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The Psychological and Behavioral Effects of Political Violence on Palestinian Children Living in the Israeli Occupied West Bank

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THE PSYCHOLOGICAL AND BEHAVIORAL EFFECTS OF POLITICAL VIOLENCE ON PALESTINIAN CHILDREN LIVING IN THE ISRAELI OCCUPIED WEST BANK

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An increasing number of children throughout the world are growing up in the midst of war, insurrection, revolt, and occupation. Children subjected to violent experiences relating to political conflict exhibit a variety of responses and symptoms, ranging from mild stress to severe trauma. Most of the research on the impact of war-related violence on children addresses single acute episodes of warfare. The literature of children exposed to chronic violence is less well developed. This study investigated the effects of the ongoing political violence on Palestinian children living in the Israeli-Occupied West Bank. Additionally, risks relating to maternal and family functioning, and protective factors relating to maternal mediation were examined in light of children's experiences with political violence.

A sample of 150 Palestinian children and their mothers was recruited from cities and villages in the West Bank in September, 1990. Psychological and behavioral symptoms of children were measured using the Child Behavior Checklist administered to the mother. The Conflict Tactics Scale, Parenting Stress Index, Cornell Behavior Description, and Violence Questionnaire were used to measure the variables of political violence, family violence, problems in maternal functioning, and child rearing strategies.

The results demonstrated that Palestinian children who experienced a serious *Intifada*-related injury, an *Intifada*-related arrest of a family member, or a recent violent *Intifada* event, displayed significantly more psychological and behavioral symptoms than children who did not have these experiences. Moreover, children who experienced both violence within the family and political violence achieved significantly higher scores on psychological and behavioral symptomatology than children who did not experience both

types of violence. Additionally, the accumulation of risk factors in children's lives was significantly related to increased psychological and behavioral problems. Furthermore, mothers were found to be important mediators of stressful experiences for their children. While mothers who were depressed could not protect their children from negative developmental outcomes, mothers who engaged in high levels of verbal reasoning with their children had children who had lower levels of psychological and behavioral symptoms. Finally, boys were more susceptible to negative outcomes from family and *Intifada* risks than were girls, and younger children (aged 6-9) were more vulnerable than were older children (aged 12-15).

VITA

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She worked as a counselor for severely emotionally disturbed children at the Orthogenic School of the University of Chicago from 1978 to 1984 and as a research analyst at the National Committee for Prevention of Child Abuse from 1985 to 1986. In 1986, she joined Erikson Institute as a Research Associate investigating the effects of chronic violence on children growing up in dangerous environments. Her research has included children in Mozambique, Cambodia, Nicaragua, the Israeli Occupied Territories, and inner-city Chicago.

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CHAPTER 1

INTRODUCTION

Statement of the Problem

An increasing number of children throughout the world are growing up in the midst of war, insurrection, revolt, and occupation. In the decade prior to 1985, more than 40 countries have been immersed in war and armed conflicts (UNICEF, 1986). Prior to World War II, military personnel constituted more than 80 percent of the casualties. However, in recent times that situation has been reversed. In today's wars, more than 80 percent of the direct and indirect victims of military action are children and women (UNICEF, 1986). As a consequence, children have experienced the violent death of a parent or other close family member, separation from family, kidnapping, bombardment, and physical injury.

Children who have been subjected to violent experiences may exhibit a variety of responses and symptoms, ranging from mild stress to severe trauma. Most of the research of war-related violence on children addresses single acute episodes of warfare such as shelling or air raids (Janis, 1951; Ziv & Israeli, 1973), experiencing a terrorist attack (Ayalon, 1983), and witnessing the torture or death of someone close to the child (Allodi, 1980; Cohn, Kisten, Koch, 1980). However, children often experience a number and variety of war experiences which occur over an extended period of time (Garbarino, Kostelny & Dubrow, 1991; Boothby, 1992; Macksoud, 1992). Research on children's experience of living with chronic violence is less well developed. Additionally, the social context in which political violence occurs for children (e.g., maternal well being, family functioning and ideology) is an area of research which has received limited attention. Another area in need of empirical study is the impact of political conflict on children as a function of risk factors and protective factors in the social environment of the child.

The Palestinian Uprising (*Intifada*) provides an excellent opportunity to study the behavioral and psychological effects of chronic strife on children in the context of their social environment. Although first described as only an event when it began in December 1987, the rebellion against Israeli occupation in the West Bank and Gaza Strip has become a condition of life for most Palestinian children.

Background

The total population of Israel and the Occupied Territories is approximately 6 million. There are approximately 3.5 million Jewish Israelis in Israel, and 70,000 Jewish settlers in the Occupied Territories. Some 650,000 Palestinians live in Israel and are Israeli citizens, while approximately 140,000 Palestinians live in annexed East Jerusalem. There are roughly 1.6 million Palestinians in the Occupied Territories—900,000 in the West Bank and 700,000 in the Gaza Strip.

Of the 1.6 million Palestinians living in the Occupied Territories, 60 percent, or approximately 900,000, are children and youth under the age of 16. Children who live in the Gaza Strip number 400,000, while 500,000 children live in the West Bank.

This study will focus on the West Bank, those lands held by Jordan from 1948 to 1967 when they were conquered by Israel. The West Bank comprises an area of 2,847 square miles enclosed by Israel on the north, west, and south, and bounded by the Jordan River on the east.

Many Palestinians refer to the West Bank as Palestine or Occupied Palestine. Many Israelis call the area Judea and Samaria. Still others refer to the West Bank and Gaza Strip as the Administered Territories or Occupied Territories. While the nuances may be lost on an outsider, the choice of words for Palestinians and Israelis is significant. For the purposes of this study, the area under investigation will be referred to as the West Bank.

While the violence that Palestinian children now experience does not represent a historical discontinuity (conflict in the West Bank and Gaza Strip has occurred sporadically over the last twenty years, and prior to that under the Jordanian and Egyptian occupation of the territories), the Uprising represents an intensification of that conflict (Sifry, 1988).

The resistance to Israeli occupation escalated and gained prominence in the *Intifada* (or "shaking off" in Arabic) which began in December 1987, after an incident in the Gaza Strip when an Israeli truck collided with a taxi and killed four Palestinians. In the ensuing days, Palestinians revolted, staging a series of demonstrations in the West Bank and Gaza Strip. These demonstrations were followed by a more coordinated program of general strikes, violent protest, acts of mass civil disobedience, and rock throwing.

By December 1990, more than eight hundred Palestinians had died from gunshot wounds from live ammunition and rubber bullets, exposure to tear gas in confined areas, and internal injuries caused by severe beatings. Hundreds more had been killed by other Palestinians, being punished for being collaborators or spies for the Israelis.

Many Palestinian children are touched directly or indirectly by the on-going violence associated with the Uprising, although variation in frequency and intensity exists. Some areas have high levels of *Intifada*-related violence while other areas experience relatively low levels of violence. For example, researchers conducting a study in the West Bank in 1989 were unable to find any children in some towns and cities who had had no direct experience with violence (i.e., who had not been shot, detained, arrested, beaten or teargassed)(Nixon, 1990). Other areas experience relatively low levels of violence.

Some children are injured when they actively participate in demonstrations and direct confrontations with the military. Other children are injured accidentally when they are caught up in the political conflict. Still others are injured in a more deliberate manner—as increasingly younger children participate directly in demonstrations and as

rules regarding the use of dangerous force by the military are relaxed. The army is authorized to arrest and punish anyone twelve years old or older who is caught throwing stones (*New York Times*, 1989), although younger children have also been arrested (DataBase Project on Palestinian Human Rights 1989; Nixon, 1990).

In refugee camps and in the towns and cities where demonstrations occur, it is common for soldiers to raid homes and carry out searches looking for information about demonstrators. Often these raids occur at night. Often intimidation, threats, and force are used to extract information. Parents have reported that their homes have been entered repeatedly, sometimes more than once per night for extended periods.

As of December 1989, 159 Palestinian children had died as a result of gunshot wounds, teargassings, and beatings (Nixon, 1990). The average age of children killed was ten. Additionally, more than 1,000 homes were demolished or sealed, displacing more than 10,000 Palestinians, nearly 5,000 of them children (Nixon 1990).

Of the 159 child fatalities in the first two years of the *Intifada*, gunfire was the leading cause of death, accounting for 67 percent of all child deaths. Moreover, approximately 6,500 to 8,500 children were injured by gunfire during the first two years, and more than 25,000 children required medical treatment for beating injuries during the first two years of the *Intifada* (Nixon 1990).

Children accounted for 21 percent of all recorded deaths and 38 percent of all recorded casualties (i.e., deaths and injuries).

It is estimated that between 50,000 and 63,000 children were injured during the first two years of the *Intifada* (i.e., about 1 out of every 16 Palestinian children had been shot, beaten or teargassed) (Nixon 1990). Taking into consideration the relative differences between Palestinian and American population sizes, such losses would be equivalent to more than 9,000 American children killed and more than 3 million seriously injured.

Research Questions and Hypotheses

What are the psychosocial consequences for children who live in violent political conflict? Does the level of violence where they live affect their ability to function? Does the relationship between political violence and child symptoms vary by age and gender? What are the effects for children who experience both community violence due to political conflict and family violence? Do other factors in the child's social environment intensify his experiences of chronic political violence? Can parents help mediate the negative effects of violence for their children? This study seeks to answer these questions in the context of the Palestinian Uprising.

In this study, the following hypotheses will be addressed:

Hypothesis I: Children living in high violence areas will have higher levels of symptomatology than children living in low violence areas.

Hypothesis II: Variability in the symptomatology of children is accounted for the individual child's personal experience with political violence in the area where he lives.

Hypothesis III: Variability in the symptomatology of children is accounted for by the individual child's experience of aggression within the family.

Hypothesis IV: Children experiencing both violence within the family and political violence will display higher levels of symptomatology than children who experience none or only one form of violence.

Hypothesis V: Variability in the symptomatology of children experiencing political violence is accounted for by problems in maternal functioning.

Hypothesis VI: Variability in the symptomatology of children experiencing political violence is accounted for by variations in the mother's child rearing strategies.

Hypothesis VII: Children experiencing multiple risks in their social environment will have higher levels of symptomatology than children who do not experience multiple risks.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Theoretical Framework

An ecological framework recognizes the multiplicity of factors that influence children's development. It views child development as proceeding from the interaction of an active, purposeful, and adaptive child with an array of social systems (Bronfenbrenner, 1979; Garbarino & Associates, 1992). The child's experiences can be viewed as subsystems within systems within larger systems—"as a set of nested structures, each inside the next, like a set of Russian dolls" (Bronfenbrenner, 1979, p.22). In addition to interactions within systems, interactions between systems are also considered.

An ecological framework examines the environment of the child at four levels beyond the individual organism—microsystem, mesosystem, exosystem, and macrosystem. Microsystems are the day-to-day interactions of the child with the immediate social environment. The first and most important relationship of the child is between him and his mother (or other caregiver) which then becomes the foundation for subsequent relationships. The family is the next microsystem with which the child has a relationship. Later, the child's microsystem includes the social environment of friends, school and neighborhood. These relationships serve as a context for the child's emerging social map of events, relationships, and processes which help him make sense of the world.

Mesosystems are relationships between the child's microsystems, with the links themselves forming a system. The exosystem and macrosystem represents formal and

informal social structures that effect the child's immediate environment (i.e., the microsystem) and influence what goes on in that environment (Bronfenbrenner, 1979). The exosystem may encompasses situations in which the child has no direct contact with people whose actions nevertheless significantly affect the child's development. Macrosystems are the context within which micro-, meso-, and exosystems are set. Macrosystems are the cultural patterns of a society, and include laws, values, religion and ideology. They reflect a society's shared beliefs about how things should be done, as well as the institutions that represent those assumptions.

The effects of risk and protective factors on children depend on their inner resources and on the social context established for them by their caregivers and the community. Risk factors are environmental influences that undermine a family's ability to nurture child development. Protective, or opportunity factors, are environmental influences that support and strengthen a family's ability to promote child competence and thus enhance child behavior and development (Garbarino and Associates, 1992; Dunst and Trivette, 1992; Werner, 1990; Garmezy and Rutter, 1983).

This review of the literature addresses five issues relevant to the developmental consequences of children growing up with political violence:) political violence as an exosystem effect (i.e., when children live in high violence areas); 2) political violence as a microsystem effect (i.e., when children are directly involved in the violence); 3) the developmental impact of the microsystem of family violence and other problems in family functioning (i.e., maternal well being and child rearing strategies); 4) the impact of violence in the community-home mesosystem on child well being and 5) ideology as a macrosystem effect on children's behavior and development will be discussed.

The Historical Context of War and Political Violence on Children

The psychological effects of war were first reported on systematically in the "battle fatigue" of soldiers during World War I, and later the "shell shock" of combatants during World War II was investigated (Mott, 1919; Kardiner, 1941). These symptoms were recognized as normal reactions to experiencing violent events related to war. Anna Freud and Dorothy Burlingham's (1943) pioneering work during World War II expanded this field of research to include children who experienced war related events, such as air raids and bombings, and the role that parents, especially mothers played in mediating negative effects of war.

Recent research has demonstrated that children's experiences with conflict and violence are varied and multiple. Macksoud's (1988) research on children living in Beirut found that Lebanese children experienced an average of 5-6 war-related events, the most common being bombardment, witnessing violent acts, and the death of a loved one. In South Africa, children have witnessed murders, had their homes and schools bombed, been arrested, and assaulted (Straker, 1987; Gibson, 1989). In Israel, children have experienced shelling of their homes (Ziv and Israeli, 1973). In the Israeli Occupied Territories, children have been teargassed, beaten and shot during the Palestinian Uprising (Nixon, 1990).

Moreover, in addition to children being victims of violence, they have also participated in political conflict which includes violent activities (Boothby 1988; Boothby 1990; Garbarino 1991). In countries where there is political oppression and economic discrimination, many children voluntarily participate in the struggle for liberation. Thus, in Nicaragua, Sandinista youth took up arms against the Contras, and in the Israeli Occupied Territories, Palestinian children continue to throw stones and to

participate in demonstrations against the Israeli army (Acker, 1986; Garbarino, Kostelny and Dubrow, 1991a).

Yet other children who become involved in political conflict are recruited through indoctrination programmes that glorify war and induce children to join for national or religious reasons. In other countries, children are kidnapped and forced to join the army. For example, in Mozambique, boys as young as six are forced to kill or be killed (Boothby, 1992).

Acute vs. Chronic Violence

According to studies of children exposed to stressors such as war and political violence, two different groups can be distinguished: those who experience acute stressors and those who experience chronic stressors. The effects of an acute stressor, such as a single episode of violence, includes a normal shock reaction which usually lasts a short time and is marked by severe anxiety. (Garmezy and Rutter, 1985). However, Post Traumatic Stress Disorder can result if the stressor is intense enough (Terr, 1990). Children who experience acute stressors are better able to assimilate the traumatic event into their existing world view —i.e., the event was an accident and things are back to normal — (Garbarino, Kostelny & Dubrow, 1991). Terr (1990) noted that brief stressors tend to have only limited effects on children but that repeated stressors may lead to anger, despair, and severe psychic numbing, which in turn result in major personality changes.

Unlike acute violence, which is short-lived and where children can go back to their usual routines after the stressful or traumatic event, chronic violence imposes a requirement for developmental adjustment. Such developmental adjustments include persistent Post Traumatic Stress Disorder, alterations of personality, and major

changes in patterns of behavior. However, developmental adjustments may also include articulation of ideological interpretations of the world that provide a framework for making sene of ongoing danger, particularly when that danger comes from the violent overthrow of day-to-day social reality as is the case in war, communal violence, or chronic violent crime (Garbarino, Kostelny & Dubrow, 1991).

