

RESEARCH ARTICLE

Stress Reactions and Coping Strategies among Bedouin Arab Adolescents Exposed to Demolition of Houses

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Abstract

The aim of this study was to examine emotional reactions and coping strategies of Bedouin adolescents against the backdrop of house demolitions in the unrecognized Bedouin villages in the Negev, Israel. We compared two groups of adolescents living in unrecognized Bedouin villages, teenagers whose houses had been destroyed (acute + chronic group) and their counterparts whose houses had not been destroyed (chronic group). Data were gathered during October to December 2010 from 465 Bedouin adolescents aged 13–18 years. Adolescents filled out self-report questionnaires, which included demographics, objective and subjective exposure to house demolition, state anxiety, state anger, psychological distress and Adolescent Coping Scale. Results show differences between the two groups in stress reactions as well as in objective exposure to house demolition with the acute + chronic group reporting more stress and more exposure. In addition, different variables explained stress reactions in the different groups. Whereas in the acute + chronic group, objective and subjective exposure were the most significant variables, in the chronic group, the coping strategies explained stress with more variance. Results are discussed in terms of differentiating between types of stress, chronic versus acute + chronic and in relation to the interactionist model of coping with stress. Copyright © 2013 John Wiley & Sons, Ltd.

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Keywords

Bedouins; adolescents; house demolition; coping; stress

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Introduction

This study investigates Bedouin adolescents in a stressful situation involving the threat and actual demolition of their homes in the unrecognized Bedouin villages. We aimed to compare two groups of adolescents living in unrecognized Bedouin villages—teenagers whose houses were destroyed (acute + chronic group) with their counterparts whose houses were not destroyed (chronic group)—on different dimensions of exposure to the events as well as on coping strategies and emotional reactions. We wanted to examine coping strategies that could explain emotional reactions as a result of exposure to house demolition in these two groups of adolescents. Our goal was to elaborate upon empirical knowledge regarding coping of adolescents in unique collective stressful events of house demolition, on the basis of the theoretical foundations of stress and coping as well as crisis theories. Implications of such study could lead to the development of models for coping with acute and chronic stress in collectivist traditional cultures.

Research background

The Bedouin of the Negev are a minority group in Israel. They are Muslim Arabs who have inhabited the Negev desert since the 5th century CE. Traditionally, they were nomadic or semi-nomadic tribes; however, during the past half century, they have experienced a rapid and dramatic transition, were settled in regular villages and cities and thus became closer to modern Israeli and Western society. Still, community elders aim to conserve Bedouin tradition (Globman & Katz, 1998).

About half of the Bedouin in the Negev are living in unrecognized villages in the Negev with no infrastructure and no planning committee to approve construction permits. Thus, every house that is built is *de facto* automatically deemed illegal (Abu Saad, 2004), and the government has instituted a massive policy of house demolitions. Additionally, many homes are subject to pending demolition orders, leaving their residents in a constant state of stress due to fear of

actual demolition (Abu Saad, 2010). Except for schools and nurseries, there are no governmental services in these villages, and usually living condition is quite poor (Slater & Alkrenawi, 2004).

The stressful situation that we examine in the present study involves the relationship of the minority group members who live in the unrecognized village, with their own state. It is a complicated situation in which those who build houses in these villages have broken the law while the government, enforcing the law, demolishes their home and thus deprives these citizens of their most private and important asset.

Our conceptual framework involves the interactionist theory proposed by Lazarus and Folkman (1984), which claims that a stressful situation, such as demolition of houses in the present study, is a trigger for interaction between the person and the environment. When a person confronts such a situation, it activates cognitive appraisal, which is followed by secondary appraisal to evaluate which resources are available for the person to deal with the situation. The selected coping behaviour is a result of the appraisal and leads to reactions to the situation. Furthermore, the stress and coping process can be affected by culture. The conservation of resource (COR) theory considers both environmental and internal processes as important when facing stress. Therefore, these processes are embedded in social context and are nested within cultures (Hobfoll, 2001). The cultural context shapes the type of stressors experienced by the individual—in this case 'house demolition'—and may affect the appraisal of the event and the choice of coping strategies (Aldwin, 2008).

