Psychological distress and resources among siblings and parents exposed to traumatic events

Raija-Leena Punamäki
University of Tampere, Finland

Samir Qouta and
Eyad El Sarraj
Gaza Community Mental Health Program, Gaza, Palestine

Edith Montgomery
Rehabilitation and Research Center for Torture Victims, Copenhagen, Denmark

We examined symmetries and asymmetries within family members’ psychological distress and resources in general and when exposed to traumatic events in particular. PTSD and depressive symptoms indicated distress and resilient attitudes, and satisfaction with quality of life indicated resources. We also analysed potential complementary dynamics between family members and identified family types according to their distress and resources. Concerning trauma impact, we hypothesized that exposure to family military violence (FMV) and recent personal trauma (RPT) predict family members’ psychological distress and resources differently, indicating asymmetry in family responses. The participants were 65 Palestinian families each consisting of a mother, a father and their 15-, 17- and 19-year-old children. The within-family MANOVA results showed asymmetric in psychological distress and resources in sibling and spousal subsystems, for example older siblings reported a higher level of depressive symptoms than both parents, and mothers reported PTSD more often than fathers. The cluster analysis identified four family types, two with symmetric responses: In the “resilient families” all members showed low distress and high resources, and in the “ordeal families” all showed distress and low resources. In the asymmetric families either the children or the parents showed low distress and high resources, named the “children’s strength families” and the “parental strength families”, respectively. Partial correlation analysis revealed complementary dynamics between children and their parents: If mothers reported high levels of psychological distress, the 15- and 17-year-olds reported low or vice versa. Spousal complementary dynamics were found in psychosocial resources: If the mother showed highly resilient attitudes, the father showed low or vice versa. As hypothesized, exposure to traumatic events was differently associated with family members’ psychological distress and resources. Family military trauma (FMT) predicted depressive symptoms only among the youngest siblings, and recent personal trauma (RPT) was associated with dissatisfaction with quality of life only among the oldest sibling and fathers.

Keywords: family systems theory; psychological distress; resiliency; trauma

In the Middle East, war is sometimes called an uninvited guest in the family. Its onset means loss of loved ones, witnessing death and destruction, accompanied with feelings of fear, anger and despair. The participants of this study are Palestinian families whose lives have been shadowed by war, and refugee and military violence across three generations. According to family systems theory (Minuchin, 1974; Watzlawick, Beavin, & Jackson, 1967), family members respond to trauma as a system, in which each member’s behavior, emotional expression and cognitive strategies are crucial for maintaining the integrity and cohesion of the whole family and each member’s wellbeing. War and military violence place excessive burdens on family functioning, and there are abundant descriptions about dysfunctional communication, compensation dynamics and symptom expression in traumatized families (Jaffa, 1993; Lichtman, 1984; Riggs, Byrne, Weathers, & Litz, 1998; Weine et al., 2004). Others emphasize functional family responses indicating that when facing life danger and trauma, families attempt to restore their resources, maintain integrity and balance, and express compassion (Masten & Coatsworth, 1998, Punamäki, 1987). However, empirical evidence is lacking about the impact of trauma on the family as a whole and considering both dysfunctional and functional responses. This is where our study attempts to contribute by examining the general and trauma-related symmetries and asymmetries in distress and resources in Palestinian families consisting of quintets of father, mother and three of their children.

Trauma and family responses

A family can be conceptualized as parents’ and children’s subsystems that vary in the degree of symmetry and asymmetry in their responses and interactions (Bateson, 1978; Cummings, Davies, & Campbell, 2000; Watzlawick et al., 1967). Families show high symmetry when all members respond to trauma similarly, for example when both children
and parents suffer from a high level of symptoms and lack access to positive resources. On the other hand, traumatized families show asymmetry when there is "a share of work" in expressing vulnerabilities and strengths. For instance, one of the parents and one of the children may show severe distress and lack resources, while other members are resilient, resourceful and without distress. The family systems theory has hardly been applied in trauma research, although researchers emphasize that the effects of trauma can be understood better through a family's typical coping efforts, adaptation styles and shared expression of pain than through focusing only on psychiatric distress and symptoms (Danieli, 1980; Figley, 1989; Harkness & Zanor, 2001; Weine et al., 2004).

Research showing similarities in the severity of PTSD and depressive symptoms among siblings and parents in traumatized families provides examples of members' symmetric vulnerability to trauma. Familial mental illness has been found to be one of the main risk factors for PTSD among war veterans (Davidson & Mellor, 2001; Davidson, Tupler, Wilson, & Connor, 1998) and in community samples (Ozer, Best, Lipsey, & Weiss, 2003; Punamäki, Qouta, Komproe, El Marsi, & De Jong, 2005). Further, Yehuda with her team has shown that a risk of PTSD is higher among children of Holocaust survivors if either of their parents also suffers from PTSD (Yehuda, Halligan, & Bierer, 2001; Yehuda, Schmeidler, Giller, Siever, & Binder-Brynes, 1998). Research on war veterans has revealed that when the father suffers from PTSD, both the mother and children report high levels of PTSD or other psychiatric symptoms (Westerink & Giarratano, 1999).

Finally, research among families living under war conditions shows correlations between the mothers' and their children's depressive symptoms (Smith, Perrin, Yule, & Rabe-Hesketh, 2001; Qouta, Punamäki, & El Sarraj, 2005), thus suggesting similarity or symmetry between family members' responses to trauma. The reasons for symmetric symptom expression have been explained by contamination of fear, generalization of anxiety and worry about each other's safety (Laor et al., 1997; Qouta et al., 2005), as well as by underlying genetic vulnerability (Yehuda et al., 1998).