One such reaction to chronic violence may be denial and numbing. Terr (1990) found that children begin to deny reality when stressors or traumas continually occur. When extreme situations become unpredictable, these "battle-weary" children attempt to block out stressful or traumatic events by ignoring reality. Children become desensitized when they must continually guard against thinking about the reality of their situation (Terr, 1990).

Convergent research studies suggest that the effects of violence are cumulative — the more children are exposed to violent events, the more developmental harm, including psychological and behavioral disorders, they manifest. In their studies of children experiencing chronic violence in the United States, Pynoos and Nader (1988) have demonstrated that repeated experiences with violence does not protect children against negative developmental outcomes; rather, it increases children's susceptibility to developmental harm and traumatization.

Macksoud, in documenting the chronic exposure to violence of children living in Beirut, concluded that the repetitive nature of the traumas these children experienced had an additive effect (Macksoud, 1992). Thus, in addition to the types of traumas, the number of traumas and the extent of exposure were also crucial factors related to the development of children.

While the diagnosis of Post Traumatic Stress Disorder is used with children experiencing ongoing stressors, Straker (1987) has suggested that the term "post-traumatic stress disorder" is not appropriate for children who are victims of chronic

violence. Rather, the term "continuous stress syndrome" is more appropriate, indicating long lasting developmental consequences for children.

Moreover, while some effects of chronic violence may become evident immediately, others may not appear until years later in the child's life. For example, 50% of children exposed to the extreme violence under the Pol Pot regime in Cambodia during 1979-1979, did not reveal mental health disturbances until four years after their traumatic experiences were over (Kinzie and others, 1986).

Developmental Outcomes to Chronic Violence

Children who grow up amidst the chronic violence of war, occupation, or community violence are at risk for developmental impairment (Garbarino, 1991; Rosenblatt, 1983). A growing number of studies in recent years have focused on the relationship between chronic violence and psychological disorders, behavioral problems, and personality changes.

A study of Palestinian children living under military occupation prior to the *Intifada*, found that the more children are exposed to stressful events linked to military occupation, the more psychological disorders they manifest, including extreme anxiety, phobic reactions, aggressiveness, withdrawal, and enuresis (Punamaki, 1987). Garbarino (1991) observed that some children living in Kuwait under the Iraqi occupation in 1990-1991 cried incessantly and were unable to eat (Garbarino, 1991).

In a study conducted in 1988 on the impact of the *Intifada* on the mental health of 796 Palestinian children, Baker (1991) found children living in the West Bank and Gaza Strip to be suffering from behavioral and psychological problems. However, conclusive results could not be ascertained because a pre-post-*Intifada* design was not possible, and because there was no control group of Palestinian children who had not

experienced the *Intifada* (i.e., children living inside Israel or in communities where there were low levels of *Intifada*-related events).

Nonetheless, Baker was able to compare a smaller group of Palestinian children in 1990 (N=183 from the Occupied Territories and N=30 from Israel) and noted significantly higher levels of depression, aggression and fearfulness for the children in the Occupied Territories, but also higher levels of self esteem. While the literature documents that individuals in stressful environments have low self-esteem and that self-esteem is negatively correlated with depression, Baker suggests that the active engagement of children and youth in events of the *Intifada* produced feelings of power and control which was positively correlated with high self esteem in Palestinian children (Baker, 1991).

This parallels Punamaki's research (1987) on the relationship between military occupation and psychological symptoms on 174 Palestinian mothers and 105 of their children aged 8-14. While findings indicated that children's psychological disorders significantly increased as the amount of stressful events related to the military occupation increased, findings also demonstrated that children who appeared resilient had mothers who showed internal locus of control, were not depressed, received social support and were religious (Punamaki, 1987).

In another study of Palestinian children, Punamaki (1988) examined the effects of age, sex, exposure to political hardships, and the historical-political situation on children's coping modes and fears. Three groups of children aged 8-14 were examined: 66 children living in the Israeli-occupied West Bank in 1982, before the Lebanon war; 42 West Bank children in 1985, and 31 Palestinian children living in Beirut refugee camps in 1984. Both individual characteristics of children and historical-political factors were found to influence the way children coped with stress. The findings indicated that exposure to political hardships increased the level of

coping in the West Bank group tested in 1982, whereas in the West Bank group tested in 1985 exposure to political hardships decreased coping ability. It was concluded that the active coping style of the West Bank 1982 group reflected the defiant mood prior to the Israeli invasion of Lebanon, and that the lower coping of the West Bank 1985 group reflected the more defeated attitude prevalent after the invasion of Lebanon. In all three groups, older children employed more coping. Moreover, boys were found to cope more than girls, and displayed fewer fears than girls.

In a study of Lebanese children, Macksoud and Aber (1993) investigated the war experiences of 224 Lebanese children aged 10-16 growing up in Lebanon to determine the number of types of war experiences they had, as well as mental health symptoms and positive outcomes. They found the number of types of experiences varied according to gender, age, father's occupational status and mother's educational level. The types of war experiences were related to mental health symptoms, post traumatic stress disorder and adaptational outcomes. Thus, children who were victims of violence or who experienced the death of a family member displayed more post traumatic stress disorder, while children who were separated from parents were more depressed.

However, some war experiences were found to have positive effects on children's development. Being displaced from one's home resulted in planful behavior, and separation and experiencing violence were related to prosocial behavior. The authors suggest that witnessing violence to others produces a prosocial tendency to help others and become advocates of humanitarian issues as a way to master their own suffering. Likewise, children who experienced the death of someone close to them or who remained in their homes during the fighting, displayed an increase in planful behavior as a way for them to take control of their lives and gain control over

their environment. Planning for the future was seen as an attempt to fight feelings of helplessness and hopelessness (Macksoud & Aber, 1993).

The effects of length of time of exposure to violent activities was documented by Boothby (1992) in his research on Mozambiquan boys kidnapped by Renamo, the antigovernment army that has conducted brutal attacks against Mozambiquan civilians. In this study, of the 42 boys aged 6-16 that were forced to join the Renamo army, the 35 boys who spent less than six months with Renamo emerged from their experience with their sense of basic trust in traditional values intact. The seven boys who had spent between one and two years with Renamo had profound disruptions in their identity. Boothby describes them as having lost their sense of self and having merged their identities with their captors (Boothby, 1992).

Studies of community violence in the United States complement the research on war zones and political violence in other countries. Research on community violence in high violence areas in Chicago has noted regressive behavior, such as thumb sucking and loss of bowel and bladder control in young children (Garbarino, Dubrow, Kostelny and Pardo, 1992). Research in the area of learned helplessness suggests that the feeling of helplessness may be a realistic response under conditions where the stressors are unpredictable and uncontrollable (Peterson, Luborsky, and Seligman, 1983). Children living in constant danger also may display fear and anxiety in a variety of ways, ranging from excessive clinging behavior to continuous crying. Bell (1991) found that children's fear increased as the number of experiences of violence increased.

In a high violence community in New Orleans, Osofsky and colleagues (1993) found a significant relationship between exposure to chronic community violence and stress reactions for a sample of 53 fifth grade children. Mothers observed increased sadness, anger, aggression and uncaring attitudes in their children. Researchers also

noted symptoms for children who had been exposed to chronic violence which included sleep disturbances, disruptions in peer relationship, erratic behaviors, difficulty concentrating, memory impairment, anxious attachment with their mothers, and severe constriction in activities, exploration, and thinking (Osofsky and others, 1993).

Risk Factors and Protective Factors

Risk factors are individual or environmental hazards that increase children's vulnerability to negative developmental outcomes. Risks occur when the interaction between the child and the environment produces stressors which "results in new limitations or difficulties, new threats to homeostasis and to integration, new obstacles to learning, increased difficulties in mastering anxiety, or negative expectancies." (Murphy & Moriarty, 1976). Lazarus (1986) conceptualizes stressors as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being." The presence of risk factors does not guarantee negative developmental consequences, but instead increases the probability that developmental harm will occur (Werner, 1990).

Permanent developmental damage is more likely to occur when multiple risks are present in a child's environment (Rutter 1987; Sameroff & others, 1987; Sameroff & Fiese, 1990; Sameroff & others, 1993; Dunst & Trivette, 1992). The risk of developmental harm from exposure to violence increases when that exposure is compounded by other biological, cultural, psychological, and social risks. Cumulative stress from a variety of stressors throughout the course of development increases negative outcomes for children. Rutter (1987) found that when risk factors accumulate, the chance of damaging consequences increases dramatically, and when

four or more risk factors occur, the risk increases tenfold. "Stresses potentiate each other so that the combination of chronic stresses provides very much more than a summation of the separate stresses singly. Lasting damage occurs when the elements of a child's environment — at home, at school, in the neighborhood — multiply each other's destructive effects" (Rutter, 1982). In a study by Sameroff and colleagues of risk and children's IQ, children with three or more risk factors had lower IQ's than children with two or fewer risk factors (Sameroff & others, 1987).

A number of protective factors from the environment can buffer stress and trauma for children. A stable emotional relationship with at least one parent or other reference person; an open, supportive educational climate and parental model of behavior that encourages constructive coping with problems and conflict; and social support from persons outside the family have been found to mediate stressors in children's lives (Losel and Bliesner, 1990).

Thus, when examining the effects of political violence, other risk factors which the child experiences must also be considered, as well as protective factors that buffer the child from developmental harm. In addition to violence in the child's environment, violence within the family, problems in maternal functioning, and restrictive and punitive child rearing practices have been shown to be risk factors that affect developmental outcomes in children. On the other hand, maternal well being, a nurturing family, and a relationship with an adult that includes cognitive processing of stressful events have been shown to be protective factors that shield children from negative outcomes. Moreover, the effects that stressors have in children's lives often depends on the developmental age of the child as well as the child's gender. These risk and protective factors will be discussed as they relate to children's experience of violent political conflict.

Age

A child's age is an important factor in his response to stressors. Young children have less cognitive competence than older children in making sense of stressors in their environment (Garbarino & Stott, 1989; Garbarino and Associates, 1992). Bowlby (1980) demonstrated that children who experienced trauma when they were six months to six years of age suffered the greatest psychopathology. Rutter's (1981) research supports these findings for children who were hospitalized. Children who were hospitalized between six months and four years of age were more vulnerable to negative outcomes than children less than six months or more than four years of age. Research by Eth and Pynoos (1985) confirm that preschool children who experience trauma are more likely to develop psychopathology than older children.

In a study of children receiving psychiatric care, children who experienced an initial trauma before the age of eleven were three times more likely than those who experienced their first trauma as teens to develop psychiatric symptoms (Davidson and Smith, 1990). Moreover, analyzing research by Rutter and others, Bronfenbrenner demonstrated that the stress of urban life associated with "family adversity" is most detrimental for young children, while it even stimulates some adolescents (Bronfenbrenner, 1986). Witnessing, or being a victim of violence is particularly stressful for young children who are already wrestling with developmental challenges of competence, safety, and bodily integrity (Groves, Zuckerman, Marans, and Cohen, 1993).

Older children, especially adolescents, are also better able to make use of ideology as a protective factor in times of political conflict (Garbarino, Kostelny & Dubrow, 1991b). The degree to which historical and social events influence an individual's development depends on the individual's developmental level. A study by Stewart and Healy (1989) found that women who "came of age" during World War II

were more accepting of the role of women in the workplace than women who were younger or older. In research done on children of the Great Depression, Elder (1974, 1993) found that younger children, especially boys, were more adversely affected by depression hardships, suffering more psychological harm than adolescents.

Developmental outcomes for adolescents depend less upon the infrastructure of the family and more on the ideologially-driven activities in the community and the larger society. Because adolescents encounter social conditions and culture more directly than younger children, they therefore are more likely to incorporate ideologically-related events into their identity formation. Adolescents are thus better able to make use of ideology as a protective factor and source of resilience than younger children (Garbarino, Kostelny & Dubrow, 1991). This parallels Arroyo and Eth's (1985) findings of El Salvadoran and Nicaraguan children. Children who were 12-15 years old viewed themselves as freedom fighters, and consequently experiences of police invasion and detention were not as traumatic for the older group as they were for the younger group.

Additionally, how a child responds to violence depends on age and developmental level. Preschool children who were victims of violence have demonstrated separation anxiety, and repetitive play of the traumatic event (Mowbray, 1988; Arroyo and Eth, 1985). Preschool children also tend to exhibit passive reactions and regressive symptoms — such as enuresis, decreased verbalizations, and clinging behavior — as responses to experiences with violence (Garbarino, Dubrow, Kostelny & Pardo, 1992).

School-age children, on the other hand, display more aggression as well as more inhibition, and they develop somatic complaints, cognitive distortions, and learning difficulties as a result of experiences with violence (Arroyo & Eth, 1985;

Pynoos & Eth, 1985). Guilt, anger, hostility and depression were found to be more prevalent in both school-age children and adolescents (Mowbray, 1988).

Furthermore, adolescent responses to violence are characterized by a "premature entrance into adulthood or a premature closure on identity formation" (Pynoos and Eth, 1985). Adolescents may also engage in acting-out and self-destructive behaviors, such as substance abuse, delinquent behavior, promiscuity, life-threatening reenactments, and other aggressive acts.

Gender

Convergent research findings suggest that boys are more vulnerable to stressors in their environment than girls (Rutter, 1979; Garmezy, 1983; Werner, 1990). Research by Milgram and Milgram (1976) on the effects of the Yom Kippur War also determined that boys suffered more negative outcomes than girls. During periods of political violence in Northern Ireland, McCauley and Troy (1983) reported that boys were referred more frequently for psychiatric problems than were girls — 60% of all referral were for boys, compared to only 40% for girls.

In research of the impact of the Great Depression of the 1930s on children, Elder (1974; 1993) concluded that young boys displayed more developmental disturbances than did young girls and encountered more problems in transitions to traditional adult roles than girls when their families experienced unemployment and income loss. Elder attributed these developmental outcomes to changes in the family structure. Boys were negatively affected by the diminished status of their fathers due to unemployment, while girls were positively affected by the increased status of their mothers who were more likely to be employed (Elder, 1974).

Furthermore, resiliency for boys and girls depends on different factors (Block & Gjerde, 1986; Werner, 1990). Girls require independence and an absence of

overprotection, while boys need structure, parental supervision, an adult male who serves as a model of identification, and emotional expressivity.

Family Violence

Numerous studies have found that violence within the family is a risk factor for psychological and behavioral problems (Garbarino, Guttman, & Seeley, 1986; Garbarino & Gilliam, 1980; Garbarino & Stocking, 1980; Cicchetti, 1989, 1990; Straus, 1987). Children who experience violence in the family are at increased risk for disturbances and delays in their social and emotional development (Cicchetti, 1989), as well as in their cognitive functioning and academic performance (Erickson, Egeland, & Pianta, 1989).

A correlation between maltreatment and children's developing sense of self was found by Cicchetti and colleagues. Toddlers who were physically maltreated responded more negatively to their own mirror images, made fewer self-statements, and were less likely to refer to their own internal states than comparison toddlers (Cicchetti & Beeghly, 1987). Preschool children who were maltreated had less ego control and self-esteem (Egeland, Sroufe, & Erickson, 1983). In a study of 104 low income children, half who were maltreated and half who were not, Vondra et al. (1989) found that maltreatment affects self-perception. In pre-school children, their self-perception was overly inflated, while in middle school children, their self perception was low, describing themselves as less competent and less accepted than the comparison group.