Exposure to house demolition

Objective exposure

Exposure to violent events is expected to increase risks for both short-term and long-term emotional problems. When investigating mental health outcomes in the context of collective stressful events, most research to date has quite naturally considered direct, physical exposure to the event/s as being an important factor in determining youth's subsequent emotional and behavioural problems. Several studies have demonstrated that higher levels of physical exposure elicit more adverse psychological reactions (e.g. Wu, Yin, Xu, & Zhao, 2011). Additionally, forced displacement was found to be related to more distress, instability and lack of resources (Slone, Shoshani, & Paltieli, 2009; Thomas & Thomas, 2004). Despite these results, other studies suggest that during acute stress situations, the levels of distress are alleviated once the acuteness diminishes, and the stress symptoms are relieved (Sagy & Antonovsky, 1986).

An additional component of exposure relates to indirect exposure via a relationship with someone who was hurt by the events. Studies have shown that children and adolescents who were acquainted with

a victim experienced more stress-related symptoms than those who did not know a victim (Pfefferbaum, North, Doughty, Gurwitch, Fullerton & Kyula, 2003).

Moreover, *subjective experiences of exposure* of collecting reports of peritraumatic reactions, worries for safety of significant others or reports of fear have been found to be significant predictors of post-traumatic stress disorder and other psychological difficulties (Braun-Lewensohn, Celestin-Westreich, Celestin, Verte, & Ponjaert-Kristoffersen, 2009; Laufer & Solomon, 2010; Pfefferbaum et al, 2003; Solomon & Lavi, 2005).

As both types of exposures seem to affect adolescents when facing diverse potential traumatic events, we would like to examine if exposure to house demolition affects adolescents in similar ways.

Coping strategies as explanatory variables

Coping strategies have been generally found to mediate the relationship between exposure to stress and psychological outcomes. Most models of coping assume that individuals who cope more effectively with stressful life events show lower levels of anxiety or depression (Lazarus & Folkman 1984). Thus, different studies show that emotionally focused strategies tend to be associated with more psychological problems whereas problem-solving strategies or active coping tend to be linked more to well-being (Lewis & Frydenberg 2002). Adolescents are at the stage of developing personal styles of coping. This developmental period also introduces abilities to deal with sources of conflict or stressful events in a variety of contexts (Liu, Tein, & Zhao, 2004).

When attempting to understand the psychological implications of adolescent exposure to collective stress, cross-cultural studies suggest the relevance of a coping perspective for our insight into the dynamics through which these experiences affect youth's well-being (Gil & Caspi 2006). Several studies in the last decade indicated the cross-cultural importance of coping strategies during or following collective stressful events. Variations among different cultures have been found mainly in the choice of coping strategies. For example, Palestinian adolescents reported using more of the coping strategies expect physical recreation and relaxation strategies compared with their European and Australian counterparts (Frydenberg, Lewis, Kennedy, Ardila, Frindte, & Hannoun, 2003). On the other hand, a study which compared Chinese and Canadian adolescents concluded that both groups used approximately the same strategies because of globalization processes and changes in the Chinese society, which is becoming more Western (Auerbach, Abela, Zhu, & Yho, 2010). Oláh (1995), who examined cultural differences in the use of coping strategies as result of specific stressful situations, concluded that the situation

was more significant in choice of coping style than cultural indicators.

In the present study, we will explore the coping strategies that Bedouin adolescents use when facing a unique situation of stress: demolition of their houses.

Acute + chronic versus chronic stress

In this study, we have chosen to differentiate between two types of stress situations: acute + chronic versus chronic stress. Those who live under the threat of house demolition suffer from a chronic stress situation, whereas those whose houses have been demolished cope with an acute stress situation added to the chronic stress. Crisis theories (e.g. Caplan, 1964) consider the impact of an acute stressful event as minimizing or even eliminating individual differences in emotional responses. Thus, the acute, unexpected event seems to overwhelm coping resources for all those affected. On the other hand, in the chronic situation, which is more similar to a 'normal' stressful life (Antonovsky, 1987), the coping resources can be more significant in reducing emotional responses. Some empirical support for this differentiation has been found in several studies among Israeli adolescents who were exposed to various stress situations (e.g. Sagy & Antonovsky, 1986; Sagy, 2002; Sagy & Braun-Lewensohn, 2009). The present study aims to elaborate the empirical knowledge regarding the special situation of house demolition in differentiating between these types of stress.