Asymmetric and complementary dynamics between members of traumatized families are frequently discussed in clinical literature and qualitative case reports. They reveal fundamental changes in role distribution, emotional expression and communication (Abrams, 1999; Jaffa, 1993; Weine et al., 2004). Traumatized and persecuted families tend to assume clear roles and strict share of work in showing strengths and weaknesses in order to survive and maintain a balance in turmoil. In “the emotional share of work” each family member's response is regulated by other members' distress or strength (Almqvist, 2000; Punamäki, 1987; Weine et al., 2004). The asymmetries may occur in sibling subsystems, when, for instance, children in refugee families assume distinct roles, one of them being “the sunshine child”, the other “the savior” and the third “the consoler”. All these roles indicate positive resources, whereas one of the children may be the “symptom carrier” or scapegoat, expressing vulnerability and distress (Almqvist & Hwang, 1999; Hobfoll et al., 1991; Punamäki, 1987). These observations concur with research revealing differences between children's response to parental depression (Moser & Jacob, 2002) and marital conflict (Cummings et al., 2000, p. 260).

The asymmetries may further occur between parental and child subsystems. In traumatized families both parents and children intensively worry about each others' security and thus generational boundaries can diffuse (Jaffa, 1993; Montgomery, Krogh, Jacobsen, & Lukman, 1992; Weine et al., 2004). For instance, the wife and children of a torture survivor may dedicate all their efforts to protect the father from further stress and hide their own anxiety. Jaffa (1993) described a “parental child” that assumes the role of a suffering adult and becomes responsible for nurturing and caring for siblings in the traumatized families. “Parentification” is an extreme form of change of family roles, where children take over the caring and supporting tasks of parents, who are incapable of doing so due to their mental health or other problems (Chase, 1999; Zahn-Waxler & Radke-Yarrow, 1990). In war-traumatized families children have witnessed the humiliation of their parents and felt their inability to protect them. It may explain the children's engagement in political struggle and willingness to compensate for the familial humiliation by the enemy (Baker, 1990). Similarly refugee children tend to take the responsibility for their persecuted families and guide their parents in facing new stressors and demands for adjustment. Parents in turn perceive their children as the exclusive source of hope for a better life and live through the children's achievements (Almqvist, 2000; Weine et al., 2004).

The motive for the strict hierarchies and role reversals in traumatized families is to maintain balance and secure survival and wellbeing. When one family member is weak and suffers from psychological distress, others compensate by showing resiliency and positive adaptation. These asymmetries pose a risk for mental health and child development because of their inadequate timing and inflexibility. Observations among war veterans and refugee families show that responses that were functional in the time of life danger turn out to be dysfunctional in family life, because they demand intimacy and sharing rather than hardness and numbing of emotions (Almqvist & Hwang, 1999; Catherall, 1997; Riggs et al., 1998). Parents' emotionally loaded expectations of children as “saviours” can burden resilient children's development and deprive them from other roles.

Psychological distress and resources

A majority of the general and war-related trauma research has applied a psychopathological orientation (for review, Shalev & Yehuda, 1998; Breslau, 2002). There is ample evidence that traumatic events of war and military violence are associated with PTSD and depressive symptoms among children (Kuterovac-Jagodic, 2003; Sack, Clarke, & Seeley, 1995; Thabet & Vostanis, 1999; Weisenberg, Schwarzwald, Waysman, Solomon, & Klingman, 1993) and adults (Solomon, Kotler, & Mikulincer, 1988; De Jong et al., 2001). Similarly, traumatic experiences increase negative family characteristics such as poor parenting (Barber, 2001; Punamäki, Qouta, & El Sarraj, 1997), marital conflicts (Riggs et al., 1998) and dysfunctional family communication (Garbarino & Kostelnky, 1996).

Less research is available about families' strengths and resources under traumatic stress. There are, however, observations that trauma victims make great efforts to improve their resources in order to maintain wellbeing and integrity. They report positive changes in themselves, such as deepened spirituality, appreciation of life and human relationships, which are conceptualized as posttraumatic growth (Garbarino,
Evidence is available of resilient children who successfully adapt despite of stressors and adversities (Rutter, 1985), overcome hardships and trauma, achieve developmental competences and even blossom in harsh conditions (Luthar, 1993; Masten, & Coatsworth, 1998). Resilience is attributed to individual characteristics, such as social, cognitive and emotional competencies, flexible coping repertoire, creativity and optimal and easy temperament (Apfel & Simon, 1996; Luthar, 1993; Masten & Coatsworth, 1998) and family characteristics, such as social support, open communication and emotional sharing (Beardslee & Podorefsky, 1988; Olsson, 2003). Some observations are available showing that traumatic experiences can result in positive family developments such as increased feeling of cohesion and appreciation of family life (Catherall, 1997; Punamäki, 1988).

In this study we consider both psychological distress and resources among family members living under conditions of traumatic stress.

Research tasks

Our first aim was to examine whether family members show symmetries or asymmetries and potential complementary dynamics in their psychological distress (PTSD and depressive symptoms) and resources (resilient attitudes and satisfaction with quality of life). We also attempted to identify family types (clusters) according to family members’ expression of distress and resources. Second, we examined whether exposure to traumatic events (family military trauma, FMT and recent personal trauma, RPT) influences family members’ psychological distress and resources differently and whether the family types are differently exposed to traumatic events. We hypothesize that in families exposed to high levels of traumatic events there are more differences (asymmetries) between family members’ psychological distress and resources, indicating emotional share of work as a way of surviving.

Method

Participants

The sample consists of 65 Palestinian families in which three adolescents and both parents participated. They were from the Gaza Strip and all families were Sunni Muslims. One child in each family (index child) belonged to the basic sample of 108 Palestinian children, who were first studied during the First Intifada in 1993 when they were 10–11 years old. The families were visited again just before the Al Aqsa Intifada started in 2000, and in addition to the index child also both parents and one younger and one older sibling participated.