In addition to violence against the child in a family, violence towards other family members, especially the mother, has been found to have detrimental effects on children. In a study of children from violent families, Porter and O'Leary (1980) demonstrated that violence between parents was significantly correlated with behavior

problems among boys less than ten years old, although a significant relationship was not found for girls. (Porter & O'Leary, 1980). Research by Hershorn and Rosenbaum (1985) confirm these findings. In a study comparing children of physically abused mothers, mothers who experienced non-physical conflict, and satisfactorily married mothers, children whose mothers experienced physical abuse or non-physical conflict had increased conduct problems (Hershorn & Rosenbaum, 1985).

Interaction of Violence In the Family with Violence Outside the Family

Although empirical research on the interaction of violence inside the home with violence outside the home is limited at this time, it is clear that a significant number of children in violent communities also experience violence inside their homes (Garbarino & Kostelny, 1992). These children, who are already vulnerable from experiencing family violence and are then exposed to community violence, are at increased risk of developing behavioral and psychological problems (Osofsky and others, 1993; Garbarino, 1992; Cicchetti & Lynch, 1992).

Children living in communities where high levels of community violence exist are also exposed to more intra-familial violence which is associated with the stress which parents struggling with adverse living conditions experience. Research conducted on child maltreatment rates in high crime areas in Chicago, demonstrated that these high crime areas had child maltreatment rates up to four times higher than expected based on city averages (Garbarino & Kostelny, 1992; Garbarino & Kostelny, 1993).

Cicchetti and Lynch have proposed an ecological/transactional model demonstrating the interaction of community violence and child maltreatment, which increases the likelihood of negative developmental outcomes and psychopathology in children (Cicchetti, 1990). A community in which violence is prevalent may contribute

to the proliferation of violence and maltreatment in the family. In addition, outside factors, such as poverty or living under conditions of military occupation, may influence violence both within the community and the family by increasing stress that leads to violence at the broader community level and violence at the narrower family level. The microsystems of maltreated children's developmental ecologies are characterized by stressful, chaotic, and uncontrolable events (Cicchetti, 1993).

The combination of living in high-risk families within high-risk communities creates a situation of special danger for children because the compensatory factor in the child's life of a warm and supportive family that could remediate the effects of a violent community are severely limited (Garbarino, Kostelny, Grady, 1993; Gabarino, Dubrow, Kostelny & Pardo, 1992). Families can provide the emotional context for the necessary "processing" to make positive moral sense of stressful and traumatic events. But to do so they must be functioning well to start with (Garbarino, Dubrow, Kostelny and Pardo, 1992). Maltreated children are generally denied that processing with their family. Additionally, for children in dangerous environments outside the home, communities are often not able to help process stressful events in the child's life. Findings by clinical researchers studying the impact of extra-familial trauma indicate that one of the mediators of Post Traumatic Stress Disorder in children exposed to trauma is the quality of the child's family relationship prior to the trauma (Pynoos & Nader, 1988; Terr, 1990).

Parental Mediation

The formation of a secure attachment relationship with the primary caregiver is one of the first developmental tasks that children must undertake (Bowlby, 1980). A child's relationship with a caring adult early in life is related to later capacities for love, trust, conscience, and self-confidence. The child continues to need stable, dependable,

nurturing relationships as he develops — from his parents and/or from other caring adults in his microsystem.

These relationships with adults are especially important for children experiencing stressors in their lives who need help processing their stressful and traumatic experiences in a way that prevents developmental harm. This process of operating in the developmental space between what the child can do alone and what the child can do with the help of a teacher is known as the zone of proximal development (Vygotsky, 1986). Developmentalists have come to recognize that it is the dynamic relationship between the child's competence alone and the child's competence in the company of a guiding teacher that leads to forward movement.

For children who experience traumatic stressors, research has shown that parents can be both effective buffers, as well as contributing additional risk factors to their child's development. Risk factors such as separation from mother, maternal depression, and a punitive and controlling child rearing style have been shown to contribute to developmental harm for children experiencing stressful experiences. On the other hand, protective factors such as the child remaining in the care of his mother (or other significant caretaker), and maternal well-being have been shown to shield children who experience stressors in their lives from negative developmental outcomes.

Studies on the aftermath of acute traumatic events indicate that social support can lessen the adverse effects of stressful experiences (Figley, 1985). The child's immediate family members, especially parents, are most likely to detect the psychological disturbances, since they are most familiar with their child's moods and sensitivities prior to the event and can thus readily detect changes in behaviors, moods, and attitudes. Furthermore, the child's parents can be helpful in processing the trauma, by serving as either passive or active facilitators — clarifying insights,

correcting perceptual distortions, and determining the attribution of blame and credit. Solnit has found that an optimal parent-child relationship with positive early experiences enables a child to recover from and cope with stress and trauma (Solnit, 1983). Children who experience warm, strong, and supportive relationship with parents are most likely to avoid this pattern of missocialization of fear, violence, and hatred. Positive family relationship buffer the effects of community violence as they do all forms of environmental threat (Werner, 1990).

Separation

In times of unusual stress, children have an increased need for intense physical contact with parents, since their predominant fear is separation from them (Ressler, Boothby, and Steinbock, 1988). Freud and Burlingham demonstrated that children during World War II were able to endure the emotional stress and physical disruption of war better if they remained with their primary caretaker, and were cared for in a routine and stable manner. More children who were separated from their parents manifest negative developmental outcomes than children who were not separated. Although 25-50 percent of the children who were evacuated from cities in England during World War II while their parents remained manifested neurotic symptoms, very few children who remained behind with their families displayed neurotic symptoms. The security provided by parents apparently compensated for the traumatic effects of the war (Freud and Burlingham, 1943).

Moreover, for the few children who had remained with their parents and displayed psychological symptoms, the symptoms lasted only a short time. Because they do not fully comprehend inherent danger, younger children often exhibit only minor symptoms of anxiety when they are able to remain physically close to at least one parent and when parents are able to remain calm themselves.

Interviews with children and parents in Kuwait in the aftermath of the Iraqi occupation confirm these findings. Physical proximity was important for young children, and parents often had entire families sleeping together to promote feelings of security (Garbarino, 1991). During situations of chronic danger, family bonds take on major importance. In Germany after World War II, many refugee families perceived themselves united by a common destiny and clung together (Ressler, Boothby and Steinbock, 1988). Children who remained with parents, even in concentration camps, revealed less psychological disturbances than did children who had been separated form their families. Separation from parents was more traumatic for children than the actual exposure to bombing and witnessing of destruction, injury, and death from air raids. Additionally, a study of Cambodian children during the Pol Pot regime, Kinzie (1986) found that children who did not reside with a family member after fleeing the war were more likely to develop post traumatic stress disorder than those who lived with a family member.

Furthermore, children imprisoned in Nazi concentration camps and separated from their parents exhibited severely disturbed behavior with long term effects of anxiety and hostility dominating their development (Langmeir & Matejcek, 1973). While refugee children regained physical health, their social behavior and emotional health rapidly deteriorated. These children showed developmental retardation, destructiveness, and an inability to play. Children separated from their mothers before the age of three were retarded by age five in the cognitive and social domains. However, as Anna Freud noted with the children she studied, children who were separated from their parents, but who had a strong, positive relationship with them, did better than those children who did not have secure, strong parental attachments. Langmeir suggests that character traits developed in early childhood served as resiliency factors which could buffer them from severe trauma.

Maternal Well-Being

However, while parents can often mediate acute stressors for their children, when the stressors are chronic and affect the mother as well, her ability to mediate is impaired. Most children are able to cope with stressors in their environment and maintain reservoirs of resilience as long as parents are not pushed beyond their "stress absorption capacity" (Garbarino, 1993). When that point is exceeded, however, the development of young children deteriorates rapidly and markedly.

Researchers conducting studies of children under extreme conditions during World War II emphasized that the emotional state and behavior of mothers are the main mediators between children's psychological functioning and traumatic experiences (Freud and Burlingham, 1943; Janis, 1951). According to research on the mother-child relationship during war, the level of emotional upset displayed by the child's parents, not the war situation itself, was the most important factor in predicting the child's response to the war. Fraser (1974) observed that in Belfast, Northern Ireland during the 1968 riots, a child's response to violent events depended largely on the degree of emotional security the child had before and during the stressful event and the psychological resources available from the child's primary caregiver and immediate family. The stressful experience itself was secondary.

In Belfast, during intense communal fighting in 1969, the most psychologically disturbed children tended to have a parent who had exhibited psychological disturbances as a result of the violence. This finding suggests that the children were modeling their parents' distress or that the parents' distress impaired his or her ability to mediate for the child (Lyons, 1971). Case studies by Baider and Rosenfield (1974) of the effect of parental fears on children for Israeli parents and children during the Yom Kippur war demonstrated that young children's anxiety was reduced when

parents were able to act as mediators and interpreters of stressful events for their children.

Another example of communicated anxiety comes from a study by Ziv and Israeli (1973), comparing the anxiety level of 103 Israeli children living in settlements who experienced shelling and 90 Israeli children in kibbutzim who did not. While they found no relationship between a child's being shelled and a child's anxiety, they did find a correlation between a parent's level of anxiety and that of the child.

Moreover, a study of 40 Chilean refugee families living in Canada demonstrated that children's symptomatology was related to the loss of the parental bond or the protective home atmosphere due to parental preoccupation or psychological disorganization. Mothers who were depressed because of the disappearance or death of their husband could not protect their children from psychological disturbances. The study suggests that before parents can buffer the war traumas involving loss for their children, they first need to experience and understand the loss themselves, and to share it with others. Mothers had to undergo their own healing processes before they could help their children (Allodi, 1980).

Punamaki's study (1987) of the impact on Palestinian children's and mothers' exposure to traumatic events resulting from military occupation, revealed that exposure to trauma increased both the mother's and her children's mental health problems. However, the main finding from this study was that a mother's mental health and active behavior in a traumatic situation mediates the impact of traumatic events on her child's emotional health. Palestinian mothers whose children experienced many violent events but had no psychological disturbances, strongly believed in their ability to control their lives, used active means of coping in trying to change the traumatic situation, and availed themselves of social support.

Resilient children have parents who are "models of resilience," available with reassurance and encouragement during adversity, helping their children understand and process stress and trauma (Anthony and Cohler, 1987). A study of Lebanese mothers and their children in Beirut during the 1982 war indicated that mothers who were psychologically healthy could be effective mediators between war experiences and the psychological functioning of their young children (Bryce, Walker, Ghorayeb, and Kanj, 1989). In addition to the frequency of war experiences, the mother's perception of the war's negative effects on her children was examined. The mother's perception of negative effects was a stronger predictor of psychological disturbance in her children than the number of war related experiences.

A mother's ideology or belief system can also serve as a buffer for her and her children (Bettelheim, 1943, Punamaki, 1987; Bryce, Walker, Ghorayeb, and Kanj, 1989). Ideology contributes to resilience because it gives meaning to violent events and sustains the ability to function under extreme conditions (Murphy & Moriarty, 1976). In his observations of life in Nazi concentration camps, Bettelheim (1943) noted that those who bore up best were those with intense ideological commitments that offered meaning impervious to day-to-day brutalization. This parallels a recent study in Israel which reported that ultraorthodox Jews suffered less from stress than more secular Jews as a result of the Palestinian Uprising (Pines, 1989).

Ideology or strong religious beliefs have brought stability and meaning to children's lives, particularly during times of hardship and stress. Ideology mobilized the social and psychological resources of Palestinian mothers - who, with their children, were exposed to chronic violence — and enhanced their ability to buffer stress for their children (Punamaki, 1987). For Palestinians living under Israeli occupation in refugee camps, where every feature of day-to-day stress and physical deprivation is met with an ideological response that mobilizes social and psychological

resources, "the psychological processes of healing the traumatic experiences drew strength from political and ideological commitment. Nationalistic motivation was present at all stages of the stress process: the meaning and harmfulness of an event as well as sufficiency of one's own resources to cope with stressors were approached in the wider social and political context of a victimized and struggling nations" (Punamaki, 1987, pp. 82-83). The determined struggle to persist dominates Palestinian culture and community life (Grossman, 1988) and is responsible for the resilience of children in the face of awesome stress, such as was experienced by Palestinian families under siege in the refugee camps in Lebanon (Cutting, 1988).

Punamaki (1987) found that mothers' experience with violence mobilized them into actively coping with the stress by engaging in political activities; this active behavior in a stressful situation mediated the impact of stressful events on their children's emotional health. Palestinian mothers whose children experienced many violent events but had no psychological disturbances strongly believed in their ability to control their lives, were actively trying to change the traumatic situation, had religious beliefs, and availed themselves of social support.

Mother's Child Rearing Strategies

Parenting styles and attitudes have a direct impact on children's development. Parents experiencing stresses from the environment are restricted in their child rearing roles (Bronfenbrenner, 1979). Parents' ability to engage in stable, nurturing child rearing depends on a supportive environment, including safety in their community (Dunst & Trivette, 1992).

In their attempt to cope with violence, parents may engage in child-rearing strategies that impede their children's normal development. In the United States, parents and children growing up in high risk communities which include poverty and

violence, are exposed to different demands and experience more risks than economically privileged parents (Halpern, 1990a). Thus, child-rearing strategies that are adaptive for coping in these inner-city environments are quite different from child-rearing strategies practiced in mainstream society. Inner-city parents who are trying to help their children cope may demand unquestioning obedience while discouraging curiosity in order to protect their children from exposure to violent activities. Parents regard these strictures as necessary in the dangerous environments in which they live, since errors in judgment can have life-threatening consequences (Silverstein and Krate, 1975; Halpern, 1990b).

Thus, parents who fear for the safety of their children may adapt their child-rearing strategies to the realities of a dangerous environment. Such strategies may include not letting children go outside to play for fear of shooting incidents, or giving them specific instructions about where to go and what to do when they hear gunshots. While such strategies may be a necessary adaptation to living in a dangerous area, it impedes the normal developmental tasks of childhood, tasks that include exploring the world and interacting with peers in community activities. Parents who fear for their children's safety because of danger in their community, communicate powerful messages that the world is a hostile and unpredictable place (Garbarino, Dubrow, Kostelny and Pardo, 1992; Groves & Zuckerman, 1993).

Similarly, parents of children in high-violence environments may manifest their fear by imposing an extremely restrictive and punitive style of discipline (including physical assault) on their children. In their efforts to protect their children from the influence of negative forces, such as gangs in the neighborhood, these parents often employ harsh, restrictive measures to suppress the self-assertive tendencies of children—especially boys—so they won't get into trouble with teachers or police. Unfortunately, this approach is likely to heighten aggression on the child's part and

endorse and acceptance of violence as the modus operandi for social control (Scheinfeld, 1983).

In conclusion, cross-cultural studies of children during war or other stressful events reveal four principal themes. First, the objective reality of children's experiences only partially accounts for psychological and social outcomes. Second, individual characteristics, including the child's age and gender must be taken into account in assessing the impact of stressful environments and events. Third, risk and protective factors occurring at all levels of the child's social environment play a role. These include family functioning, maternal well being, child rearing strategies, and ideology.

CHAPTER 3

RESEARCH DESIGN

This study was part of a larger research effort conducted by the Erikson Institute for Advanced Study of Child Development in collaboration with the Early Childhood Resource Center in East Jerusalem and the Youth Policy Center at Haifa University. The larger study was designed to investigate the social, psychological, and moral consequences of living with violence on 450 Palestinian and Israeli children. Only those measures and procedures relevant to the present study, however, will be discussed herein.