Stress reactions

The literature suggests that exposure to an acute unexpected event is likely to result in strong emotional reactions such as anxiety and psychological distress. However, regarding chronic exposure to stress or threat of stressful events, the literature is inconsistent. Several studies have stated that by being exposed to prolonged stressful events, a person becomes habituated; thus, over time, his or her reactions will become milder (Cairns & Dawes, 1996; Dawes, 1994; Punamaki, 1996). On the other hand, a pathogenic approach suggests that being exposed to chronic stressors is a risk factor for developing major psychological distress for longer terms (Baker & Shalhoub-Kevorkian, 1999; Elbedour, Onwuegbuzie, Ghannam, Whitcome, & Abu Hein, 2007; Heptinstall, Sethna, & Taylor, 2004; Macksoud & Aber, 1996). Examining Bedouin adolescents in Israel during 'Operation Cast Lead' (an acute stress situation) and 6 months later (chronic stress), we found anxiety, anger and psychological distress at the upper end of the scale in both stages of the research. Although no significant difference emerged in anxiety and anger in the two stages, psychological distress was reported as more severe during the chronic stress situation (Braun-Lewensohn, & Sagy, 2010a, 2010b). Overall, it seems that Bedouin Arabs like other minorities in Israel and around the world seem to be more vulnerable for developing

symptoms of distress compared with the majority population when facing acute or chronic types of stress (Abu-Kaf & Priel, 2012; Weem et al., 2010; Yahav & Cohen, 2007).

Coping strategies

Coping strategies were also investigated during chronic and acute stress situations. In these cases, findings were not consistent. Whereas several studies found that during acute violent situations (with political background) emotional coping strategies of denial and distancing were used more frequently (Cairns, 1987), in other cases, problem-solving strategies were used most often (Braun-Lewensohn et al. 2009; Braun-Lewensohn, Sagy, & Roth, 2010). Aspinwall and Taylor (1997) suggested that, during chronic stressful conditions, coping becomes more proactive, meaning that the strategies are more general efforts, which are 'undertaken in advance of potentially stressful event to prevent it or to modify its form before it occurs' (Aspinwall & Taylor, 1997, p. 417). In an acute stress situation, for a short-term uncontrollable situation, emotional coping such as avoidance might be helpful (Aldwin & Brustrom, 1997). However, in the long run, regardless of the type of situation (chronic or acute), most research on coping suggests that problem-focused strategies are beneficial for primary controllable situations of stress whereas emotion-focused strategies better fit uncontrollable stressful situations (Jaser et al., 2007). In Israel, studies show that problem-solving strategies serve as protecting factor whereas emotional coping is maladaptive in different cultures (Jews and Arab) and across situations (e.g. Braun-Lewensohn et al., 2010; Braun-Lewensohn et al., 2009).

Demographic factors

Demographic factors such as gender, age and socioeconomic status (SES) have been frequently studied regarding their role in explaining stress reactions (e.g. Finkelstein, Kubzansky, Capitman, & Goodman, 2007).

Gender

Most studies confirm the role of gender, with girls being generally found to report more internalization of difficulties compared with boys who report more problem externalization (e.g. John, Russell, & Russell, 2007).

Age

Research generally finds age as an indicator of stress reactions following collective stressful events, with younger children or younger adolescents exhibiting more distress than older children or older adolescents (e.g. Mels, Derluyen, Broekaert, & Rosseel, 2010). However, this effect merits further study since findings are not necessarily consistent. Different studies found that younger children were less vulnerable than early adolescents whereas other studies found no age effects

when comparing early and older adolescents (John et al., 2007).

Socio-economic status and coping with stress

The role of SES as a differential factor among adolescents is well documented. It appears that adolescents who come from low SES have fewer psychological resources for meeting the requirements of their challenging environment (Finkelstein, et al., 2007). However, results regarding the relationships between SES and health or mental health outcomes are not conclusive (Piko & Fitzpatrick, 2007).

Study's questions and hypotheses

In the present study, we examined the way Bedouin adolescents from the unrecognized villages in the Negev cope with the stressful situation of house demolition. Our research questions and hypotheses are as follows:

- (1) Are there differences between adolescents whose houses were not destroyed (chronic stress group) and adolescents whose houses were destroyed (acute + chronic stress group) on the different variables of the research: objective and subjective exposure, coping strategies, state anxiety, state anger and psychological distress? On the basis of the crisis theory (Caplan, 1964), we hypothesized that adolescents whose houses were destroyed will be more objectively and subjectively exposed, and will react with more anxiety, anger and psychological distress (scale of psychological distress) than those whose houses were not destroyed. Regarding use of coping strategies, we hypothesize that Bedouin adolescents from both groups will use mostly problem-solving strategies (Braun-Lewensohn et al., 2010).