The original sample of index children was recruited from a random community sample using low and high levels of family military trauma as a criterion (Quota, Punamäki, & El Sarraj, 1995). In the present sample the number of boys (48%) and girls (52%) was almost equal among the index children, as well as among the younger (42.4%/57.6%) and the older (56.3%/43.8%) siblings. The ages were 17.64 ± 0.84 years for the index children, 15.12 ± 1.43 for the younger and 19.55 ± 1.58 for the older siblings. In this study, the participating siblings are called the 15-year-olds, the 17-year-olds and the 19-year-olds.

Procedure

A female psychologist approached the families and asked each index child and one of his/her younger and older siblings and both parents to participate. The preference was given to siblings that belonged to the same age group as the index child. There was a standard introduction to the study that informed family members about the purpose and the procedure for the study (“We have followed up the development and wellbeing of x (index child) and would like to include also other family members . . .”). All children and fathers and most of the mothers filled in the questionnaires themselves. The psychologist interviewed mothers who so wished, mainly those without formal education (n = 11). She advised the family members to answer the questionnaires independently without conferring and reserved privacy for those interviewed. The visits to the families lasted about 2–3 hours. After filling in the questionnaires, the participants discussed family life, problems and possible needs for mental health services. The parents were not rewarded for their participation, but children received a moderate present (a calendar).

Measures

Traumatic events were measured by two variables. Family military trauma (FMT) refers to eight traumatic events that families experienced during the First Intifada, including losses (e.g., death and imprisonment of a family member), military violence and destruction (night raids at home, beating and wounding). When collecting the basic sample (1993) the index children had reported whether or not their families had experienced any of the events (not = 0; yes = 1). The sum variable ranged between 0–8 and was normally distributed. Moreover, during the present fieldwork, all studied family members reported the occurrence of recent personal trauma (RPT) in their own lives (not = 0; yes = 1). The nature of the trauma was not specified, and “recent” refers to the last 4 years of Palestinian authority. The participants also described the events if they wished to do so, but in this analysis, only the occurrence was used as a variable. Parents described, for instance, death and illness in the family; mothers also mentioned miscarriages, and children told about social problems such as a friend being a traitor, violent relationships and false accusations. The sum variable was formed by accounting the family members’ “yes” answers, and it ranged between 0–5.

Depressive symptoms were measured by 13-item BDI, Beck Depression Index (Beck, Ward, Mendelsohn, Mosch, &
Erlaugh, 1961) including symptoms such as sad mood, difficulties in making decisions and exhaustion. The shortened BDI has been frequently used in clinical setting in Palestine, and it has been found to be reliable (Quota et al., 2003). In this study the reliabilities were $\alpha = .82$ for children and $\alpha = .79$ for parents.

Posttraumatic symptoms (PTS) were assessed by the Pynoos-Nader adolescence version of the Reaction Index (PTSI_RI; Pynoos et al., 1987). The 20-symptom scale covers intrusive reexperiencing of the event, avoiding related memories and numbing feelings and increased hyperarousal. The adolescent form was applied for parents with some rewording in order to have identical scales for within-family analyses. The participants evaluated whether they had suffered from symptoms during the recent month (0) none of the time, (1) little of the time, (2) some of the time, (3) much of the time or (4) most of the time. The theoretical maximum sum score is 80 and minimum 0. The reliability of the scale has been successfully tested among Palestinians (Punamäki et al., 2001; Quota et al., 2003; Tabet & Vostanis, 1999). We used here only the total score, and its reliability was $\alpha = .74$ for children and $\alpha = .86$ for parents.

Resilient attitudes were measured by the Resiliency Attitudes Scales (RAS; Bisceo & Harris, 1999). It provides separate versions for parents (72 items) and children (56 items) covering eight equivalent constructs of resiliency for both children and parents: insight, relationships, initiative, creativity, humor, morality, persistency, and belief in the ability to improve things. Each construct in the children’s form included seven, and the parent’s form included eight descriptions. Participants were inquired to evaluate on a 4-point scale how the descriptions fit their attitudes, feelings and behavior: (1) Not at all, (2) somewhat, (3) well and (4) very well. Averaged sum scores were formed for children (reliability $\alpha = .81$) and parents ($\alpha = .76$).

Quality of life was measured by Health-related Quality of Life (HRQoL), which is a 36-item-tool on perceived satisfaction in the areas of general health, vitality, social relationships and emotional fulfillment (Ware & Gandek, 1998). The participants rated each item on a 5-point scale ranging from (1) not at all satisfied to (5) very satisfied. The HRQoL has been found to be valid (discrimination validity) and reliable in a Palestinian epidemiological study (Quota & El-Masri, 1999). In this study the reliabilities were $\alpha = .86$ for children and $\alpha = .84$ for parents.

Statistical analyses

To answer the question about differences and similarities (symmetries and asymmetries) between family members’ response we applied GLM Repeated Measures MANOVA (SPSS 10.0 program). Separate within-family analyses were conducted for each dependent variable indicating psychological distress (PTSD and depressive symptoms) and resources (resilient attitudes and quality of life). Significant within-family main effects on response patterns would indicate that family members differ from each other in their responses, and simple contrasts were applied to locate these significant differences.

Cluster analysis was applied to identify types of families showing symmetries and asymmetries in their psychological distress and resources. First, we ran clustering with variables of PTSD and depressive symptoms, resilient attitudes and quality of life of all five family members. The 20 clustering variables were standardized to a mean of 0 and a standard deviation of 1 in order to minimize bias caused by differences in scales (Hair, Anderson, Tatam, & Black, 1995). Second, we applied agglomerative hierarchical cluster analysis using Ward’s method (based on squared Euclidian distances) to decide the number of naturally occurring clusters in the data. Third, we used variance ratio criteria and inspection of the dendrogram (tree diagram) to locate large increases in rescaled distances that would indicate good clustering solutions for the number of clusters. The final clustering solution was run repeated number of times, because the order of cases has an impact on the results (Hair et al., 1995).