Selection of Sample

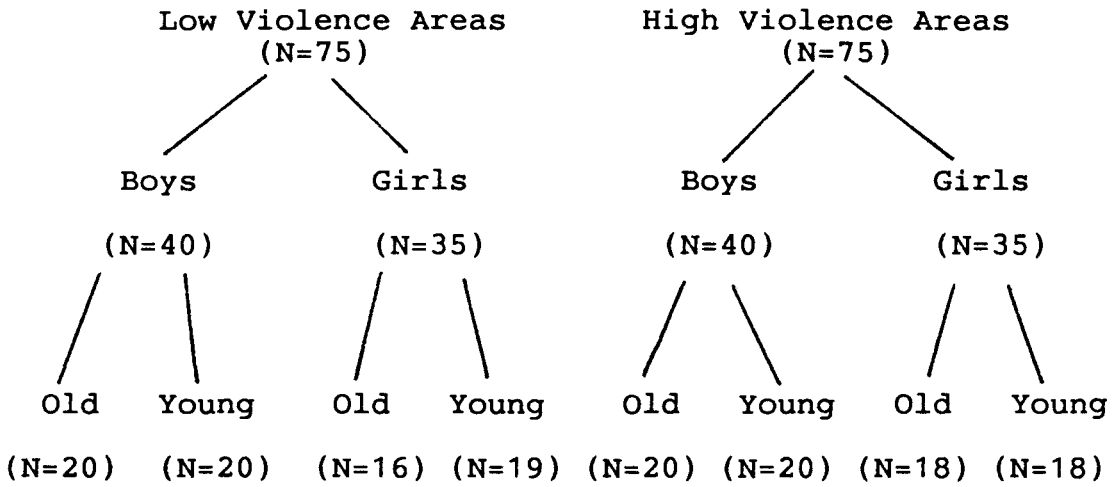
For the present study, a sample of 150 Palestinian children and their mothers living in the Israeli occupied West Bank was utilized. A total of 153 families had been approached to participate in the study. Two families declined to participate, and one mother did not finish the interview. Children and their mothers were randomly selected according to 1) level of *Intifada* violence in the area where they lived (high vs. low violence), 2) gender (boys vs. girls), and 3) age (6-9 year olds vs. 12-15 year olds) (See Table 1). All children were from two parent households.

High and low violence areas were determined by ranking all cities and villages in the West Bank by percentage of *Intifada*-related deaths, injuries, curfews and house demolitions occurring in 1988 and 1989. Areas that ranked in the top 20% were categorized as high violence areas, while those that ranked in the bottom 20% were categorized as low violence areas. One city and two villages from high violence areas and one city and two villages from low violence areas were then randomly selected for the study.

Table 1

Demographic Characteristics of Sample

(N=150)



Socio-economic Factors

A correlation matrix was compiled for five socio-economic variables and eleven variables measuring child symptomatology. The socioeconomic variables were: living conditions (very crowded, crowded, modest, comfortable, very comfortable), father's educational level (0-20 years), father's employment status (unemployed, employed part time, employed full time), mother's educational level (0-20 years), and mother's employment status (housewife, unemployed, employed part time, employed full time).

The variables measuring child symptomatology were taken from the Problems Section of the Child Behavior Checklist. The Total Problems Scale measured overall child symptomatology, while the ten subscales measured specific syndromes of problems: internalizing behavior, externalizing behavior, withdrawn behavior, somatic complaints, depression/anxiety, social problems, thought problems, attention problems, delinquent behavior, and aggressive behavior. The Child Behavior Checklist is discussed more fully in later in this chapter.

None of the socioeconomic variables were significantly correlated with the Total Problems Scale, and only two out of fifty correlations were significantly correlated ($p<.01$) on the subscales (father's and mother's educational level were negatively correlated with social problems) (See Table 2). Therefore it was determined that overall, socioeconomic variables were not correlated with child symptomatology.

Although the socioeconomic variables were not correlated with child symptomatology, they were correlated with level of violence in area. Significant differences were found between low and high violence areas for living conditions ($p<.01$), father's educational level ($p<.001$), and father's employment status ($p<.01$), with high violence areas having more crowded living conditions, lower educational level for father, and lower employment status for father (See Table 3). As will be discussed later, this is similar to patterns in other areas of war and conflict: violence is more prevalent in lower socio-economic areas.

Table 2

Socio-economic Variables as They Relate to Child Symptomatology

	Father's Educ.	Father's Employ.	Living Cond	Mother's Educ.	Mother's Employ.
Father's Education	1.00	.27**	.31**	.62**	.18
Father's Employment	-.27**	1.00	.34**	.23*	.06
Living Conditions	.31**	.34**	1.00	.20*	.10
Mother's Education	.62**	.23*	.20*	1.00	.24*
Mother's Employment	.18	.06	.10	.24*	1.00
Total Problems	-.04	.08	.08	.00	.04
Internalizing	.00	.12	.09	.03	.09
Externalizing	-.03	.04	.11	-.04	.02
Withdrawn	-.04	.14	.09	.03	.10
Depression	.02	.11	.07	.03	.03
Somatic	.01	.09	.01	.01	.12
Social Problems	-.22*	-.04	.00	-.22*	-.13
Delinquency	.08	.13	.16	.08	.00
Attention Problems	-.13	-.02	-.08	-.11	-.04
Thought Problems	-.06	.06	.02	-.06	.07
Aggressive Behavior	-.11	.01	.01	-.13	.05

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

TABLE 3

Socio-economic Variables in High and Low Violence Areas

	Low Violence Areas		High Violence Areas		
	Mean	Standard Deviation	Mean	Standard Deviation	t Value
Living Conditions	3.58	.92	3.08	1.12	3.01**
Father's Education Level	10.08	5.00	7.30	4.34	3.63***
Father's Employment Status	2.59	.92	2.22	.92	2.65**
Mother's Education Level	7.73	4.77	6.45	3.47	1.88
Mother's Employment Status	.12	.47	.17	.50	-.63

Low Violence: N=75
High Violence: N=75

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

Instruments

The instruments used in this study measured demographic and socio-economic variables, child symptomatology, family violence, political violence, problems in maternal functioning, and maternal child rearing style. Translation of the instruments from English into Arabic and back into English was performed by a professor from the Hebrew University and staff from the Early Childhood Resource Center in East Jerusalem.

1) Demographic and life history information: A standard format adapted from earlier research (Garbarino and Sherman, 1980) was used to collect demographic information. This information included family and household size and composition, age of children and parents, residential history, occupational history, and social status. Modifications of this basic instrument were made to improve its appropriateness for capturing ethnic and social class variables especially significant for understanding the population being studied.

2) Achenbach Child Behavior Checklist: The Achenbach Child Behavior Checklist (Achenbach and Edelbrock, 1983) is designed to record in a standardized format the behavioral problems and competencies of children aged four through sixteen, as reported by their parents, the child him or herself, or others who know the child well. For this study, mothers completed the instrument. Each of the 118 behavior problem items is scored on a three step response scale (0 = not true; 1 = somewhat or sometimes true and 3 = very true or often true). The Total Problems Scale is a composite of all 118 items. Additionally, there are ten subscales of syndromes of specific problems: internalizing behavior, externalizing behavior, withdrawn, somatic complaints, depression/anxiety, social problems, thought problems, attention problems, delinquent behavior and aggressive behavior.

The Achenbach Child Behavior Checklist is based on both a normative sample and a clinical sample of children aged four to sixteen living in the United States. The

normative sample was selected to be representative of the U.S. population based on the following characteristics: a) white, black, and English-speaking Hispanic ethnicity; b) socio-economic status ; c) urban-suburban-rural residence; and d) Northeast, North Central, South, and West geographic areas. (Achenbach, Howell, Quay and Conners, 1991).

The clinical sample of children receiving mental health services were selected from 18 clinical services distributed across the United States. The agencies varied widely in terms of the populations they saw with respect to socio-economic status, ethnicity, geographic area, and urban-suburban-rural residence.

The Child Behavior Checklist is particularly applicable to studies of children at risk. Its overall reliability and validity is high. High inter-interviewer reliability (.959) was obtained for the problem items by three interviewers on 241 matched triads of children by Achenbach. Test-retest reliability was .952 for the specific problem items. Interparent reliability ranged from .65 to .75. Content validity is supported by discriminating significantly between referred and nonreferred children who were demographically matched. Construct validity is supported by numerous correlates of the Total Problems Scale and ten subscales with the Conners Parent Questionnaire (1973) and the Quay-Peterson revised Behavior Problem Checklist (1983). Criterion-related validity is supported by the ability of the scores to discriminate between referred and nonreferred children after demographic effects were partialled out.

3) Conflict Tactics Scale: The Conflict Tactics Scale (CTS), Form N (Straus and Gelles, 1988) was used to ascertain the child's experience with violence in his family. The Conflict Tactics Scale has been widely used in the United States and in several other countries as a self-report measure of ways that families respond to conflict. It asks whether the subject has experienced a range of behaviors — from "talked about it" to "hit" to "used a knife or a gun." The child responded in terms of his mother, and the mother responded in terms of her husband. Three scales comprise a total of 18 questions,

and measure three modes of dealing with conflict: 1) Reasoning; 2) Verbal Aggression and 3) Physical Violence.

4) Violence Questionnaire: The Violence Questionnaire was constructed specifically for the present study. It consisted of a series of questions developed to focus on the child's report of personal experiences with violence in a variety of settings, including family and political violence. Children were asked about typical experiences with violence, their most violent experiences, chronic violence, and injuries sustained as a result of violence.

5) Parenting Stress Index: The Parenting Stress Index (PSI), developed by Abidin, is a diagnostic assessment technique designed to measure stress in the parent-child relationship (Loyd & Abidin, 1985). The Parenting Stress Index consists of 126 items, completed by the parent, which are divided into two major domains representing parent and child characteristics. The Total Parent Domain score includes seven subscales: depression, attachment, restrictions of role, sense of competence, social isolation, spouse support, and health.

Three subscales were used in this study: depression, restriction of role, and sense of competence. However, since high scores on the sense of competence scale actually indicate less competence, for purposes of this study this scale will be referred to as sense of incompetence. Nine items comprised the depression scale, thirteen items comprised the sense of competence scale, and seven items comprised the restriction of role. Response options for each questions are rated on a four point scale from "fully agree" = 1 to "fully disagree" = 4. The alpha reliability coefficient for the Parent Domain is .93 (Loyd & Abidin, 1985).

6) Cornell Parent Behavior Description: The Cornell Parent Behavior Description (CPBD) was developed by Devereux and Bronfenbrenner (1969) and used extensively in cross cultural studies of child rearing. The CPBD is a report by the child of his perception of his parent's child-rearing practices. The child responded to items about his mother.

Two subscales were used: 1) punishment (use of physical and nonphysical punishment); and 2) control (parental demandingness, protectiveness, and intrusiveness). Items are rated on a 5-point scale from "never" = 1 to "very often" = 5. The validity of the scale has been established in the research literature (Devereux, Bronfenbrenner and Rodgers, 1969), including correlations with direct observation of parent-child interactions. The scale consists of 32 items with a total reliability ranging from .70 to .81 while the reliability of the individual subscales have been reported to range from .48 to .82 (Seigelman, 1965; MacDonald, 1971).

Data Collection Procedures

Contact with mothers was made through intermediaries from the Early Childhood Resource Center in East Jerusalem and invited to participate in a study of "how children and families live in this area and how recent events influence their lives." Using intermediaries was a necessary procedure given the uncertain political situation, the presence of secret police informers, and the fact that Israeli secret police had posed as journalists and researchers to collect intelligence on demonstrators as the basis for subsequent arrest.

The intermediaries screened parents to assure that their participation was voluntary, and explained the study to them. Oral, rather than written consent, was solicited. This oral consent procedure was necessary as parents were reluctant to sign a form out of fear of retaliation from the Israeli army. A confidential code for each family was assigned to ensure anonymity. Children were given the option of not participating in the study even after parents offered their consent. Children were given small presents as token compensation for their participation.

Interviews were conducted in Arabic by four field workers from the West Bank. The field workers received training in the use of the instruments and interviewing techniques by this investigator and a Palestinian researcher. Pilot testing and revision of the instruments were carried out in July, 1990. Data was collected in September, 1990.

Statistical Analyses

Hypothesis I. Children living in high violence areas will have higher levels of symptomatology than children living in low violence areas.

A 2^3 ANOVA was used to examine main effects of level of violence in area (high vs. low violence) with child symptomatology. Additionally, variables of gender (boys vs. girls) and age (6-9 years vs. 12-15 years) were examined to determine if interaction effects of these two variables with level of violence in area affected child symptomatology. Children's symptomatology was measured using the Total Problems Scale of the Achenbach Child Behavior Checklist (CBCL), as well as ten subscales: internalizing behavior, externalizing behavior, withdrawn behavior, somatic complaints, depression/anxiety, social problems, thought problems, attention problems, delinquent behavior, and aggressive behavior. (Note: For all analyses in this study, child symptomatology is measured using the Total Problems Scale and the ten subscales of the Child Behavior Checklist.

Hypothesis II. Variability in the symptomatology of children is accounted for by the individual child's personal experience with violence.

The five independent variables used to measure child's personal experience with political violence were:

1) Chronic *Intifada* Violence: Chronic *Intifada* violence was defined as violence occurring on an ongoing basis for the child. Presence or absence of chronic *Intifada* violence was measured using the Violence Questionnaire.

2) Violent *Intifada* Event: Violent *Intifada* event was defined as an *Intifada*-related event that was perceived by the child as the most violent experience he ever had. Presence or absence of violent *Intifada* event was measured using the Violence Questionnaire.

3) Time of occurrence of Violent *Intifada* Event: If the most violent event that the child experienced was *Intifada*- related, the time of occurrence was measured. Three responses were possible: a) event occurred within the past six months; b) event occurred within the past six to twelve months; and c) event occurred more than twelve months ago. Categories b and c were collapsed into one category (i.e., more than six months ago) because of the small number of cases in category c.

4) *Intifada*-related injury: *Intifada-related* injuries were defined as injuries requiring medical attention or hospitalization. Presence or absence of injuries was measured using the Violence Questionnaire.

5) *Intifada*-related arrest of family member: The presence or absence of an *Intifada*-related arrest of a family member was measured as part of the Conflict Tactics Scale administered to the mother.

The following ANOVAs were performed to determine main effects of child's experience with political violence on child symptomatology, as well as interaction effects of child's experience with political violence with level of violence in area (high vs. low), gender (boys vs. girls) and age (young children vs. older children) on symptomatology:

1) 2^4 ANOVA of chronic violence (presence and absence) with violence in area, gender, and age.

2) 2^4 ANOVA of violent *Intifada* event (presence and absence) with violence in area, gender, and age.

3) 2^4 ANOVA of time of occurrence of most violent *Intifada* event (less than 6 months ago and more than 6 months ago) with violence in area, gender, and age.

4) 2^4 ANOVA of *Intifada*-related injury (presence and absence of injury) with violence in area, gender, and age.

5) 2^4 ANOVA of arrest of family member (presence and absence) with violence in area, gender and age.

Hypothesis III. Variability in the symptomatology of children is accounted for by the individual child's experience of aggression within the family.

The following independent variables measuring violence within the family were examined:

1) Chronic family violence: Presence or absence of chronic family violence was measured using the Violence Questionnaire administered to child.