- (2) Do the different demographics, exposure variables and coping strategies explain stress reactions in the two groups of adolescents in the same way? We hypothesize that the exposure measures will be significantly related to stress reactions in the acute + chronic stress group whose houses were destroyed, whereas coping strategies will be stronger relative to stress reactions in the chronic stress non-destroyed house group (Sagy & Braun-Lewensohn, 2009). All demographics are expected to explain stress reactions in the same way in both groups. Girls and youth from low SES are expected to report more stress reactions (John et al. 2007; Piko & Fitzpatrick, 2007), whereas age is expected to have no effect (John et al., 2007).

Method

Participants

Four hundred and sixty-five Bedouin adolescents aged 13–18 years ($M = 15.78$, standard deviation = 1.08) living in 19 unrecognized villages in southern Israel participated in the study. No inclusion or exclusion criteria were used apart from age. Fifty percent of the sample ($n = 233$) reported that their houses had been destroyed; 74.8% reported their house was destroyed up to a year ago whereas 25.2% reported that house was destroyed more than a year ago. A demographic description of each group is presented in Table I.

Procedure

Permission to administer the questionnaires in schools was obtained from the Central Scientist Committee. The third author administered the questionnaires during October to November 2010 during regular class periods. All participants were informed

Table I. Gender and fathers' and mothers' education of the different groups

	Unrecognized destroyed		Unrecognized non-destroyed		χ^2
	<i>N</i>	%	<i>N</i>	%	
Father's education					3.72
Did not attend school	41	9.3	37	8.4	
Elementary school	47	10.6	50	11.3	
High school	84	19.0	68	15.3	
Secondary education	27	6.1	36	8.1	
University degree	24	5.4	29	6.5	
Mother's education					20.05***
Did not attend school	95	21.4	57	12.8	
Elementary school	73	16.4	86	19.4	
High school	34	7.7	61	13.7	
Secondary education	14	3.2	8	1.8	
University degree	9	2.0	7	1.6	
Gender					20.41***
Male	90	19.5	141	30.2	
Female	139	30.2	91	19.7	

$p < 0.001$ ***.

that the researchers were interested in their experiences, and anonymity was emphasized. Few students (i.e. 10% or 2%) chose not to participate or withdrew before completing all of their questionnaires. Many participants expressed enthusiasm while completing the questionnaires, mentioning that they were glad to have an opportunity to share their experiences. All questionnaires were administered to the adolescents in their native tongue—Arabic. The questionnaires were translated into Arabic by an Arabic teacher and back translated by the third author to assure accuracy of the translation.

Measures

Demographic background data were collected relating to gender, age and parents' level of education as indicators for SES. Each student reported separately his or her father's and mother's education on a scale from 1 (*did not attend school at all*) to 5 (*academic degree*). Additionally, adolescents reported if their parents were working or not.

Objective exposure was assessed by a yes or no questionnaire, which was especially designed for the purpose of this study. Respondents were asked to report whether someone they know was hurt in a demolition, whether they know someone whose house was destroyed, whether their parents had paid a fine for illegal building and whether someone from their family had been arrested as a result of resistance to the demolition. The sum of the different items is used as an index of objective exposure, with higher sum scores reflecting increased exposure.

Subjective exposure was assessed by five questions scored on a four-point Likert scale. Adolescents reported their fear and danger of house demolitions for themselves, for their close family and extended family, for their friends and for people in their villages. Answers ranged from 'not dangerous at all' to 'very dangerous'. The sum of the questions is used in the present study as subjective exposure index with higher sum scores reflecting increased subjective exposure. In the present study, $\alpha = 0.78$.

Coping strategies were measured by the Adolescent Coping Scale (Frydenberg & Lewis, 1993). The specific form allows to measure how adolescents cope with the experience of actual or threat of house demolition. The short form is composed of 18 items on a five-point scale. The items are collapsed into three global coping styles: problem-solving coping, reference to others and non-productive coping. In the Israeli context (since 'reference to others' is consistently unreliable), the three scales were reduced to two scales: problem solving ($\alpha = 0.60$) and non-productive emotional coping ($\alpha = 0.62$). Higher scores reflect more usage of particular way of coping.