To examine the complementary dynamics between family members, we performed the partial correlation analysis. For each dependent variable we first calculated the family average and then assessed partial correlations among the five family members’ scores, controlling for the family average. The significant correlations between family members indicate complementary dynamics If, for instance, one member reported a high level of symptoms, the other reported a low one. Lack of significant correlation, in turn, refers to similar tendencies of expressing distress and having resources between family members.

To answer the second question about the impact of traumatic events, we added family military trauma (FMT) and recent personal trauma (RPT) as covariants in the main effect within-family models (MANCOVA). This procedure was chosen in order to avoid artificial dichotomizing of the trauma variables. Significant interaction effects between within-family dependent variables and traumatic events covariants would indicate that traumatic events differently predict (FMT) and associate (RPT) with family members’ psychological distress and resources. The locations of the different associations were checked by a zero-order Pearson correlation analysis between trauma variables and each family member’s scores. Further, significant between-family main effects of traumatic events would mean that exposure to trauma generally impacts family members’ responses. Finally, one-way ANOVAs were applied to examine whether the family types (clusters) differ from each other in the levels of family military trauma and recent personal trauma.

The missing values were substituted by the group means separately for both parent and each sibling group. The mean substitution was chosen because there were few missing items and the scales of dependent variables were normally distributed and mean-independent (Thomson & Williams, 1984).

Results

Descriptive statistics

Table 1 shows the ranges, means and standard deviations and Table 2 the percentage distributions of demographic variables reported by mothers and fathers. The results show that mothers were younger than fathers ($t(65) = 5.09, p < .0001$). Fathers were better educated than mothers ($\chi^2 = 37.85, p < .0001, N = 64$), and a majority (84%) of mothers worked at home. Twenty per cent of fathers were unemployed, that is, they worked at home. The participating families were large: There were 8–9 children on average. The differences (nonsignificant) in number of children between spouses’
reports are due to fathers (18%) having had more than one wife. The percentage of multiple marriages had been 26–29% in the earlier generation, as is indicated by parents’ reports of the number of their fathers’ wives (Table 2). The spouses’ concept of extended family differed from each other; fathers reported more members in their extended families. More than half of the families lived in refugee camps, and thus the children’s grandparents were refugees from Palestine from the 1948 war.

Family military trauma was normally distributed in the sample; 54% had been exposed to 5–8 traumatic events and 66% to four or less. Of the mothers almost all (95%) reported a recent personal trauma, while 75% of fathers, 74% of 19-year-olds, 67.2% of the 17-year-olds and 59.4% of 15-year-olds reported recent personal trauma.

Symmetries and asymmetries in within-family distress and resources

The within-family MANOVA main effects and simple contrasts for family members’ psychological distress are presented in Table 3. The results show significant main effects on within-family PTSD (p < .02) and depressive (p < .0001) symptoms, indicating general asymmetries between family members in symptom expression. Simple contrasts specify that mothers and 19-year-olds reported higher levels of PTSD than 15- and 17-year-olds. Mothers reported a higher level of PTSD than fathers. Concerning depressiveness, the 17- and 19-year-olds reported higher levels of symptoms than both parents and 15-year-old siblings. Fathers reported a higher level of depressive symptoms than mothers.

The within-family MANOVA main effects and simple contrasts for family members’ psychological resources are presented in Table 4. The significant within-subject main effects indicate general asymmetries in family members’ resilient attitudes (p < .0001) and satisfaction with quality of life (p < .002). Simple contrasts specify that mothers and fathers showed higher levels of resilient attitudes than their children, and that mothers showed a higher level of resilient attitudes than fathers. Concerning the quality of life, the 15-year-old siblings were more satisfied than older siblings and the mother.

Identifying family types according to distress and resources

Results for cluster analyses showed that a four-cluster solution provided the best fit to the data (see criteria in the statistical analyses). A discriminate function analysis using 20 clustering variables to predict group membership demonstrated a 96.7% correct classification rate.

The cluster solution with ANOVA results are presented in Table 5. The results show that of the family type clusters the ordeal families and resilient families provide examples of symmetric family responses, that is, all members show similar levels of either psychological distress or resources. Parental strength families and children’s strength families in turn illustrate asymmetric family dynamics, that is, parental and children’s subgroups show different levels of distress and resources.

In cluster 1, all family members reported high levels of PTSD and depressive symptoms and low levels of resilient attitudes and satisfaction with quality of life. Cluster 1 was named ‘ordeal families’, and their number was 15 (24.6%) in our sample.
In cluster 2, on the other hand, all family members reported low levels of PTSD and depressive symptoms and high levels of resilient attitudes and satisfaction with quality of life. Cluster 2 was named “resilient families”, and their number was also 15 (24.6%) in our sample.

In cluster 3 families, children and parents reported asymmetric dynamics in their distress and resources. The children, especially the 15-year-olds, showed high levels of PTSD and depressive symptoms and low levels of resilient attitudes and satisfaction with quality of life, whereas both fathers and mothers reported low levels of psychological distress and high levels of resources. Cluster 3 was named “parental strength families”, and their number was 21 (34.4%) in our sample.

Cluster 4 shows asymmetry in distress and resources between 15- and 17-year-olds and their parents. The children scored low in PTSD and depressive symptoms and high in resilient attitudes and satisfaction with quality of life, whereas both parents reported high levels of psychological distress and low levels of resources. However, similar to parents, the 19-year-olds scored high in PTSD and depressive symptoms and low in resilient attitudes and quality of life. Cluster 4 was named ‘children strength families’, and their number was 10 (16.4%) in our sample.

### Complementary dynamics between family members

Table 6 shows partial correlations among family members’ psychological distress and resources, controlling for the family average. Results revealed complementary dynamics between children and their parents and between two older siblings. Spousal complementary dynamics were found in psychological resources, but not in psychological distress.