2) Physical violence to child: Physical violence to child by mother was measured on the Violence Scale of the Conflict Tactics Sale administered to child. The Violence Scale measures the use of physical force against another person as a means of resolving the conflict. Specific items include: threw something at the other one; pushed, grabbed, or shoved the other one; slapped or spanked the other one; kicked, bit, or hit with a fist; hit or tried to hit with something; beat up the other one; threatened with a knife or gun; used a knife or gun. Additionally, presence or absence of severe physical violence was ascertained using only those items measuring the severest forms of violence based on previous measures by Straus and Gelles.

3) Verbal aggression to child: Verbal aggression to child by mother was measured on the Verbal Aggression Scale of the Conflict Tactics Scale administered to child. The Verbal Aggression Scale measures the use of verbal and nonverbal acts which symbolically hurt the other, or the use of threats to hurt the other. Specific items include: insulted or

swore at the other one; sulked and/or refused to talk about it; stomped out of the room or house; did or said something to spite the other one; threatened to hit or throw something at the other one; threw, smashed, hit, or kicked something. Additionally, a severe verbal aggression index was comprised based on scores in the upper 15% of the population.

4) Physical violence to mother: Physical violence to mother by husband was measured on the Violence Scale of the Conflict Tactics Sale administered to the mother. The items were identical to those measuring physical violence to child described above.

5) Verbal aggression to mother: Verbal aggression to mother by husband was measured by the Verbal Aggression Scale of the Conflict Tactics Scale administered to mother. The items were identical to those measuring verbal aggression to child described above.

6) Total aggression within the family: A total aggression score was compiled by combining the four scores on the Violence and Verbal Aggression Scales (physical violence to child, verbal aggression to child, physical violence to mother, verbal aggression to mother).

First, a 2^4 ANOVA was performed to determine main effects of children's experience of chronic family violence on children's symptomatology as well as interaction effects of chronic family violence with level of violence in area, gender, and age.

Additionally, correlation matrices were compiled for physical violence to child, verbal aggression to child, physical violence to mother and verbal aggression to mother with the Total Problems Scale and the ten subscales of the CBCL. In addition to a correlation matrix for all cases, separate matrices were compiled for high and low violence areas, boys and girls, and younger and older children. Both raw scores and T scores were examined. Pairs of correlations in which one of the correlations reached $p<.05$ were then tested for significant differences between each pair using Fisher's Z Test.

Next, a multiple regression analysis was performed to examine the total family aggression score with the Total Problems Scale and the ten subscales on the Child

Behavior Checklist for all cases. A series of stepwise multiple regression analyses was then undertaken to examine the following: 1) child's experience of physical violence by the mother, 2) child's experience of verbal aggression by the mother, 3) mother's experience of physical violence by her husband, and 4) mother's experience of verbal aggression by her husband as it related to child symptomatology as measured on the scales of the CBCL. A multiple regression analysis was run for all cases. Additionally, six separate multiple regression analyses were run for high violence areas, low violence areas, boys, girls, younger children and older children.

Finally, the following series of ANOVAs were performed to examine severe forms of physical violence and verbal aggression:

1) A 2^4 ANOVA of severe physical violence to child (presence and absence) with violence in area (high and low), gender (boys and girls) and age (younger children and older children).

2) A 2^4 ANOVA of severe verbal aggression to child (presence and absence) with violence in area (high and low), gender (boys and girls) and age (younger children and older children).

3) A 2^4 ANOVA of severe physical violence to mother (presence and absence) with violence in area (high and low), gender (boys and girls) and age (younger children and older children).

4) A 2^4 ANOVA of severe verbal aggression to mother (presence and absence) with violence in area (high and low), gender (boys and girls) and age (younger children and older children).

Hypothesis IV Children experiencing both violence within the family and political violence will experience higher levels of symptomatology than children who experience none or only one form of violence.

The independent variables measuring family violence were:

1) Chronic family violence: measured by the presence or absence of chronic family violence on the Violence Questionnaire administered to child.

2) Severe physical violence to child: measured by the presence or absence of severe physical violence to child from mother as reported by child on the Conflict Tactics Scale.

3) Severe verbal aggression to child: measured by the presence or absence of severe verbal aggression to child from mother as reported by child on the Conflict Tactics Scale.

4) Severe physical violence to mother: measured by the presence or absence of severe violence to mother from father as reported by mother on the Conflict Tactics Scale.

5) Severe verbal aggression to mother: measured by the presence or absence of severe verbal aggression to mother from father as reported by mother on the Conflict Tactics Scale.

The independent variables measuring political violence were:

1) Chronic *Intifada* violence: measured by presence or absence of child's experience of chronic *Intifada* violence as reported by child on the Violence Questionnaire.

2) Violent *Intifada* Event: Presence or absence of violent *Intifada* event was measured by child's report on the Violence Questionnaire.

3) *Intifada*-related Injury: Presence or absence of a serious *Intifada*-related injury was measured by child's report on the Violence Questionnaire.

4) *Intifada*-related Arrest of Family Member: Presence or absence of arrest of family member was measured by mother's report as part of the Conflict Tactics Scale.

Child symptomatology was measured by the CBCL scales.

A series of 2^2 ANOVAs were performed to determine interaction effects of each of the following five family violence variables with each of the five political violence variables:

Family Violence Variables:

1) Chronic family violence

2) Severe physical violence to child

3) Severe physical violence to mother

4) Severe verbal aggression to child

5) Severe verbal aggression to mother

Political Violence Variables:

1) Chronic *Intifada* violence

2) Violent *Intifada* event

3) Time of occurrence of violent *Intifada* event

4) *Intifada*-related injury

5) *Intifada*-related arrest of family member

Hypothesis V. Variability in the symptomatology of children experiencing political violence is accounted for by problems in maternal functioning.

The independent variables related to problems in maternal functioning were maternal depression, maternal restriction of role, and maternal sense of incompetence. The three subscales measuring these variables were taken from the Parenting Stress Index (PSI):

1) Maternal depression: High scores on this subscale suggest significant depression in the mother. Items are related to those found on scales designed to detect the presence of clinically significant depression.

2) Maternal role restriction: High scores on this subscale suggest that the mother experiences the parental role as restricting her freedom, frustrating her attempts to maintain her own identity, and being controlled by her child's demands.

3) Maternal sense of incompetence: High scores on this subscale suggest the mother lacks practical child development knowledge, possess a limited range of child management skills, or does not find the role of parent satisfying. Normal scores for these three subscales among U.S. mothers are between the 15th and 80th percentile rank.

A correlation matrix was compiled for maternal depression, maternal role restriction and maternal sense of incompetence with items from the CBCL scales for all cases and for low and high violence areas. Both raw scores and T scores were examined. Pairs of correlations for low and high violence areas which reached $p<.05$ were tested for significant differences between each pair using Fisher's Z test.

A stepwise multiple regression analysis was performed for all cases to examine 1) maternal depression, 2) maternal role restriction, and 3) maternal sense of incompetence as they related to child symptomatology. Additionally, separate stepwise multiple regression analyses were run for low and high violence areas.

Finally, a series of ANOVAs was performed to determine if main effects existed for maternal depression, maternal role restriction, and maternal sense of incompetence on child symptomatology. Additionally, interaction effects of these three variables with level of violence in area, gender and age on child symptomatology were examined. Presence of maternal depression, maternal role restriction and maternal sense of incompetence indicated mothers scored in the clinical range, while absence indicated they scored in the normal range on the PSI.

1) A 2^4 ANOVA for maternal depression (presence and absence) with level of violence in area (high and low), gender (boys and girls) and age (young and older children).

2) A 2^4 ANOVA for sense of incompetence (presence and absence) with level of violence in area (high and low), gender (boys and girls) and age (younger and older children).

3) 2^4 ANOVA for role restriction (presence and absence) with level of violence in area (high and low), gender (boys and girls) and age (younger and older children).

Hypothesis VI. Variability in the symptomatology of children experiencing violence in their community is accounted for by variations in the mother's child rearing strategies.

The following independent variables relating to the mother-child relationship were examined:

1) Control by mother: Measured by the Cornell Parent Behavior Description administered to child.

2) Punishment by mother: Measured by the Cornell Parent Behavior Description administered to child.

3) Maternal response style: Mother's response to her child's use of violence was measured by the Violence Questionnaire administered to child. Three responses were possible: a) ignored situation; b) threatened or hit child; and c) discussed the issue with child.

4) Maternal reasoning : Maternal reasoning was measured using the Conflict Tactics Scale administered to child.

A correlation matrix was compiled for all cases for the two variables on the Cornell Parent Behavior Description and for low and high violence areas. Both raw scores and T scores were examined. Pairs of correlations for low and high violence areas which reached $p<.05$ were tested for significant differences between each pair using Fisher's Z test.

A multiple regression analysis was performed for all cases to examine 1) maternal control of child and 2) maternal punishment of child as they related to child symptomatology. Separate multiple regression analyses were also run for low and high violence areas.

Next, a 3 X 2 X 2 X 2 X 2 ANOVA was used to examine the independent variables of mother's response style with level of violence in area, gender, age, and most serious violence to determine main effects and interaction effects of these variables with child symptomatology.

Finally, a 2^4 ANOVA was performed to examine main effects of maternal reasoning on child symptomatology, as well as interaction effects of maternal reasoning with level of violence in area, gender, and age on symptomatology.

Hypothesis VII. Children experiencing multiple risks in their social environment will have higher symptoms than children who do not experience multiple risks.

A series of ANOVAs were conducted to assess the effects of multiple risk factors on child symptomatology. *Intifada* Risks and Family Risks were examined independently, and then combined to form a total risk score. Risks which achieved a $p.<05$ level of significance in the previous analyses in this study were included.

Intifada Risks

1) *Intifada* injury

2) *Intifada*-related arrest of family member

3) Time of occurrence of violent *Intifada* event

Family Risks

1) Chronic family violence

2) Severe physical violence to mother

3) Severe verbal aggression to mother

4) Maternal depression

5) Maternal sense of incompetence

6) Punitive maternal response style

Total Risks

Total risks consisted of the combined three *Intifada* risks and the six family risks.

The following ANOVAs were performed:

1) A 3 x 2 x 2 x 2 ANOVA for *Intifada* risks with level of violence in area, age, and gender.

2) A 3 x 2 x 2 x 2 ANOVA for Family risks with level of violence in area, age and gender. (So there would be N=5 in each cell, three or more risks were collapsed into one category for statistical analysis.)

3) A 4 x 2 x 2 x 2 ANOVA for Total risks (0 to 4 or more risks) with level of violence in area (high and low), gender (boys and girls) and age (young and older children). (So there would be N=5 in each cell, four or more risks were collapsed into one category for statistical analysis.)

Finally, the following ANOVAs were conducted to examine Maternal Reasoning with cumulative risks:

1) A 2 x 3 ANOVA for maternal reasoning (presence and absence) with *Intifada* risks (0 to 2 or more risks).

2) A 2 X 3 ANOVA for maternal reasoning (presence and absence) with Family risks (0 to 2 or more risks).

CHAPTER 4

RESULTS

Psychological and behavioral symptoms for Palestinian children were measured using the Total Problems Scale of the Child Behavior Checklist. In addition to this overall measure of child functioning, ten subscales measuring specific psychological and behavioral problems were also included in the analyses: internalizing behavior, externalizing behavior, withdrawn behavior, somatic complaints, depression/anxiety, social problems, thought problems, attention problems, delinquent behavior and aggressive behavior.

Overall, Palestinian children displayed more psychological and behavioral problems than the U.S. sample. Palestinian children's scores on the Total Problems Scale ranged from 38 to 84 with a mean score of 58.8. By comparison, the mean score for children in the United States is 50.2. Broken down by age and gender, younger Palestinian boys had a mean score of 60.7 (compared to 50.0 for younger U.S. boys); older Palestinian boys had a mean score of 59.0 (compared to 50.5 for older U.S. boys); younger Palestinian girls had a mean score of 57.4 (compared to 50.1 for younger U.S. girls); and older Palestinian girls had a mean score of 57.8 (compared to 50.4 for older U.S. girls). Tables 4-8 compare U.S. norms by gender and age—both referred and non-referred for mental health services—with scores from the Palestinian sample in high and low violence areas.

In the Palestinian sample (N=150), 20.6% of the children scored in the clinical range on the Total Problems Scale of the Child Behavior Checklist (i.e., T scores above 67). By comparison, in the United States population, only 5% of nonreferred

Table 4

Standardized Mean Scores (and Standard Deviations) on the Child Behavior Checklist for U.S. and West Bank Boys Aged 4-11

	Non-Referred U.S. Sample	Referred U.S. Sample	Low Violence West Bank	High Violence West Bank Sample	Combined Low & High Violence West Bank Sample
Total Problems	50.0 (9.8)	64.4 (10.7)	61.7 (9.9)	59.8 (11.1)	60.7 (10.5)
Internalizing	50.2 (9.6)	61.7 (11.8)	59.7 (9.1)	60.7 (9.2)	60.2 (9.0)
Externalizing	49.9 (9.8)	62.5 (11.6)	59.2 (9.6)	56.2 (10.6)	57.7 (10.1)
Withdrawn	54.0 (5.6)	61.0 (9.8)	58.5 (5.3)	61.3 (9.8)	59.9 (7.9)
Somatic Complaints	53.8 (5.8)	57.7 (8.1)	53.7 (7.6)	52.8 (5.3)	53.2 (6.5)
Depression/ Anxiety	54.0 (5.9)	63.3 (11.2)	61.5 (7.2)	61.9 (8.8)	61.7 (7.9)
Social Problems	53.9 (5.6)	62.6 (9.9)	60.0 (8.4)	59.0 (7.3)	59.5 (7.8)
Thought Problems	53.4 (5.5)	60.4 (9.1)	63.0 (10.1)	62.8 (9.9)	62.9 (9.9)
Attention Problems	54.0 (5.8)	64.7 (10.6)	60.5 (9.3)	57.8 (8.3)	59.1 (8.8)
Delinquent Behavior	53.8 (5.7)	62.3 (9.4)	65.2 (8.8)	62.6 (8.5)	63.9 (8.7)
Aggressive Behavior	54.0 (6.0)	64.1 (11.9)	57.6 (8.5)	56.5 (7.8)	57.1 (8.1)

Low Violence Cases: N=20
High Violence Cases: N=20
Combined High and Low Violence Cases: N=40

Table 5

Standardized Mean Scores (and Standard Deviations) on the Child Behavior Checklist for U.S. and West Bank Boys Aged 12-18

	Non-Referred U.S. Sample	Referred U.S. Sample	Low Violence West Bank	High Violence West Bank Sample	Combined Low & High Violence West Bank Sample
Total Problems	50.5 (9.8)	64.0 (9.5)	57.9 (8.3)	60.2 (8.0)	59.0 (8.1)
Internalizing	50.5 (9.7)	61.5 (11.1)	55.5 (6.6)	60.0 (7.3)	57.7 (7.3)
Externalizing	50.5 (9.7)	62.6 (10.7)	55.8 (8.9)	55.9 (8.0)	55.9 (8.4)
Withdrawn	54.0 (6.2)	62.2 (11.1)	55.9 (7.8)	59.5 (7.8)	57.7 (7.9)
Somatic Complaints	54.1 (5.8)	58.3 (9.3)	53.2 (4.1)	53.3 (4.6)	53.2 (4.3)
Depression/ Anxiety	54.2 (6.1)	62.4 (10.1)	57.5 (5.0)	62.1 (6.1)	59.8 (6.0)
Social Problems	54.0 (6.1)	62.0 (10.0)	59.2 (5.8)	62.8 (7.4)	61.0 (6.8)
Thought Problems	53.3 (5.4)	60.6 (9.5)	61.5 (7.7)	61.0 (9.1)	61.2 (8.3)
Attention Problems	54.0 (5.9)	64.8 (10.0)	56.8 (7.4)	56.8 (4.7)	56.8 (6.1)
Delinquent Behavior	53.9 (5.8)	63.3 (9.1)	61.3 (7.2)	59.3 (6.5)	60.3 (6.8)
Aggressive Behavior	54.2 (6.2)	62.5 (11.1)	55.3 (6.0)	55.8 (4.8)	55.5 (5.4)