State anxiety (Spielberger, Gorsuch, & Lushene, 1970): This scale consists of 11 items on a four-point Likert scale [1 (*almost never*) to 4 (*almost always*)].

Examples of questions are as follows: I feel peaceful, I am afraid of disasters and I am worried. The mean score was used, and higher scores reflect more anxiety. Cronbach's α reliability was 0.85.

State anger (Spielberger et al., 1970): This scale consists of six items on a four-point Likert scale [1 (*almost never*) to 4 (*almost always*)]. Examples of questions are as follows: I am angry, I want to scream at someone and I feel frustrated. The mean score was used, and higher scores reflect more anger. Cronbach's α reliability was 0.89.

Psychological distress is a five-item psychosomatic symptom scale on a four-point Likert scale [1 (*never*) to 4 (*very frequently*)], referring to frequency of occurrence of familiar symptoms (e.g. headaches and stomach ache). The scale was developed by Ben-Sira (1979) and was elaborated by Sagy for use in a population of children (Sagy & Dotan, 2001). In the present study, the mean score was used with higher score reflecting more distress. Cronbach's α was 0.78.

Results

The exposure level to house demolition among the population of the present study is high. Half of the sample reported their houses had been destroyed; a majority (92%) knew someone whose house was destroyed, and 82% knew someone who was physically hurt as a result of house demolition. Only 4% reported no exposure to any aspect of the five parameters of house demolition.

Differences between the groups (destroyed/non-destroyed) on the study's variables are presented in Table II. Results show significant differences on all stress reactions as well as objective exposure with adolescents whose houses were destroyed reporting more stress and more exposure.

Evaluation of the path analysis model

We used AMOS 5.0 (Arbuckle & Wothke, 1999) with maximum likelihood estimation to test the hypotheses that the different demographics, exposure variables and coping strategies would predict stress reactions. We used multi-group analysis to compare the effect of the different demographics, exposure variables and coping strategies in each group. Each of these variables was used separately as a manifest variable. For stress reactions (the dependent variable), a latent variable was created using the three dimensions of stress reactions as indicators (i.e. state anxiety, state anger and psychological distress).

Model fit to the data was assessed using the ratio of chi-square to degrees of freedom (χ^2/df), incremental fit index (IFI; Bollen, 1989), comparative fit index (CFI; Bentler, 1990) and root mean square error of approximation (RMSEA; Browne & Cudeck, 1993). Acceptable fit is indicated by a χ^2/df ratio as high as 5 (Marsh & Hocevar, 1985), IFI and CFI equal to or greater than 0.90 and RMSEA less than 0.08 (Browne & Cudeck, 1993).

Table II. Mean, SD and *t* values of the study variables

	Non-destroyed homes		Destroyed homes		<i>t</i> value
	N = 232		N = 233		
	M	SD	M	SD	
State anxiety (1–4)	2.91	0.62	3.26	0.53	−6.53***
State anger (1–4)	2.61	0.88	3.26	0.79	−8.28***
SPD (1–4)	2.71	0.81	2.71	0.81	−8.04***
Objective exposure (0–4)	1.99	1.05	3.20	1.00	−12.64***
Subjective exposure (5–20)	18.21	2.25	18.38	2.36	−0.79
Problem solving (1–5)	3.31	0.70	3.27	0.63	0.84
Emotional coping (1–5)	2.98	0.74	3.05	0.66	−1.03

SPD: scale of psychological distress.

$p < 0.001$ ***.

The indices were adequate for the overall model— $\chi^2_{(16)} = 57.7$, $p < 0.001$; $\chi^2/df = 3.60$; $CFI = 0.92$; $IFI = 0.93$; $RMSEA = 0.07$.

Since none of the demographic variables—mother's and father's education, gender and age—were significant in explaining stress reactions in any group, these variables were dropped from the final model. Additionally, preliminary analysis examined the effect of 'time since demolition' on stress reactions in the group of adolescents in which their houses were demolished, and found insignificant effect ($\beta = -0.10$, $p = 0.085$) (Figures 1 and 2).