Concerning psychological distress, if the mother showed a high level of PTSD, their 15- and 17-year-olds showed low levels, or vice versa. If fathers showed a high level of PTSD, their 17- and 19-year-olds showed low levels, or vice versa. If both mothers and fathers reported high levels of depressive symptoms, their 15- and 19-year-olds reported low, or vice versa. The complementary depressiveness was also found between 17-year-olds and fathers and between the two older siblings.

Concerning psychosocial resources, if fathers showed a low level of resilient attitudes, their 17- and 19-year-old children showed high levels, or vice versa, and if mothers showed low resiliency, the 15-year-olds showed high, or vice versa. Complementary resiliency was also found between the two older siblings. Spousal complementary dynamics indicate that if mother showed highly resilient attitudes, the father showed
Complementary dynamics in satisfaction with quality of life were found between mothers and their 17- and 19-year-old children, and between fathers and the 15-year-olds. Spousal complementary dynamics indicate that if mothers showed a high satisfaction with quality of life, fathers showed low, or vice versa.

### Traumatic events and within-family distress and resources

The interaction effects between within-family dependent variables (psychological distress and resources) and traumatic events covariants (MANCOVAs) and between-family effects are summarized in Table 7. The hypothesis that exposure to a high level of traumatic events is differently associated with family members' responses (i.e., high asymmetry) was substantiated in PTSD (marginally) and depressive symptoms, but not in resilient attitudes.

Concerning PTSD, the results reveal a trend of recent personal traumatic events (RPT) differently associating with family members' symptoms, as indicated by marginally significant interaction effect \( p < .06 \). Zero-order Pearson correlations specified that a high level of recent personal trauma was associated with a high level of PTSD symptoms in both mothers \( (r = .27, p < .01, N = 65) \) and fathers \( (r = .31, p < .005, N = 65) \), and in one of the group of siblings (the 17-year-olds; \( r = .35, p < .002, N = 65 \)), but not other siblings. Significant between-family effects indicate that a high level of recent personal traumatic events (RPT) was generally associated with a high level of PTSD \( (p < .0001) \).

Results further show that family military trauma (FMT) differentially predicted family members' depressive symptoms, as indicated by a significant interaction effect \( p < .05 \). A positive correlation between family military trauma and depressive symptoms was found only among the youngest siblings (the 15-year-olds; \( r = .23, p < .04, N = 65 \)). Similar to PTSD, there was a general association between a high level of recent personal traumatic events (RPT) and depressive symptoms, indicated by significant between-family effect \( p < .01 \).

Satisfaction with life varied both between family members (significant within-family main effect after entering trauma as covariant) and according to both family military trauma (FMT) and recent personal trauma (RPT). Zero-order Pearson correlations specify that recent personal trauma was negatively associated with satisfaction with quality of life only in fathers \( (r = .36, p < .001, N = 65) \) and in 19-year-old siblings \( (r = .26, p < .02, N = 65) \), and that family

<table>
<thead>
<tr>
<th>Differences between family members</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Within-family MANOVA main effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 15 Sibling of 17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 15 Sibling of 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 17 Sibling of 19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 15 Mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 15 Father</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 17 Mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 17 Father</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 19 Mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 19 Father</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 15 Mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 15 Father</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 17 Mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sibling of 17 Father</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Note. a df (4, 60) for within-family MANOVA main effects. b df (1, 63) for F-values of simple contrasts. c The black arrows indicated the direction of contrasts in PTSD and dashed arrows in depressive symptoms between family members. The arrows up indicate higher score values and arrows down lower score values. |
Table 5
Means and Standard Deviations of clustering variables according to the family types

<table>
<thead>
<tr>
<th>Clustering variables</th>
<th>Ordeal Family</th>
<th>Resilient Family</th>
<th>Parental Strength Family</th>
<th>Children’s Strength Family</th>
<th>ANOVA statistics (df = 1, 59)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>F</td>
</tr>
<tr>
<td>Psychological distress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.32&lt;sup&gt;ac&lt;/sup&gt;</td>
<td>.24</td>
<td>.09&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.20</td>
<td>.53&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Father</td>
<td>.21&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.24</td>
<td>.48&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.20</td>
<td>.16&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>15-year-olds</td>
<td>.55&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>.10&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.18</td>
<td>.30&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>17-year-olds</td>
<td>.89&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>.72&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.18</td>
<td>.08&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>19-year olds</td>
<td>.50&lt;sup&gt;bc&lt;/sup&gt;</td>
<td>.25</td>
<td>.55&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.18</td>
<td>.09&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Depressive symptoms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.89&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.24</td>
<td>.63&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.20</td>
<td>.35&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Father</td>
<td>.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>.64&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.22</td>
<td>.32&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>15-year-olds</td>
<td>.12&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.26</td>
<td>.56&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.26</td>
<td>.36&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>17-year-olds</td>
<td>.94&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.20</td>
<td>.69&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.20</td>
<td>.12&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>19-year olds</td>
<td>.26&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>.25</td>
<td>.41&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.25</td>
<td>.23&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Psychological resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resilient attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-.58&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.27</td>
<td>.06&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.27</td>
<td>.30&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Father</td>
<td>-.03&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.19</td>
<td>.47&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.19</td>
<td>.16&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>15-year-olds</td>
<td>.19&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>.78&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>-.67&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>17-year-olds</td>
<td>-.49&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.24</td>
<td>.24&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.24</td>
<td>.07&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>19-year olds</td>
<td>-.35&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>.19</td>
<td>.18&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.18</td>
<td>.09&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Quality of life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-.64&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.24</td>
<td>.21&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>.24</td>
<td>.49&lt;sup&gt;bc&lt;/sup&gt;</td>
</tr>
<tr>
<td>Father</td>
<td>-.04&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.18</td>
<td>.63&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.18</td>
<td>.26&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>15-year-olds</td>
<td>-.31&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.25</td>
<td>.08&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>.25</td>
<td>-.40&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>17-year-olds</td>
<td>-.82&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.22</td>
<td>.35&lt;sup&gt;ab&lt;/sup&gt;</td>
<td>.22</td>
<td>-.13&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td>19-year olds</td>
<td>-.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.23</td>
<td>.43&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.23</td>
<td>-.09&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note. Means within rows not sharing the same subscript were significantly different at p < .05 in Tukey-b tests.