Low Violence Cases: N=20
High Violence Cases: N=20
Combined High and Low Violence Cases: N=40

TABLE 6

Standardized Mean Scores (and Standard Deviations) on the Child Behavior Checklist for U.S. and West Bank Girls Aged 4-11

	Non-Referred U.S. Sample	Referred U.S. Sample	Low Violence West Bank	High Violence West Bank Sample	Combined Low & High Violence West Bank Sample
Total Problems	50.1 (9.9)	63.8 (11.3)	59.9 (7.1)	54.7 (8.2)	57.4 (8.0)
Internalizing	50.1 (9.7)	61.4 (10.9)	58.1 (7.0)	55.8 (6.4)	57.0 (6.7)
Externalizing	50.0 (9.6	61.2 (12.3)	57.7 (6.2)	52.9 (9.8)	55.4 (8.4)
Withdrawn	54.0 (5.7)	61.4 (9.5)	57.5 (5.6)	57.2 (5.2)	57.4 (5.3)
Somatic Complaints	53.9 (5.7)	58.0 (8.7)	53.5 (5.9)	52.4 (3.7)	53.0 (4.9)
Depression/ Anxiety	54.0 (5.7)	52.9 (10.0)	59.8 (6.8)	56.9 (6.7)	58.4 (6.8)
Social Problems	54.0 (5.9)	64.6 (11.4)	61.8 (8.1)	57.6 (6.5)	59.8 (7.6)
Thought Problems	53.2 (5.7)	60.2 (9.3)	60.1 (9.2)	58.3 (7.3)	59.2 (8.3)
Attention Problems	54.1 (5.9)	65.7 (11.1)	64.7 (5.2)	55.8 (5.9)	55.2 (5.5)
Delinquent Behavior	53.8 (5.7)	60.8 (9.5)	65.5 (8.0)	59.6 (9.5)	62.6 (9.1)
Aggressive Behavior	54.0 (5.8)	62.9 (11.8)	54.4 (4.8)	53.7 (5.0)	54.0 (4.9)

Low Violence Cases: N=19
High Violence Cases: N=18
Combined Cases: N=37

TABLE 7

Standardized Mean Scores (and Standard Deviations) on the Child Behavior Checklist for U.S. and West Bank Girls Aged 12-18

	Non-Referred U.S Sample	Referred U.S. Sample	Low Violence West Bank Sample	High Violence West Bank Sample	Combined High & Low Violence West Bank Sample
Total Problems	50.4 (10.1)	63.8 (10.9)	59.5 (8.8)	56.4 (7.4)	57.8 (8.1)
Internalizing	50.1 (10.0)	62.0 (11.5)	57.9 (8.0)	54.2 (5.4)	55.9 (6.9)
Externalizing	50.8 (9.8)	62.8 (11.4)	56.9 (8.5)	55.4 (7.0)	56.1 (7.7)
Withdrawn	53.8 (6.0)	62.5 (10.2)	57.6 (5.5)	52.5 (3.6)	54.9 (5.2)
Somatic Problems	53.9 (6.2)	59.1 (9.3)	52.9 (4.7)	53.4 (4.7)	53.2 (4.6)
Depression/ Anxiety	54.1 (6.1)	62.7 (9.7)	60.5 (7.5)	57.5 (5.8)	58.9 (6.7)
Social Problems	54.2 (6.0)	60.2 (9.6)	59.1 (6.6)	57.2 (5.3)	58.1 (6.0)
Thought Problems	53.4 (5.6)	60.4 (9.5)	62.8 (11.2)	60.1 (9.5)	61.4 (10.3)
Attention Problems	54.1 (5.9)	63.5 (9.6)	57.3 (7.1)	56.0 (6.0)	56.6 (6.5)
Delinquent Behavior	54.1 (5.8)	64.4 (10.6)	62.0 (7.3)	59.5 (6.4)	60.7 (6.8)
Aggressive Behavior	54.4 (6.5)	63.0 (10.3)	56.3 (6.2)	54.9 (4.8)	55.5 (5.5)

Low Violence Cases: N=17
High Violence Cases: N=15
Combined High and Low Violence Cases N=32

TABLE 8

Mean Scores (and Standard Deviations) on the Child Behavior Checklist for Boys and Girls in High and Low Violence Areas

	High Violence Males	High Violence Females	Low Violence Males	Low Violence Females	Total Cases
Total Problems	60.0 (9.6)	55.5 (7.7)	59.8 (9.3)	59.7 (7.8)	58.8 (8.8)
Internalizing	60.3 (8.2)	55.1 (5.9)	57.6 (8.2)	58.0 (7.3)	57.8 (7.7)
Externalizing	56.1 (9.3)	54.1 (8.5)	57.5 (9.3)	57.4 (7.2)	56.3 (8.7)
Withdrawn	60.4 (8.8)	54.9 (5.0)	57.2 (6.7)	57.5 (5.5)	57.6 (7.0)
Somatic Complaints	53.0 (4.9)	52.9 (4.2)	53.4 (6.1)	53.3 (5.3)	53.1 (5.1)
Depressed/ Anxious	62.0 (7.5)	57.2 (6.2)	59.5 (6.4)	60.1 (7.0)	59.8 (7.0)
Social Problems	60.9 (7.5)	57.4 (5.9)	59.6 (7.1)	60.6 (7.5)	59.6 (7.1)
Thought Problems	61.9 (9.4)	59.2 (8.4)	62.2 (8.9)	61.3 (10.1)	61.2 (9.2)
Attention Problems	57.3 (6.9)	55.9 (5.9)	58.6 (8.5)	55.9 (6.1)	57.0 (7.0)
Delinquent Behavior	60.9 (7.7)	59.5 (8.0)	63.2 (8.2)	64.0 (7.7)	61.9 (8.0)
Aggressive Behavior	56.2 (6.4)	54.3 (4.9)	56.4 (7.4)	55.2 (5.5)	55.6 (6.2)

All Cases: N=150
High Violence Boys: N=40
High Violence Girls: N=35
Low Violence Boys: N=40
Low Violence Girls: N=35

children scored in the clinical range, while 67% of children referred for mental health services scored in the clinical range. These results for the Palestinian sample are similar to other high risk populations (e.g., children who are maltreated (Garbarino, Schellenbach & Sebes, 1986) and children who live in communities with chronic violence in the United States (Osofsky & others, 1993).

The following results will be presented according to each of the seven hypotheses.

Level of Violence in Area

Hypothesis I. Children living in high violence areas will have higher levels of symptomatology than children living in low violence areas.

A 2^3 ANOVA was performed to assess main effects of level of violence in area (high violence vs. low violence) as well as gender (boys vs. girls) and age (younger children vs. older children) on children's symptomatology. Interaction effects of level of violence with gender and age were also examined. Children's symptomatology, measured on the Child Behavior Checklist, included the Total Problems Scale and ten subscales: internalizing behavior, externalizing behavior, withdrawn behavior, depression/anxiety, somatic complaints, social problems, thought problems, attention problems, delinquent behavior and aggressive behavior.

No main effects of level of violence in area were found for the Total Problems scale or for any of the ten subscales. Low violence areas had a mean score of 59.7 on the Total Problems scale, while high violence areas had a mean score of 57.9. There were no main effects of gender or age on the Total Problems scale or any of the subscales. On the Total Problems scale girls had a mean score of 57.6 and boys had a

mean score of 59.9. Younger children had a mean score of 59.1 while older children had a mean score of 58.5.

However, there were interaction effects of level of violence in area and gender on the Total Problems scale and the subscales of internalizing behavior, depression/anxiety, and withdrawn behavior. For all four of these interactions, boys living in high violence areas displayed significantly more symptoms than girls living in high violence areas (See Tables 9-12). On the Total Problems scale, girls in high violence areas had mean scores of 55.5 compared to mean scores of 60.0 for boys in high violence areas. On internalizing behavior, girls in high violence areas had mean scores of 55.1 compared to mean scores of 60.3 for boys in high violence areas. On depression/anxiety, girls in high violence areas had mean scores of 57.2 compared to mean scores of 62.0 for boys in high violence areas. Finally, on withdrawn behavior, girls in high violence areas had mean scores of 54.9 compared to mean scores of 60.4 for boys in high violence areas.

Children's Personal Experience of Political Violence

Hypothesis II. Variability in the symptomatology of children is accounted for by the individual child's experience with political violence.

The five independent variables related to political violence were:

1) Chronic *Intifada* violence

2) Violent *Intifada* event

3) Time of occurrence of violent *Intifada* event

4) *Intifada* injury

5) *Intifada*-related arrest of a family member

Table 9

Mean Scores (and Standard Deviations) of Boys and Girls in High and Low Violence Areas on the Total Problem Scale of the Child Behavior Checklist

		Level of Violence in Area	
		High	Low
Gender	Boys	60.0 (9.55) (N=40)	59.8 (9.26) (N=40)
	Girls	55.5 (7.74) (N=35)	59.7 (7.78) (N=35)

Table 10

Mean Scores (and Standard Deviations) of Boys and Girls in High and Low Violence Areas on the Internalizing Scale of the Child Behavior Checklist

		Level of Violence in Area	
		High	Low
Gender	Boys	60.3 (8.19) (N=40)	57.6 (8.16) (N=40)
	Girls	55.1 (5.88) (N=35)	58.0 (7.33) (N=35)

TABLE 11

Mean Scores (and Standard Deviations) of Boys and Girls in High and Low Violence Areas on the Depression Scale of the Child Behavior Checklist

		Level of Violence in Area	
		High	Low
Gender	Boys	62.0 (7.46) (N=40)	59.5 (6.43) (N=40)
	Girls	57.2 (6.20) (N=35)	60.1 (7.03) (N=35)

Table 12

Mean Scores (and Standard Deviations) of Boys and Girls in High and Low Violence Areas on the Withdrawal Scale of the Child Behavior Checklist

		Level of Violence in Area	
		High	Low
Gender	Boys	60.4 (8.77) (N=40)	57.2 (6.70) (N=40)
	Girls	54.9 (5.03) (N=35)	57.5 (5.50) (N=34)

A total of 14 children (9.3%) reported experiencing chronic *Intifada* violence. Six children were from low violence areas and eight children were from high violence areas. A total of 64 children (42.7%) reported experiencing a violent *Intifada* event. Of these, 24 children (37.5%) were from low violence areas and 40 children (62.5%) were from high violence areas. A total of 26 children (17%) reported serious physical injuries as a result of *Intifada* violence. Of these, four children (15.4%) were from low violence areas and 22 children (84.6%) were from high violence areas. A total of 50 children (33%) had the experience of an *Intifada*-related arrest of a family member. Of these, 58% (N=29) were from high violence areas while 42% (N=21) were from low violence areas.

These results provide a validity check on low vs. high violence areas—more children from high violence areas experienced chronic *Intifada* related violence, more children experienced *Intifada* violence as the most severe type of violence they have encountered, more children are seriously injured, and more children have had a family member arrested than in low violence areas.

Chronic *Intifada* Violence. No main effects were found for chronic *Intifada* violence on the Total Problems scale or on any of the subscales. Additionally, there were no interaction effects with level of violence in area, age or gender.

Violent *Intifada* Event. No main effects were found for violent *Intifada* event on the Total Problems Scale or on any of the subscales. Furthermore, there were no interaction effects of violent *Intifada* event with level of violence in area, age, or gender.

Time of Occurrence of Violent *Intifada* Event. For the 64 children who reported a violent *Intifada* event, there was a main effect of time of occurrence. The children who reported a violent *Intifada* event occurring within the past 6 months

(N=40) had a mean score of 61.1 on the Total Problems Scale, while children who reported *Intifada* violence occurring more than 6 months ago (N=24) had a mean score of 57.0 (N=22) (See Table 13). No interaction effects were found for time of occurrence with level of violence in area, gender or age on child symptomatology.

Intifada Injury. There were main effects of *Intifada* injury on the Total Problems scale, as well as on externalizing behavior, delinquency and attention problems. Furthermore, there was a clear trend across all the subscales: without exception, children who were injured obtained higher scores than children who were not injured (See Table 14). No interaction effects of *Intifada* injury with level of violence in area, gender or age were found on child symptomatology.

Arrest of Family Member. A main effect of arrest of family member on Total Problems was found. The mean for children who had a family member arrested was 61.6 (N=50) compared to 57.4 (N=100) for children who did not have a family member arrested. On the subscales, main effects were found for internalizing behavior, externalizing behavior, depression, attention problems, and thought problems (See Table 15). No interaction effects were found for arrest of family member with level of violence in area, age, or gender on child symptomatology.

Children's Experience of Violence Within the Family

Hypothesis III. Variability in the symptomatology of children is accounted for by the individual child's experience of aggression within the family.

The following independent variables used to measure family aggression:

1) Chronic family violence

2) Total family aggression

3) Physical violence to child by mother

TABLE 13

Time of Occurrence of Violent Intifada Event as it Relates to Child Symptomatology on the Child Behavior Checklist

	Less Than 6 Months Ago	More Than 6 Months Ago	F Value
Total Problems	61.1	57.0	4.0*
Internalizing	58.9	56.7	1.4
Externalizing	57.9	54.2	3.3
Withdrawn Behavior	58.6	55.2	3.1
Depression/Anxiety	60.3	59.4	.3
Somatic Problems	54.3	52.6	1.6
Social Problems	61.2	57.8	3.8*
Delinquent Behavior	62.3	60.5	.8
Attention Problems	58.0	56.0	1.3
Thought Problems	62.8	60.5*	1.0
Aggressive Behavior	56.1	54.4	1.7

Violent Intifada Event More Than 6 Months Ago: N=24
Violent Intifada Event Less Than 6 Months Age: N=40

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

Table 14

Children's Injuries from Intifada Violence as it Relates to Symptomatology on the Child Behavior Checklist

	No Serious Injury	Serious Injury Injury	F Value
Total Problems	58.1	62.3	8.0**
Internalizing	57.7	59.5	2.3
Externalizing	55.8	58.5	4.2*
Withdrawn Behavior	57.5	58.2	.4
Depression/Anxiety	59.4	61.4	2.0
Somatic Problems	53.1	53.4	.2
Social Problems	59.5	60.2	.4
Delinquent Behavior	61.7	63.2	4.3*
Attention Problems	56.5	59.4	5.1*
Thought Problems	60.8	63.3	2.2
Aggressive Behavior	55.4	56.4	1.0

Serious Injury From Intifada Violence: N=26
No Serious Injury From Intifada Violence: N=124

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

Table 15

Arrest of Family Member as it Relates to Symptomatology on the Child Behavior Checklist

	No Arrest of Family Member	Arrest of Family Member	F Value
Total Problems	57.4	61.6	8.6**
Internalizing	56.9	59.5	3.9*
Externalizing	55.0	58.8	7.5**
Withdrawn Behavior	57.5	57.8	.0
Depression/Anxiety	58.8	61.7	5.9*
Somatic Problems	53.0	53.5	.5
Social Problems	59.0	61.0	3.1
Delinquent Behavior	60.6	64.4	7.9**
Attention Problems	56.0	58.9	6.4**
Thought Problems	60.2	63.1	3.6*
Aggressive Behavior	55.0	56.7	.1

Arrest of Family Member: N=50
No Arrest of Family Member: N=100

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

4) Physical violence to mother by father

5) Verbal aggression to child by mother

6) Verbal aggression to mother by father

Chronic Family Violence. Twenty-one children (14%) reported experiencing chronic family violence in their home. Main effects of chronic family violence on Total Problems, as well as on the subscales of internalizing behavior, externalizing behavior, delinquent behavior and attention problems were found, with children experiencing chronic family violence scoring significantly higher than children who did not experience chronic physical violence. Additionally, children experiencing chronic family violence scored higher on all remaining subscales, although the differences did not reach statistical significance (See Table 16).