Overall, the different exposure variables and coping strategies were linked to stress reactions in the same direction in both groups. However, meaningful differences were found. Firstly, the overall variance explained for those whose houses were destroyed was higher (29%) than those of the non-destroyed group (16%). Furthermore, comparison of effects of the different exposure variables and coping strategies on stress was examined by comparison of a nested model. Thus, equality constraint among groups was assigned for each effect allowing comparison of the constrained model fit to the free model fit. Statistical differences were found for all variables: objective exposure ($\chi^2_{(18)} = 712.8$); $\Delta\chi^2(2) = 655.1$; $p = 0.00$; subjective exposure ($\chi^2_{(18)} = 1430.4$); $\Delta\chi^2(2) = 1372.7$; $p = 0.00$; problem-solving coping ($\chi^2_{(18)} = 578.7$); $\Delta\chi^2(2) = 521$; $p = 0.00$; and emotional coping ($\chi^2_{(18)} = 436.8$); $\Delta\chi^2(2) = 379.1$; $p = 0.00$.

Whereas objective (0.35) and subjective (0.30) exposures were the strongest indicators of stress reactions for adolescents whose houses were destroyed, objective exposure was weaker for the non-destroyed group (0.17), and subjective exposure was not significant at all in its explanation of stress in this group.

When looking at the coping strategies, the picture is inverted. The coping strategies had more explanatory power for the non-destroyed group. Emotional coping had adverse results (non-destroyed 0.35; destroyed group 0.16) mostly for the non-destroyed group. Problem

solving in turn had a positive effect but was only marginally significant ($p = 0.06$) in the non-destroyed group (−0.13).

Discussion

The aim of our study was to explore stress reactions of anxiety, anger and psychological distress as well as coping strategies among Bedouin Arab adolescents who were being exposed to the threat of house demolition in the unrecognized Bedouin villages. We compared two groups of adolescents—those whose houses had been destroyed (acute + chronic stress situation) and those whose houses had not been destroyed (chronic stress situation)—on several variables: objective and subjective exposure, coping strategies and emotional reactions.

As expected (hypothesis 1), adolescents whose houses had been destroyed reported more objective exposure as well as stronger stress reactions but not subjective exposure. In the present study, the high levels of subjective exposure in both groups might be due to the ongoing vagueness of house demolitions in these villages. As mentioned earlier, every house in the unrecognized villages is illegal and thus subject to potential destruction (Abu Saad, 2010). This uncertainty could lead to very high levels of subjective exposure and fear in both groups regardless of the actual act of house demolition. Another explanation is based on the COR theory, which states that although stress is partially founded in one's own perception, it is primarily embedded in reality within cultures (Hobfoll, 2001). The higher levels of stress reactions among the 'destroyed houses' group seem to corroborate the COR theory of resource loss (Hobfoll, 2001). However, although the acute + chronic group suffered more distress, both groups reported relatively high levels of stress reactions. Perhaps the ongoing regular difficulties of living in a conflicted situation in their own country by living in unrecognized villages, as well as the low socio-economic level, which characterizes this population, can cause major stress. Moreover, it is possible