* p < .05; ** p < .01; *** p < .001; **** p < .0001.

Table 6
Zero-order partial correlations between family members’ psychological distress and resources

<table>
<thead>
<tr>
<th>Partial correlations between</th>
<th>Psychological Distress</th>
<th>Psychosocial Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PTSD</td>
<td>Depressive symptoms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resilient attitudes</td>
</tr>
<tr>
<td>1. Sibling of 15 ↔ Sibling of 17</td>
<td>-.15</td>
<td>-.21</td>
</tr>
<tr>
<td>2. Sibling of 15 ↔ Sibling of 19</td>
<td>-.10</td>
<td>.01</td>
</tr>
<tr>
<td>3. Sibling of 15 ↔ Mother</td>
<td>-.46***</td>
<td>-.37**</td>
</tr>
<tr>
<td>4. Sibling of 15 ↔ Father</td>
<td>-.02</td>
<td>-.38**</td>
</tr>
<tr>
<td>5. Sibling of 17 ↔ Sibling of 19</td>
<td>-.20</td>
<td>-.39**</td>
</tr>
<tr>
<td>6. Sibling of 17 ↔ Mother</td>
<td>-.40***</td>
<td>-.05</td>
</tr>
<tr>
<td>7. Sibling of 17 ↔ Father</td>
<td>-.33**</td>
<td>-.42**</td>
</tr>
<tr>
<td>8. Sibling of 19 ↔ Mother</td>
<td>-.16</td>
<td>-.28*</td>
</tr>
<tr>
<td>9. Sibling of 19 ↔ Father</td>
<td>-.46**</td>
<td>-.31**</td>
</tr>
<tr>
<td>10. Mother ↔ Father</td>
<td>-.08</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Note. * p < .05; ** p < .01; *** p < .001; **** p < .0001.

* Controlled for Averaged Family Means of each variables.
military trauma was associated with low satisfaction with quality of life in fathers, but not in other family members (r = –.41, p < .004, N = 65). Nonsignificant between-family effects indicate that traumatic events were not generally associated with satisfaction with quality of life. Resilient attitudes were not a function of traumatic events.

Table 7

<table>
<thead>
<tr>
<th>Source</th>
<th>Within-family effects</th>
<th>Between-family effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F-Will’s Lambda</td>
<td>p</td>
</tr>
<tr>
<td>Posttraumatic Stress Disorder (PTSD)</td>
<td>2.14</td>
<td>.09</td>
</tr>
<tr>
<td>Family Military Trauma (FMT)</td>
<td>6.06</td>
<td>ns</td>
</tr>
<tr>
<td>Recent Personal Trauma (RPT)</td>
<td>2.33</td>
<td>.06</td>
</tr>
<tr>
<td>Depressive symptoms (D)</td>
<td>1.04</td>
<td>ns</td>
</tr>
<tr>
<td>Family Military Trauma (FMT)</td>
<td>0.01</td>
<td>ns</td>
</tr>
<tr>
<td>Recent Personal Trauma (RPT)</td>
<td>2.50</td>
<td>.05</td>
</tr>
<tr>
<td>Resilient attitudes (RAS)</td>
<td>1.76</td>
<td>ns</td>
</tr>
<tr>
<td>Family Military Trauma (FMT)</td>
<td>0.44</td>
<td>ns</td>
</tr>
<tr>
<td>Recent Personal Trauma (RPT)</td>
<td>1.28</td>
<td>ns</td>
</tr>
<tr>
<td>Quality of life (QoL)</td>
<td>4.53</td>
<td>.003</td>
</tr>
<tr>
<td>Family Military Trauma (FMT)</td>
<td>5.29</td>
<td>.02</td>
</tr>
</tbody>
</table>

ANOVAs showed that family types significantly differed in the levels of family military violence (F(3, 59) = 3.81, p < .01, η² = .18) and recent personal trauma (F(3, 59) = 2.72, p < .05, η² = .13). Figure 1 illustrates that the “ordeal families” and the “children’s strength families” had been more often exposed to both kinds of traumatic events than the “resilient families” and the “parental strength families”. Thus high exposure to traumatic events was associated not only with asymmetric family responses, but also with symmetric responses, which is contrary to the hypothesis that trauma is characteristic of asymmetric family responses.

Family types and traumatic events

ANOVA-analyses showed that family types significantly differed in the levels of family military violence (F(3, 59) = 3.81, p < .01, η² = .18) and recent personal trauma (F(3, 59) = 2.72, p < .05, η² = .13). Figure 1 illustrates that the “ordeal families” and the “children’s strength families” had been more often exposed to both kinds of traumatic events than the “resilient families” and the “parental strength families”. Thus high exposure to traumatic events was associated not only with asymmetric family responses, but also with symmetric responses, which is contrary to the hypothesis that trauma is characteristic of asymmetric family responses.

Figure 1. Family types according to family military trauma (FMT) and recent personal trauma (RPT).

Discussion

Based on the family systems theory we expected members of a family to differ in their psychological responses in general and when facing traumatic events, in particular. Their “emotional share of work”, that is, differential levels of distress and resources, is assumed to contribute to adaptation, integrity and balance of the whole family system. The results confirmed that family members show asymmetries in expressing psychological distress and having access to positive resources. Analyses also revealed complementary dynamics, especially between parents and their children, indicating that when one member was suffering, others showed no symptoms and when one was resilient and satisfied, others showed weakness, and vice versa. As hypothesized, family members were differently vulnerable to negative impacts of traumatic events, which increased PTSD and depressive symptoms and decreased satisfaction with quality of life in some members, while others were not affected.