Interaction effects were found for chronic family violence and gender on externalizing behavior, withdrawal, social problems, attention problems, and aggression, with boys who experienced chronic family violence having significantly higher scores than girls. On externalizing behavior ($p<.05$), boys had mean scores of 61.6 while girls had mean scores of 54.9. On withdrawn behavior ($p<.05$), boys had mean scores of 61.6 compared to 56.4 for girls. On attention problems ($p<.01$) boys had mean scores of 64.2 compared to scores of 54.9 for girls. On aggressive behavior ($p<.05$) boys had mean scores of 55.4 compared to mean scores of 55.2 for girls.

Second, correlation matrices were compiled for the socio-economic variables of living conditions, father's educational level, and father's employment status with items on the Conflict Tactics Scale (verbal aggression to mother, physical aggression to mother, verbal aggression to child, and physical aggression to child) to determine if lower socioeconomic status was related to higher levels of aggression in the home

Table 16

Children's Exposure to Chronic Family Violence as it Relates to Symptomatology on the Child Behavior Checklist

	No Daily Family Violence	Daily Family Violence	F Value
Total Problems	58.1	63.1	6.1**
Internalizing	57.3	61.1	4.5*
Externalizing	55.8	59.4	3.1
Aggressive Behavior	55.2	57.3	1.9
Withdrawn Behavior	57.2	59.9	2.8
Depression/Anxiety	59.3	62.1	2.9
Somatic Problems	52.9	54.6	2.0
Delinquent Behavior	61.0	66.4	8.0**
Thought Problems	60.6	64.5	3.2
Attention Problems	56.1	61.1	9.0**
Social Problems	59.4	61.2	1.2

Chronic Family Violence: N=21

No Chronic Family Violence: N=129

* $p<.05$

** $p<.01$

Table 17

Correlation Matrix for Socio-economic Variables and Violence Wthin the Family

	Verbal Aggression to Mother	Physical Violence to Mother	Verbal Aggression to Child	Physical Violence to Child
Living Conditions	-.02	.03	-.15	-.13
Father's Education	-.04	-.05	-.14	-.12
Father's Employment	-.01	-.01	-.07	.04

* p <.05
**p <.01

Table 18

Correlation Matrix for Violence Within the Family and Child Symptomatology (Raw Scores) N=112

	Verbal Aggression to Mother	Physical Violence to Mother	Verbal Aggression to Child	Physical Violence to Child
Verbal Aggression To Mother	1.00	.39**	.18	.11
Physical Violence To Mother	.39**	1.00	.24**	.15
Verbal Aggression To Child	.18	.24**	1.00	.62**
Physical Violence To Child	.11	.15	.62**	1.00
Total Problems	.32**	.17	.17	.23*
Internalizing	.33**	.15	.16	.16
Externalizing	.27**	.16	.19*	.30**
Withdrawn	.20*	.10	-.06	-.09
Somatic	.26**	.10	.10	.04
Depression	.19*	.05	.06	.11
Social Problems	.18	.18	.14	.19*
Thought Problems	.30**	.08	.25**	.16
Attention Problems	.29**	.14	.18	.22*
Delinquency	.26**	.12	.18	.27**
Aggression	.24**	.16	.18	.28**

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

Table 19

Correlation Matrix for Violence Within the Family and Child Symptomatology (T Scores) N=112

	Verbal Aggression to Mother	Physical Violence to Mother	Verbal Aggression to Child	Physical Violence to Child
Verbal Aggression to Mother	1.00	.39**	.18	.11
Physical Violence to Mother	.39**	1.00	.24**	.15
Verbal Aggression to Child	.18	.24**	1.00	.62**
Physical Violence to Child	.11	.15	.62**	1.00
Total Problems	.29**	.19*	.14	.20*
Internalizing	.29**	.11	.11	.17
Externalizing	.28**	.21*	.18	.23*
Withdrawn	.25**	.16	.05	.14
Somatic	.31**	.07	.15	.08
Depression	.18	.05	.08	.15
Social Problems	.16	.21*	.12	.16
Thought Problems	.30**	.17	.15	.05
Attention Problems	.27**	.17	.13	.23*
Delinquency	.19*	.17	.16	.15
Aggression	.27**	.16	.20*	.27*

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

(See Table 17). There were no significant correlations at the $p<.05$ level. Correlationmatrices were also compiled for raw scores and T scores for items on the CTS with the CBCL scales (See Tables 18 and 19). In both the raw scores and T scores, the results indicate a strong association between the way the mother is treated by her husband and symptoms in the child. This association is much stronger than the link between the mother's aggression to the child and the child's symptoms. On the T scores, of the 17 correlations which were significant, 12 were related to aggression to mother—9 for verbal aggression and 3 for physical violence. In contrast, only 5 correlations which were significant were related to aggression to child—4 for physical violence and 1 for verbal aggression. Additionally, correlations matrices were compiled for high and low violence areas, boys and girls, and younger and older children for items on the CTS and the CBCL scales. Because raw and T scores were similar, only T scores will be reported for correlations for high and low violence areas, gender and age.

In relation to gender, the correlations between violence within the family and child symptomatology are higher for boys than girls (See Table 20). Of the 27 pairs of cases where there are significant correlations, all 27 are larger for boys than girls. Furthermore, for 13 of the 27 pairs of correlations, statistically significant differences were found between the pairs, with boys having significantly more symptoms than girls. Verbal aggression to mother and physical violence to child were the variables which had the most significant differences between the two groups. For verbal aggression to mother, seven pairs of correlations had statistically significant differences: Total Problems, internalizing behavior, externalizing behavior, somatic complaints, thought disorders, delinquency and aggression. Physical violence to child

Table 20

Correlation Matrix for Violence Within the Family and Child Symptomatology by Gender (T Scores)

	Verbal Aggression to Mother		Physical Violence to Mother		Verbal Aggression to Child		Physical Violence to Child	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Verbal Aggression To Mother	1.00	1.00	.42**	.35*	.19	.10	.14	.01
Physical Violence To Mother	.42**	.35**	1.00	1.00	.18	.34*	.21	.16
Verbal Aggression To Child	.19	.10	.18	.34*	1.00	1.00	.64**	.57**
Physical Violence To Child	.14	.01	.21	.16	.64**	.57**	1.00	1.00
Total Problems	.46**	-.02	.30*	.17	.23	-.00	.37**	-.09
Internalizing	.43**	.03	.25	.07	.19	-.04	.29*	-.09
Externalizing	.47**	-.04	.33*	.19	.28	.03	.44**	-.08
Withdrawn	.33*	.06	.47**	.00	.09	-.09	.20	-.06
Somatic	.47**	.06	.25	-.03	.33	-.06	.31	-.24
Depression	.31*	-.06	.04	.09	.11	-.01	.28*	-.07
Social Problems	.16	.16	.35**	.18	.23	.02	.29*	-.03
Thought Problems	.44**	.08	.31	.12	.19	.06	.61**	-.01
Attention Problems	.38**	.05	.29*	.15	.24	-.06	.41**	-.09
Delinquency	.37**	-.05	.24	.16	.33*	-.01	.29*	-.01
Aggression	.46**	-.10	.32*	.12	.30*	.04	.46**	-.07

N=60: Boys
N=52: Girls

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

Table 21

Correlation Matrix for Violence Within the Family and Child Symptomatology by Age (T Scores)

	Verbal Aggression to Mother		Physical Violence to Mother		Verbal Aggression to Child		Physical Violence to Child	
	Young	Old	Young	Old	Young	Old	Young	Old
Verbal Aggression To Mother	1.00	1.00	.40**	.36**	.14	.24	.09	.14
Physical Violence To Mother	.40*	.36**	1.00	1.00	.06	.36**	.21	.16
Verbal Aggression To Child	.14	.24	.06	.36**	1.00	1.00	.59**	.65**
Physical Violence To Child	.09	.14	.21	.16	.59**	.65**	1.00	1.00
Total Problems	.31**	.25	.28*	.18	.08	.23	.22	.18
Internalizing	.31*	.27*	.19	.09	.04	.19	.17	.16
Externalizing	.33*	.21	.25	.23	.16	.21	.26	.22
Withdrawn	.23	.28*	.28*	.13	-.02	.11	.11	.15
Somatic	.35**	.24	.11	.07	.20	.05	.12	.05
Depression	.28*	.04	.16	-.00	.00	.19	.15	.15
Social Problems	.20	.10	.41*	.14	.04	.24	.13	.22
Thought Problems	.32*	.28*	.28	.13	.12	.19	.15	-.03
Attention Problems	.29*	.25	.30*	.13	.06	.25	.18	.30*
Delinquency	.24	.14	.13	.29*	.12	.22	.21	.06
Aggression	.32*	.21	.23	.16	.22	.18	.31*	.25

N=60: Young children
N=52: Older children

* p <.05
** p <.01

Table 22

Correlation Matrix for Violence Within the Family and Child Symptomatology by Level of Violence in Area (T Scores)

	Verbal Aggression to Mother		Physical Violence to Mother		Verbal Aggression to Child		Physical Violence to Child	
	High Viol.	Low Viol.	High Viol.	Low Viol.	High Viol.	Low Viol.	High Viol.	Low Viol.
Verbal Aggression To Mother	1.00	1.00	.36**	.39**	.14	.26	.10	.14
Physical Violence To Mother	.36**	.39**	1.00	1.00	.29*	.15	.15	.16
Verbal Aggression To Child	.14	.26	.29*	.15	1.00	1.00	.62**	.62**
Physical Violence To Child	.10	.14	.15	.16	.62**	.62**	1.00	1.00
Total Problems	.28*	.28*	.21	.16	.07	.28*	.21	.22
Internalizing	.31*	.27*	.10	.11	.03	.22	.17	.18
Externalizing	.28*	.26	.20	.23	.13	.30*	.21	.31*
Withdrawn	.24	.28*	.11	.23*	-.05	.19	.17	.11
Somatic	.22	.35**	-.06	.22	.01	.31*	-.03	.19
Depression	.33*	.05	.11	-.05	.06	.12	.16	.15
Social Problems	.14	.15	.20	.23	.09	.18	.21	.13
Thought Problems	.21	.35**	.24	.07	.01	.35**	-.04	.16
Attention Problems	.30*	.25	.15	.20	.01	.30*	.20	.28
Delinquency	.14	.21	.14	.23	.12	.26*	.07	.31*
Aggression	.32*	.23	.16	.17	.10	.34*	.26	.30*

N=54 Low Violence Area
N=58 High Violence Area

* p <.05
** p <.01

had six pairs of correlations with significant differences: Total Problems, externalizing behavior, thought disorders, attention disorders and aggression. For physical violence to mother, only withdrawn behavior had a significantly higher correlation for boys than for girls. There were no significant differences for verbal aggression to child.

For age, of the 16 pairs of cases that contained significant correlations, 12 were higher for younger children while only 2 were higher for older children. (Two pairs of correlations had significant correlations for both high and low violence areas)(See Table 21). However, no statistically significant differences in the pairs of correlations were found. For level of violence in area, although there were more significant correlations in the low violence areas (16 for low violence areas vs. 6 for high violence areas), there were no statistically significant differences between the pairs of correlations for high and low violence areas (See Table 22).

Total Family Aggression

Total Problems and all ten subscales of the Child Behavior Checklist were significantly correlated with Total Family Aggression (See Table 23).

Physical Violence and Verbal Aggression to Mother and Child

Finally, a series of stepwise multiple regression analyses was undertaken to examine 1) physical violence to the child by the mother, 2) verbal aggression to the child by the mother, 3) physical violence to the mother by her husband, and 4) verbal aggression to the mother by her husband in relation to child symptomatology. In addition to an analysis for all 150 cases, separate analyses were conducted for high and low violence areas, boys and girls, and younger and older children. The results, arranged by symptoms on the CBCL scales, are as follows:

Total Problems

1) Verbal Aggression to Mother

Total problems were significantly correlated with verbal aggression to mother across all cases ($p<.01$), in high violence areas ($p<.05$), for younger children ($p<.01$), and for boys ($p<.001$).

2) Physical Violence to Mother

There were no significant correlations for Total Problems with physical violence to mother for any of the categories (i.e., level of violence in area, gender or age).

3) Verbal Aggression to Child

Total problems were significantly correlated with verbal aggression to child in low violence areas ($p<.05$).

4) Physical Violence to Child

Total problems were correlated with physical violence to child for boys only ($p<.0001$).

Internalizing Behavior

1) Verbal Aggression to Mother

Internalizing Behavior was significantly correlated with verbal aggression to mother across all cases ($p<.01$), in high violence areas ($p<.05$), low violence areas ($p<.05$), for younger children ($p<.05$), older children ($p<.05$), and for boys ($p<.001$).

2) Physical Violence to Mother

There were no significant correlations of internalizing behavior with physical violence to mother for any of the categories.

3) Verbal Aggression to Child

There were no significant correlations of internalizing behavior with verbal aggression to child for any of the categories.

4) Physical Violence to Child

Internalizing Behavior was correlated with physical violence to child for boys only ($p<.0001$).

Externalizing Behavior

1) Verbal Aggression to Mother

Externalizing Behavior was significantly correlated with verbal aggression to mother across all cases ($p<.01$), in high violence areas ($p<.05$), for younger children ($p<.001$), and for boys ($p<.001$).

2) Physical Violence to Mother

Externalizing Behavior was not significantly correlated with physical violence to mother for any of the categories.

3) Verbal Aggression to Child

Externalizing behavior was not significantly correlated with verbal aggression to child for any of the categories.

4) Physical Violence to Child

Externalizing Behavior was significantly correlated with physical violence to child across all cases ($p<.01$), for children in low violence areas ($p<.05$), for boys ($p<.0001$) and for younger children ($p<.001$).

Withdrawn Behavior

1) Verbal Aggression to Mother

Withdrawn Behavior was significantly correlated with verbal aggression to mother across all cases ($p<.01$), for children in low violence areas ($p<.05$), and for older children, ($p<.05$).

2) Physical Violence to Mother

Withdrawn Behavior was significantly correlated with physical violence to mother for younger children ($p<.05$) and for boys ($p<.0001$).

3) Verbal Aggression to Child

There were no significant correlations with verbal aggression to child for any of the categories.

4) Physical Violence to Child

There were no significant correlations with physical violence to child for any of the categories.

Somatic Problems

1) Verbal Aggression to Mother

Somatic Problems were significantly correlated with verbal aggression to mother for all cases ($p<.01$), for children in low violence areas ($p<.01$), for younger children ($p<.01$), and for boys ($p<.001$).

2) Physical Violence to Mother

There were no significant correlations of somatic problems with physical violence to mother for any of the categories.