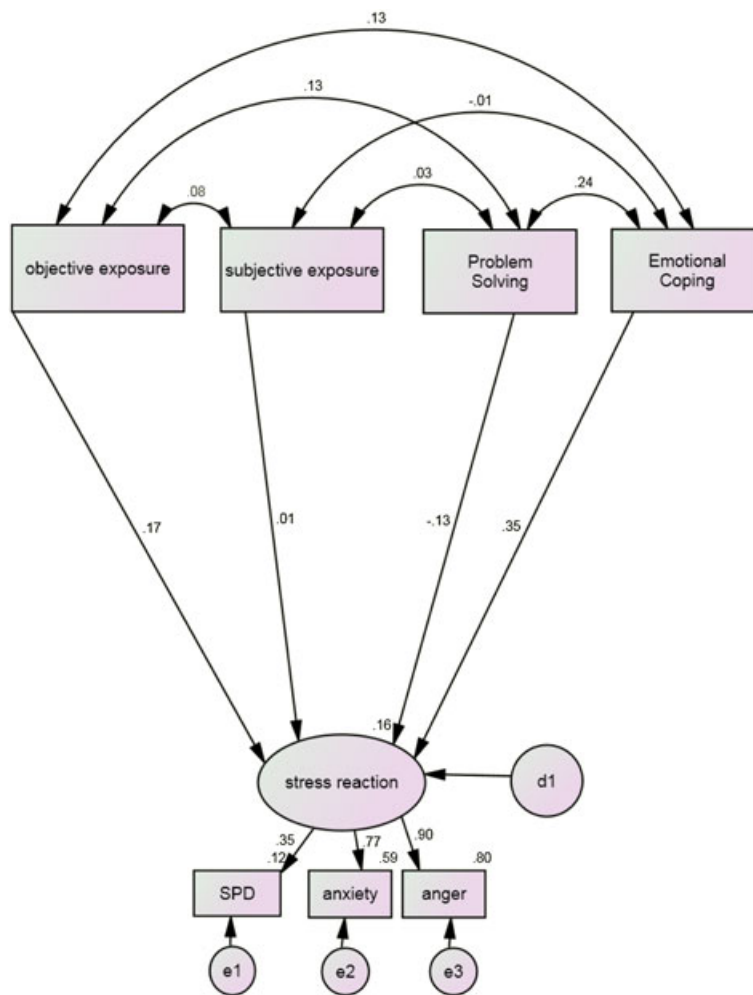


Figure 1 Exposure and coping as explanatory factors of stress reactions among Bedouin adolescents whose houses were not destroyed in the unrecognized Bedouin villages; *N*231

that the frustration of not being able to help those whose houses were destroyed, and feelings of powerlessness to deal with the situation, led to high levels of stress reactions in both groups.

We further compared the two groups on usage of coping strategies, and as per the hypothesis, no differences emerged. Similar to other Israeli samples (Braun-Lewensohn et al., 2009), Bedouin adolescents of this sample used mostly problem-solving strategies. It seems that living in the same environment in the same cultural context (Hobfoll, 2001) and under similar kinds of stress led these two groups of adolescents to use approximately the same coping strategies.

Our second question related to the role of the different demographic variables in explaining the emotional reactions. Contrary to our hypothesis, none of the demographic variables played a significant role in any group. As the social norm in Bedouin society is that men and adolescent boys are expected to protect their

family, this situation left the boys helpless, since there is no way for them to protect their families from the demolition of a house. As for age, it might be that older adolescents are more intensively exposed and the society has more expectations from them. Thus, the developmental stage, which seems to be a protector, fades out. Finally, it seems that the low SES of the entire sample did not leave room for enough variability for SES to explain stress. To summarize, the demographic variables did not explain stress in either group.

In accordance with the second hypothesis, significant differences were found between the groups with respect to the links between exposure, coping and 'stress reactions'. Both objective and subjective exposures explained stress reactions differently in the two groups. In the acute group, objective and subjective exposures were significantly more strongly related to stress reactions than in the chronic stress group. It could be that the situational determinants of exposure

