participants were asked to indicate how often they used each coping strategy, on a 5-point scale ranging from 0 (*not at all*) to 4 (*a great deal*). Factor analysis with Varimax rotation for the items revealed three distinct factors that explained 62.9% of the variance. The first factor tapped support-seeking activities, and included five items whose loading was over .40 (e.g., talking with others about the situation, and gathering information; $\alpha = .71$). The second factor tapped use of alcohol and medications and

included two items (e.g., use of medications, and/or alcohol). The third factor related to acceptance of the situation, and included two items (e.g., accepting the situation, and continuing to live as if there is no danger).

Sense of belonging to the college was measured by a questionnaire based on Itzhaky's (1995) Sense of Belonging Scale. The current scale consisted of three items: "I feel part of the college," "I like to study at the college," and "I recommend that others study at the college." Participants were asked to indicate the extent to which they agree with each statement, on a scale ranging from 1 (*not at all*) to 4 (*very much*). One overall score for sense of belonging was derived by calculating the mean of the responses to the three items for each participant. The Cronbach's alpha in the current study was .90.

Procedure

Questionnaires were administered to 613 students at the beginning of class, and were collected immediately upon completion. Students were told that they were participating in research on student responses to and coping with the current situation, and their informed consent was obtained. Five-hundred questionnaires were completed (82% response rate).

RESULTS

Place of Residence, Distress, Ways of Coping, and Sense of Belonging

Of the participants in the sample, 9.5% were identified as exhibiting probable PTSD. A significant association was found between place of residence and rates of PTSD, $\chi^2(2, N = 500) = 26.56, p < .01$. Twenty-six percent of the students from Sderot were classified as having PTSD, compared to 6% of those from rural settlements, and 6% of those who resided elsewhere.

A MANOVA with number of PTSD symptoms, ways of coping and sense of belonging as the dependent variables and place of residence as the independent variable revealed a significant main effect for residence: $F(5, 465) = 7.87, p < .001$. Post hoc Scheffe comparisons revealed that students from Sderot (the highest level of exposure) reported the highest levels of PTSD symptoms (see Table 1). However, the level of PTSD symptoms among students from rural settlements was similar to that among students living outside of the area exposed to rocket attacks.

Use of alcohol and medications was low among all three groups, albeit significantly higher among students from Sderot compared to those living elsewhere. A similar picture was found in relation to support seeking. No significant differences were found between the three groups in acceptance of the situation. As Table 1 shows, sense of belonging to the college was highest among students from

Table 1. Means and Standard Deviations of Study Measures According to Place of Residence

Variables	Sderot		Rural settlements		Elsewhere		<i>F</i> (5, 465)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
PTSD	2.13	0.66 ^a	1.67	0.57 ^b	1.69	0.55 ^b	16.91 ^{***}
Ways of coping							
Support seeking	2.01	0.95 ^a	1.80	1.01	1.71	0.90 ^b	2.96 [*]
Use of alcohol and medications	0.51	0.81 ^a	0.30	0.65	0.24	0.91 ^b	4.83 ^{**}
Acceptance	2.18	1.14	2.54	0.95	2.24	1.14	2.39
Sense of belonging	3.40	0.54	3.48	0.50 ^a	3.28	0.63 ^c	3.95 [*]

Note. Means with different subscripts differ significantly. PTSD = Posttraumatic stress disorder.

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

rural settlements, and significantly higher than among students living outside of the area exposed to attacks.

Predicting Levels of Distress: Multivariate Analysis

Hierarchical regression was conducted to identify the contribution of the various study variables to PTSD symptoms. In the first step, the background variables of gender, age, and economic status were entered, as well as level of exposure and place of residence. The combined set of variables explained 36.6% of the variance in PTSD symptoms, $F(10, 443) = 26.57$, $p < .001$. In the regression final model, economic status, place of residence, and level of exposure to attacks contributed significantly to the variance: low economic status ($\beta = -.15$, $p < .001$), living in Sderot ($\beta = .17$, $p < .001$), being a female ($\beta = .10$, $p < .05$), and high level of exposure to attacks ($\beta = .09$, $p < .05$) were associated with higher levels of PTSD symptoms. In addition, high levels of sense of belonging to the community ($\beta = -.16$, $p < .001$) and use of acceptance as a way of coping with the situation ($\beta = -.10$, $p < .001$) were associated with low levels of PTSD, whereas high levels of use of alcohol and medications ($\beta = .35$, $p < .001$), and support seeking ($\beta = .27$, $p < .001$) were associated with high levels of PTSD.

DISCUSSION

The rate of PTSD in our sample (9.5%) was similar to that reported in previous studies conducted among Israelis who had been exposed to terror attacks (Bleich et al., 2003). However, the PTSD rates did not follow the dose-response effect. Whereas the rates for Sderot residents were relatively high (26%), they were substantially lower (6%) for students from rural settlements and for those living outside of the exposed areas. Several explanations can be offered for the high distress among students from Sderot and the resiliency of the students from other settlements in the Gaza Area. Sderot is a peripheral town with limited resources, which has not succeeded in establishing a strong and diverse socioeco-

nomic base, and is usually considered underprivileged (Yiftachel, 2000). In contrast, the rural settlements were originally inspired by ideals of economic and social equality, and mutual help and responsibility. Notwithstanding social changes in recent decades, the rural settlements are still cohesive communities that provide greater material comfort, and have established plans for evacuating members in a deteriorating security situation.

Ways of coping is another possible explanation for the differences in levels of PTSD among Sderot residents versus residents of other areas. The Sderot students showed a greater tendency to use alcohol and medication than did those living outside of the exposed area. The Sderot residents tended to seek more help, which was found to be associated with higher levels of distress.

A higher sense of belonging was associated with lower levels of distress. The existence of the college community seems to contribute to the ability to cope. This finding is consistent with the results of previous studies that found that school bond and peer support serve as protective resources buffering pathological responses (Henrich & Shahar, 2008; Masten, 2001).

Although students from rural settlements reported relatively high levels of belonging, and students living outside of the exposed area reported significantly lower levels of belonging, the latter group seemed better able to cope with the stressful situation (better than students from Sderot). Thus, level of belonging, alone, does not seem to be associated with effectively managing threatening circumstances.

The study suffers from several limitations. Students from Sderot and the rural settlements were overrepresented in relation to the total number of students in the college. Second, this is a cross-sectional study. Because students continue to be exposed to a security threat, it would be worthwhile to examine the extent to which they have learned to cope with the situation over time.

This study has increased our understanding of ways of coping and of the protective roles of college bond and peer relationships—a sense of belonging—among young adults under continuous threat.

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