Asymmetric and complementary responses

The family systems theory suggests that the amount of psychological distress in the family may be stable, but in order to function well and balance each other’s responses, members tend to express their pain in different ways and at different
times (Cox & Paley, 1997). In our families the mothers and two oldest children reported higher levels of PTSD than others, and the oldest siblings suffered more from depressive symptoms than other family members.

Complementary dynamics between family members indicate a share of work in expressing distress and strengths. Similar to earlier observations (e.g., Jaffa, 1993), when parents suffered, children tended not to express their pain, and vice versa. For instance, when both parents suffered from depressive symptoms, their two oldest children did not, and when the mother showed PTSD, her two youngest children did not. The results may illustrate children’s attempts to avoid burdening their suffering parents. The correlations can also be interpreted as revealing that when parents were resourceful, their children could afford to show symptoms.

The 19-year-old siblings were “the symptom carriers”, suffering generally from both PTSD and depressive symptoms, while the 15-year-olds were “the sunshine children”, reporting a lower level of psychological distress and more satisfaction with quality of life than other family members. We also found complementary dynamics between 17- and 19-year-old siblings in depressive symptoms and resilient attitudes. In siblings’ subsystem the allocated symptom expression helps to maintain developmental balance by distracting attention from conflicting and painful issues (Palazzoli, Boscolo, Cecchin, & Prata, 1978). In traumatized families one child may express the unexpressed horrors and despair via severe symptoms, which allows other siblings to feel invulnerable and be saved from symptoms. An alternative explanation for the older siblings’ depressiveness relates to the generally elevated risk for depression in adolescence (Harrington, Rutter, & Fombonne, 1996).

Mothers reported more PTSD than fathers, who in turn showed more depression. Complementary spousal responses were found only in psychological resources, telling us that when one of the spouses is resilient showing endurance, initiative and caring, and satisfied with life, the other can afford being vulnerable and weaker. The spouses’ asymmetric and complementary responses serve balancing the family.

**Trauma and family responses**

Family members were differently vulnerable when trauma entered their home. The 15-year-old siblings, who were generally “sunshine children”, were suffering from depressive symptoms when the family had been exposed to severe military trauma. The 19-year-olds, who were generally the “symptom carriers”, lost their satisfaction with quality of life when exposed to personal traumatic events. The vulnerability of the 19-year-olds may relate to their double burden of fulfilling the adult role in traumatized families and struggling with age-specific transition of getting married and creating a professional status. Concerning the spousal subsystem, personal traumatic events were associated with PTSD in both mothers and fathers, but only fathers were vulnerable to decreased satisfaction with quality of life.

These asymmetric responses between trauma-exposed family members correspond to our clinical observations in conditions of war and life danger. We have used the metaphor “a ship in the storm” to describe how traumatized and persecuted families assume clear roles and strict share of work (R1) in expressing symptoms and resilience in order to survive and be consoled. The great within-family variation in the family responses and trauma impacts suggests that even under extremely violent and dangerous conditions of military occupation, families are not only victims, but rather dynamic human beings who are engaged in survival, caring and growth despite adversities. If one domain of life is endangered, families seek competency and safety in other areas, and if one family member is weak, the others show strength. Our sample include families whose grandparents were evicted from their homes in 1948 when the State of Israel war created, parents who have lived under Israeli military occupation since 1967 and children who have started a national struggle for independence that culminated in the First Intifada in 1986 and continued with the Al Aqsa Intifada in 2000. One may speculate that adequate communication and sharing family’s burdens may be the secret of endurance and national aspirations.

Our results concur with the substantial evidence that traumatic events are associated with increased PTSD and depressive symptoms (e.g., de Jong et al., 2001; Sack et al., 1995). Recent personal trauma was more pronounced than military trauma during the First Intifada for generally increasing distress. Both military and personal traumas were pronounced in differently impacting psychological distress and resources among family members. Recent personal trauma was associated with high levels of PTSD in both parents and the oldest child, while military trauma predicted depression in the younger sibling. Both military and personal traumas were associated with low satisfaction with quality of life among fathers, whereas personal trauma was important for 19-year-olds’ satisfaction with life.

Depressiveness is suggested to be a typical female disorder (Taylor et al., 2000), and even more so in connection with exposure to trauma (Shalev & Yehuda, 1998), but in the present study fathers showed a higher level of depressiveness than mothers. However, similar to our findings, epidemiological data confirmed that Palestinian men are just as vulnerable to depressive symptoms when exposed to military trauma and violence as women (Punamäki et al., 2005). The depressiveness among Palestinian men may relate to their humiliated status as men in a country that has been occupied by foreign male and female soldiers. The men share a hidden collective sadness of having lost their land to Israeli settlements, and not having been able to protect their wives and children from military violence. Socio-economic deterioration due to the unsolved military and political situation may also create desperation, especially for men.

We identified four unique family types that differed in the ways in which parental and sibling subsystems expressed weaknesses and strengths. Two of them were symmetric, that is, both parents and children showed high distress and low resources (“ordeal families”) or high resources and low distress (“resilient families”). The two asymmetric family types applied the sharing of work between parental and sibling subsystems. The “parental strength families” serve as an example of normative share of care and responsibilities between generations. Both mothers and fathers reported initiation, endurance, creativity and good mental health, whereas the younger adolescents were vulnerable and in need.