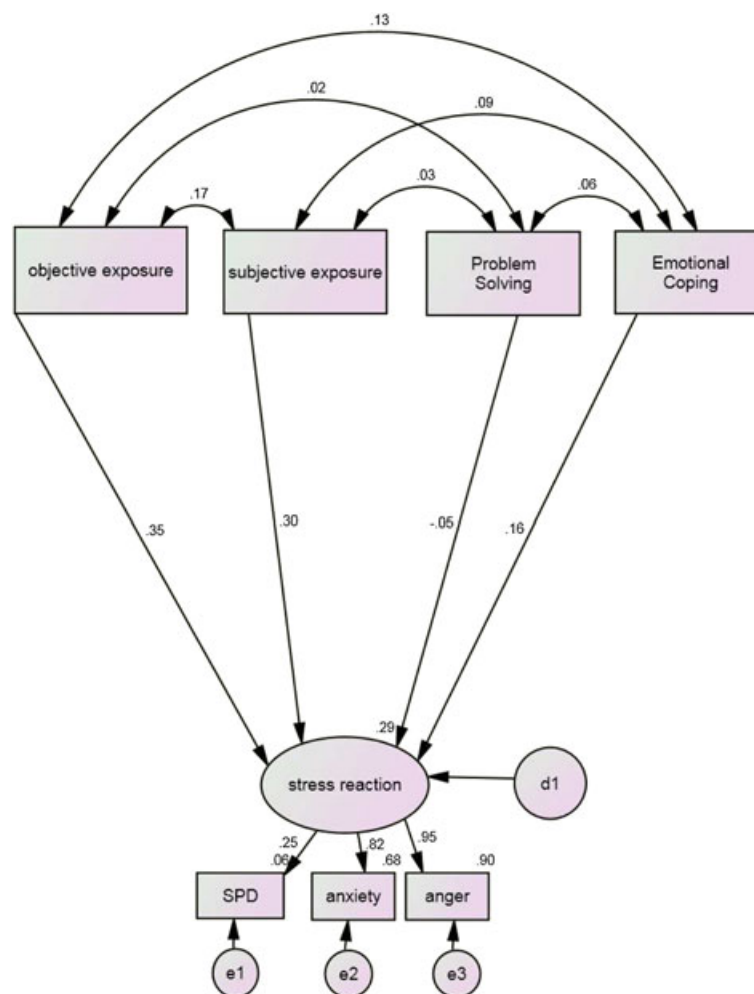


Figure 2 Exposure and coping as explanatory factors of stress reactions among Bedouin adolescents whose houses were destroyed in the unrecognized Bedouin villages; $N = 233$

are not as meaningful for the chronic group as they are for the acute + chronic group. These results fit with crisis theories (e.g. Caplan, 1964), which suggest that the actual situation in the state of acute stress is so overwhelming that the exposure itself plays the most significant role.

Regarding coping, overall for both groups, the non-productive emotional coping strategies were positively linked to the psychological reactions, meaning that the greater the use of emotional coping, the more severe anxiety, anger and psychological distress were reported by Bedouin adolescents. However, no significant link was observed between problem-solving coping and stress reactions. These results could be explained by the salutogenic model (Antonovsky, 1987), which suggests that a chronic stress situation resembles 'normal' life; thus, coping resources will be more significant in explaining stress reactions. Although it seems that both groups were suffering from chronic stress, the acuteness of the situation for those whose houses were destroyed is another stratum added

to the chronic stressful situation in which these youngsters found themselves (Sagy, 2002). In acute + chronic stress, both exposure and coping strategies are moderately related to stress. These results allow us to add to the knowledge evolving from studies relating to acute and chronic stress situations and to support this differentiation: In the acute stress situation, the situational determinants (objective exposure) and the appraisal (subjective exposure) appear to be significantly related to stress. When the stress becomes chronic, the personal resources such as coping are significantly related to stress reactions (e.g. Sagy & Antonovsky, 1986; Sagy, 2002; Sagy & Braun-Lewensohn, 2009).

Strengths and limitations

The uniqueness of this research is in the special population of adolescents from unrecognized villages in the Negev. For the first time, a large representative sample of these adolescents were asked in their own language about coping with the difficult and

stressful situation of house demolition. Additionally, the questionnaires were distributed by a Bedouin counsellor who is familiar with the population (the third author).

However, one should also take the limitations of this study into account. Firstly, the data were based only on reports of teenagers. Thus, the collected data are subjective and retrospective. Secondly, since we do not have base rate information regarding the level of anxiety, anger and psychological distress prior to the study period, we cannot with certainty ascribe outcomes solely to the impact of house demolition. Thirdly, although accepted, relatively low reliabilities were observed on the two coping scales, calling for cautiousness on sensitivity to cultural differences. Finally, we should also consider the cross-sectional nature of this study as another limitation.

Conclusion

The main goal of this study was to understand how exposure and coping strategies relate to psychological difficulties when facing an ongoing threat of house demolition. Our study found that among the

acute + chronic stress group, experiences of actual exposure to house demolition were the strongest factors related to stress reactions. The coping strategies, however, overall, were similarly related to stress responses in both groups.

Our results add further support to the importance of developing a model of differentiation between various types of stress. For those whose houses had been destroyed, the situation was acute, in addition to their chronic state of stress; thus, the situational factor was more powerful. For those who were experiencing the chronic threat of house demolition, but with no acuteness, the personal coping strategies were more powerful. Nevertheless, in both groups, emotional coping strategies were linked to more anxiety, anger and psychological distress. Thus, intervention and prevention programs should target facilitating coping strategies, which can help adolescents adjust in such a crisis. Future research should address other individual, familial and communal coping resources, which might contribute to further understanding of stress reactions under the threat of house demolition.

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