There is an argument that “war children” take over adult tasks and responsibilities before their proper maturation because parents lack resources to help and protect them. The “children’s strength families” provide an example of wartime “parentification” (Chase, 1999; Zahn-Waxler & Radke-Yarrow, 1990) or “parental children” (Jaffa, 1993), where children show...
positive resources and strengths and parents weakness and suffering. Interestingly, “children’s strength families” were more often exposed to severe traumatic events, which supports the argument that war-traumatized children are growing up fast in order to protect and take care of their suffering parents. Detecting the phenomenon is important because it is repeatedly suggested, but empirical evidence is lacking.

Implications for interventions
There is a growing awareness that personality and pretrauma factors influence the ways in which victims process traumatic experiences and recover from them. Good family relationships and experiences in early interactions are considered important protective shields and a source of support among trauma victims (Freedman, Brandes, Peri, & Shalev, 1999; Kanninen, Salo, & Punamäki, 2000; Van der Kolk, 2002; Yule, 2002). Our results can contribute to understanding the differences in family members’ responses to trauma and thus encourage interventions to meet unique needs of survivors. Contemporary wars are typically transgenerational, meaning that both parents and children have experienced persecution and life threat. Generations have sculpted the family roles and coping strategies, resulting in unique ways of sharing painful memories and constructing new potentials. Knowledge of them forms the basis for therapy and interventions.

Trauma victims who come, for instance, from families where parents show high distress and children high resources, here identified as “children’s strength families”, apparently need a different kind of help than those from “ordeal families”. Experiences with torture victims have taught us that the prisoners who had a secure adult attachment style benefit from a psycho-educational approach or short-term symptom-focused trauma treatment, whereas insecure victims demand more intensive and comprehensive healing and resiliency building (Kanninen et al., 2000). Analogously, preventive interventions in war zones can help resilient children from “children’s strength families” to widen their emotional repertoire and deepen their understanding, whereas children from “ordeal families” need systematic help in their cognitive-emotional processing of pain and trauma. The family systems approach helps mental health workers to tailor interventions so that they can acknowledge specific vulnerabilities and strengths of each individual in the context of unique family relationships. It also calls for professionals to be aware of dysfunctional complementary dynamics and inadequate timing of expression of strength.

Resilience is conceptualized as individual and family characteristics that explain why somebody not only escapes adversities unscathed but also blossoms (Apfel & Simon, 1996; Beardslee, Versage, & Gladstone, 1998; Rutter, 2000). Our measurement of resilient attitudes by Biscoe and Harris (1999) included issues like psychological insight, good and supportive social relationships and self-efficacy as well as humor and creativity. We learned that traumatic experiences did not impact these important resources negatively either generally or in some family members particularly. Preventive interventions among war-traumatized families aim at combining both healing of psychopathologies and enhancing protective factors, effective coping and resiliency (Rutter, 2000; Yule, 2002). Our results suggest that the family approach would be fruitful in tailoring interventions that take into account asymmetric and complementary dynamics in family members’ resiliency.

Our results revealed complementary dynamics in resilience between parents and children, between older siblings and between spouses. We understood these complementary dynamics as allowing one family member to be weak when the other was strong. In future it would be important to analyze what kinds of complementary dynamics within a family that facilitate each member to benefit from others’ unique strengths. Families in war are often simultaneously victims and survivors who are engaged in coping and growth despite of extreme adversity and danger. Family systems theory can provide effective tools for understanding the intergenerational dynamics of family trauma and make us aware of the double communication of resiliency and suffering.

Limitations of the study
The study has many methodological and conceptual weaknesses, and the results should therefore be considered to be preliminary. First, the sample size was originally small and we lost 40% of the index children who were originally studied during the First Intifada. We recommend repeating the research setting in a larger and randomly sampled family data sample involving both parental and sibling subsystems. For instance, cluster analysis validated conceptualization of intergenerational subsystems and differences in distress and resources, but the number of family types was too small to allow sophisticated analyses.

Second, constructing the traumatic events variables deserve criticism. Family military trauma was self-reported and information was solely obtained from the index child during the First Intifada. A preferable construction of traumatic events would involve standardized checklists covering relevant stresses and traumatic events across all family members (Netland, 2001). It would be informative to consider family members’ perceptions, meaning giving and appraisals of their traumatic experiences to better understand the diversity of responses to trauma. The meaning of military trauma may also depend on the families’ commitment and participation in the Palestinian independency struggle. Yet, under the condition of military occupation it would have been unethical to inquire about political activity, because responding would have endangered the families’ security.

Third, all our dependent and independent constructs are based on self-reports, which may cause confounding effects in reporting psychological distress and exposure to recent personal trauma. Depressive persons, for instance, have a tendency to more readily remember negative events (Teasdale, 1988) and those with PTSD intrusive symptoms are more aware of traumatic events, which may distort reporting of exposure to trauma.

Fourth, future research would benefit from conceptualizing and measuring family responses in addition to individual members’ responses. An optimal setting would combine both separate and shared responses, such as family communication, emotion recognition and expression, feeling of cohesion and shared problem solving and decision making.

Finally, caution must be exercised in generalizing the findings of intergenerational asymmetries to other traumatized populations. They may be replicable among other Middle Eastern populations, such as Israelis and Kurds, because they also have large families and transgenerational experiences of trauma and persecution. The size of the extended family and the number of children in our data are much larger (eight
children on average) than in usual western samples, which has implications for family dynamics compared with smaller families. One may suggest, for instance, that children in larger families may be less affected by their parents’ symptoms and vice versa, which may explain our results revealing some distinct parents’ and children’s subsystems in psychological responses. While western epidemiological studies show a large family size primarily in connection with poverty, resulting in poor mental health (Zwaanswijk, Verhaak, Bensing, van der Ende, & Verhulst, 2003), the large family size in our small Middle Eastern sample was beneficial, as family members from large families reported fewer depressive symptoms and expressed marginally more resilient attitudes. The result reflects the Arab cultural code that highly appreciates children and large families.

References