3) Verbal Aggression to Child

Somatic Problems were significantly correlated with verbal aggression to child for boys ($p<.0001$).

4) Physical Violence to Child

There were no significant correlations of somatic problems with physical violence to child.

Depression

1) Verbal Aggression to Mother

Depression was significantly correlated with verbal aggression to mother for children living in high violence areas ($p<.01$), for younger children ($p<.05$), and for boys ($p<.01$).

2) Physical Violence to Mother

There were no significant correlations of depression with physical violence to mother for any of the categories.

3) Verbal Aggression to Child

There were no significant correlations of depression with verbal aggression to child for any of the categories.

4) Physical Violence to Child

There were no significant correlations of depression with physical violence to child for any of the categories.

Social Problems

1) Verbal Aggression to Mother

There were no significant correlations between social problems and verbal aggression to mother for any of the categories.

2) Physical Violence to Mother

Social problems were significantly correlated with physical violence to mother across all cases ($p<.05$), for young children ($p<.001$), and for boys ($p<.01$).

3) Verbal Aggression to Child

There were no significant correlations for social problems and verbal aggression to child for any of the categories.

4) Physical Violence to Child

There were no significant correlations for social problems and physical violence to child for any of the categories.

Thought Problems

1) Verbal Aggression to Mother

Thought Problems were significantly correlated with verbal aggression to mother across all cases ($p<.01$), for children in low violence areas ($p<.01$), for younger children ($p<.05$) older children ($p<.05$), and for boys ($p<.001$).

2) Physical Violence to Mother

There were no significant correlations for thought problems and physical violence to mother for any of the categories.

3) Verbal Aggression to Child

Thought Problems were significantly correlated with verbal aggression to child for children in low violence areas ($p<.01$).

4) Physical Violence to Child

There were no significant correlations for thought problems and physical violence to child for any of the categories.

Attention Problems

1) Verbal Aggression to Mother

Attention Problems were significantly correlated with verbal aggression to mother across all cases ($p<.05$), for children in high violence areas ($p<.05$), for younger children ($p<.001$) and for boys ($p<.0001$).

2) Physical Violence to Mother

There were no significant correlations for attention problems with physical violence to mother for any of the categories.

3) Verbal Aggression to Child

Attention problems were significantly correlated with verbal aggression to child for children in low violence areas ($p<.05$).

4) Physical Violence to Child

Attention problems were significantly correlated with physical violence to child across all cases ($p<.05$), for older children ($p<.05$), and for boys ($p<.001$).

Delinquent Behavior

1) Verbal Aggression to Mother

Delinquent Behavior was significantly correlated with verbal aggression to mother across all cases ($p<.05$) and for boys ($p<.01$).

2) Physical Violence to Mother

Delinquent Behavior was significantly correlated with physical violence to mother for older children ($p<.05$).

3) Verbal Aggression to Child

Delinquent Behavior was significantly correlated with verbal aggression to child for boys ($p<.001$).

4) Physical Violence to Child

Delinquent Behavior was significantly correlated with physical violence to child for children in low violence areas ($p<.05$).

Aggressive Behavior

1) Verbal Aggression to Mother

Aggressive Behavior was significantly correlated with verbal aggression to mother across all cases ($p<.05$), in high violence areas ($p<.05$), and for boys ($p<.001$).

2) Physical Violence to Mother

Aggressive behavior was not significantly correlated with physical violence to mother for any of the categories.

3) Verbal Aggression to Child

Aggressive Behavior was significantly correlated with verbal aggression to child in low violence areas only ($p<.01$).

4) Physical Violence Child

Aggressive Behavior was significantly correlated with physical violence to child across all cases ($p<.01$), for boys ($p<.0001$), and for younger children ($p<.001$).

Additionally, severe forms of physical violence and verbal aggression were examined as they related to child symptomatology. The four independent variables were 1) severe physical violence to child, 2) severe physical violence to mother, 3) severe verbal aggression to child, and 4) severe verbal aggression to mother.

Severe Physical Violence to Child. No main effects were found for severe physical violence to child on the Total Problems scale. On the subscales, a main effect was found only for aggressive behavior. Interaction effects were found for severe physical violence to child with gender on the Total Problems scale, and on the

subscales of internalizing behavior, externalizing behavior, withdrawn behavior, somatic complaints, thought problems, attention problems and aggressive behavior, with significantly higher scores for boys who witnessed violence towards their mothers than for girls who witnessed violence (See Table 24).

Severe Physical Violence to Mother. A main effect was found for severe physical violence to mother on the Total Problems scale. On the subscales, main effects were found for internalizing behavior, externalizing behavior, social problems, thought problems, attention problems and aggression (See Table 25). Interaction effects of severe physical violence to mother and gender were found on the Total Problems scale and on withdrawn behavior, with boys who witnessed violence towards their mothers having significantly higher scores ($p<.05$) than girls who witnessed violence towards their mothers (boys=66.4; girls=56.0, F=4.6). No interaction effects were found for age or level of violence in area.

Severe Verbal Aggression to Child. No main effects were found for severe verbal aggression to child on the Total Problems scale or on any of the subscales. Moreover, no interaction effects were found with age or level of violence in area.

Severe Verbal Aggression to Mother. A main effect was found for severe verbal aggression to mother on the Total Problems scale. On the subscales, main effects were found for internalizing behavior, externalizing behavior, somatic complaints, depression, thought problems, delinquency and aggression (See Table 26). Interaction effects for severe verbal aggression to mother with gender were found on the Total Problems scale as well as on the subscales of internalizing behavior, externalizing behavior, depression, delinquency and aggressive behavior, with boys who experienced verbal aggression towards their mother obtaining significantly higher

Table 23

Total Family Aggression Score and Child Symptomatology on the Child Behavior Checklist

	R
Total Problems	.30***
Internalizing	.28**
Externalizing	.34***
Withdrawn	.24*
Somatic	.30**
Depression	.19*
Social Problems	.22*
Thought Problems	.22*
Attention Problems	.33***
Delinquency	.27**
Aggression	.36****

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

Table 24

Interaction of Severe Physical Violence to Child and Gender as it Relates to Child Symptomatology on the Child Behavior Checklist

	Girls Physical Violence to Child	Girls Physical Violence to Child	Boys Physical Violence to Child	Boys Physical Violence to Child	F Value
Total Problems	58.0	56.1	58.5	65.9	7 2**
Internalizing	56.7	55.5	57.9	63.3	4.7*
Externalizing	56.0	54.5	55.5	62.5	5.9*
Withdrawn Behavior	56.4	55.6	57.9	62.7	4.1*
Depression/Anxiety	58.9	57.7	60.1	63.5	2.6*
Somatic Problems	53.3	52.3	52.6	56.0	4.6*
Social Problems	59.0	59.0	59.3	64.1	2.7
Delinquent Behavior	61.9	61.0	61.6	64.1	1.1
Attention Problems	56.3	54.5	56.9	62.5	7.3**
Thought Problems	60.9	57.7	60.8	67.3	7.0**
Aggressive Behavior	54.8	54.4	55.1	61.3	7.3**

Severe Physical Violence to Child - Girls: N=15
No Severe Physical Violence to Child - Girls: N=54
Severe Physical Violence to Child - Boys: N=16
No Severe Physical Violence to Child - Boys: N=65

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

Table 25

Severe Physical Violence to Mother
as it Relates to Child Symptomatology
on the Child Behavior Checklist

	No Physical Violence to Mother	Physical Violence to Mother	F Value
Total Problems	58.1	65.9	5.8**
Internalizing	57.3	62.6	5.8*
Externalizing	55.6	63.0	8.5**
Withdrawn Behavior	57.0	62.2	7.3**
Depression/Anxiety	59.5	62.5	1.8*
Somatic Problems	53.0	55.0	1.8
Social Problems	59.1	65.5	9.7**
Delinquent Behavior	60.7	66.5	4.4*
Attention Problems	56.4	62.9	10.1**
Thought Problems	60.7	66.5*	4.4*
Aggressive Behavior	55.2	59.6	5.6*

Severe Physical Violence to Mother: N=14
No Severe Physical Violence to Mother: N=136

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

Table 26

Severe Verbal Aggression to Mother
as it Relates to Child Symptomatology
on the Child Behavior Checklist

	No Verbal Aggression to Mother	Verbal Aggression to Mother	F Value
Total Problems	58.1	65.4	8.4**
Internalizing	57.1	64.2	10.6***
Externalizing	55.6	62.7	8.7**
Withdrawn Behavior	56.9	63.8	11.9***
Depression/Anxiety	59.3	64.1	5.6*
Somatic Problems	52.7	57.4	11.2***
Social Problems	59.5	61.5	.8
Delinquent Behavior	61.4	67.3	7.2**
Attention Problems	56.6	60.4	3.1
Thought Problems	60.5	67.9*	7.8**
Aggressive Behavior	55.1	60.2	9.0**

Severe Verbal Violence to Mother: N=15
No Severe Verbal Violence to Mother: N=135

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

scores than girls who experienced verbal aggression towards their mothers (See Table 27). No interaction effects were found for age or level of violence in area for any of the CBCL scales.

Hypothesis IV. Children experiencing both violence within the family and political violence will experience higher levels of symptomatology than children who experience none or only one form of violence.

Interaction effects of family violence with political violence on child symptomatology were analyzed. Family violence variables were: 1) chronic family violence, 2) severe physical violence to child, 3) severe physical violence to mother, 4) severe verbal aggression to child and 5) severe verbal aggression to mother. Political violence variables were: 1) chronic *Intifada* violence, 2) violent *Intifada* event, 3) *Intifada* injury, 4) arrest of a family member and 5) time of occurrence of violent *Intifada* event. The following interactions were significant:

Physical Violence to Child and *Intifada*-Related Injury

A significant interaction effect ($p<.05$) on thought disorders was found for children who experienced both severe physical violence from mother and an *Intifada* injury (Table 28). Children who experienced an *Intifada* injury and physical violence from mother (N=7) had mean scores of 70.2 (in the clinical range) compared to mean scores of 61.1 for children who experienced an *Intifada* injury but no physical violence from mother (N=19). Children who experienced physical violence from mother but no *Intifada* injury (N=24) had mean scores of 60.6, while children who experienced neither type of violence (N=100) had scores of 60.8.

Severe Physical Violence to Mother and Time of Occurrence of Violent *Intifada* Event

An interaction effect was found for severe physical violence to mother by father and time of occurrence of violent *Intifada* event on Total Problems ($p<.05$) internalizing behavior ($p<.05$), somatic complaints ($p<.01$) and social problems ($p<.01$). Children who experienced physical violence to their mothers and a violent *Intifada* event within the past six months had significantly higher scores than children who experienced physical violence to their mothers and a violent *Intifada* event more than six months ago. For Total Problems, children who experienced physical violence to their mothers and a recent violent event (N=8) had mean scores of 70.0 (in the clinical range) compared to mean scores of 63.1 for children experiencing violence to mothers and violent *Intifada* event more than 6 months ago (N=7). For children who did not experience violence to mothers, those who experienced a recent *Intifada* event (N=81) had mean scores of 57.5 compared to 60.6 for children who experienced a violent *Intifada* event more than six months ago (N=33)(See Table 29).

For internalizing behavior, children experiencing physical violence to mother and a recent violent event (N=8) had mean scores of 66.9 (approaching the clinical range), while children who experienced physical violence to mother and an *Intifada* event more than six months ago (N=7) had scores of 59.0. For children who did not experience violence towards their mothers, children with a recent *Intifada* event (N=81) had mean scores of 57.0, while children who experienced an *Intifada* event more than six months ago (N=33) had mean scores of 58.9 (See Table 30).

For somatic complaints, children experiencing physical violence to mother and a recent violent event (N=8) had mean scores of 59.6, while children who experienced physical violence to mother and an *Intifada* event more than six months ago (N=7) had

Table 27

Interaction of Severe Verbal Aggression to Mother and Gender as it Relates to Child Symptomatology on the Child Behavior Checklist

	Girls Verbal Aggression to Mother	Girls No Verbal Aggression to Mother	Boys Verbal Aggression to Mother	Boys No Verbal Aggresssion to Mother	F Value
Total Problems	57.6	57.3	58.6	68.7	4.0*
Internalizing	56.5	57.0	57.8	67.1	3.8*
Externalizing	55.8	53.7	55.4	66.3	6.3**
Withdrawn Behavior	56.1	58.0	57.7	66.1	2.5
Depression/Anxiety	58.7	57.0	59.9	67.0	4.6*
Somatic Problems	53.0	54.5	52.5	58.5	2.2
Social Problems	58.2	62.0	60.0	61.3	.2
Delinquent Behavior	61.6	63.0	61.1	69.0	1.8
Attention Problems	56.0	54.0	57.2	62.9	3.3
Thought Problems	60.0	63.5	61.0	69.6	.9
Aggressive Behavior	61.6	63.0	61.1	69.0	1.8

Severe Verbal Aggression to Mother - Girls: N=5
No Severe Verbal Aggression to Mother - Girls: N=65
Severe Verbal Aggression to Mother - Boys: N=10
No Severe Verbal Aggression to Mother - Boys: N=70

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

Table 28

Interaction of Severe Physical Violence to Child and Intifada Injury on Thought Disorders

		Physical Violence to Child	
		No Abuse	Abuse
Intifada-Related Injury	No Injury	60.8 (N=100)	60.6 (N=24)
	Injury	61.1 (N=19)	70.2 (N=6)

Table 29

Interaction of Physical Violence to Mother and Time of Occurrence of Intifada-Related Event on Total Problems

		Physical Violence to Mother	
		No Physical Violence	Physical Violence
Time of Occurrence of Intifada-Related Event	More Than 6 months	60.6 (N=33)	63.1 (N=7)
	Less Than 6 months	57.5 (N=81)	70.0 (N=8)

Table 30

Interaction of Physical Violence to Mother and Time of Occurrence of Intifada-Related Event on Internalizing Behavior

		Physical Violence to Mother	
		Violence to Mother	No Violence to Mother
Time of - Occurrence of Intifada-Related Event	More Than 6 months	58.9 (N=33)	59.0 (N=7)
	Less Than 6 months	57.0 (N=81)	66.9 (N=8)

Table 31

Interaction of Severe Physical Violence to Mother and Time of Occurrence of Violent Intifada Event on Somatic Complaints

		Physical Violence to Mother	
		No Violence to Mother	Violence to Mother
Time of - Occurrence of Intifada-Related Event	More Than 6 months	54.7 (N=33)	52.0 (N=7)
	Less Than 6 months	52.4 (N=81)	59.6 (N=8)

Table 32

Interaction of Severe Physical Violence to Mother and Time of Occurrence of Violent Intifada Event on Social Problems

		Physical Violence to Mother	
		No Violence to Mother	Violence to Mother
Time of Occurrence of Intifada-Related Event	More Than 6 months	60.7 (N=33)	63.3 (N=7)
	Less Than 6 months	58.8 (N=81)	70.0 (N=8)

Table 33

Correlation Matrix for Problems in Maternal Functioning and Child Symptomatology (Raw Scores) N=130

	Mother's Depression	Mother's Sense of Incompetency	Mother's Role Restriction
Mother's Depression	1.00	.42**	.17
Mother's Incompetency	.42**	1.00	.19
Mother's Role Restriction	.17	.19*	1.00
Total Problems	.25**	.19	.08
Internalizing Behavior	.27**	.22*	.09
Externalizing Behavior	.20*	.18	.08
Withdrawn	.12	.09	.01
Somatic	.21*	.17	.09
Depression	.20*	-.03	.01
Social Problems	.28**	.20	.10
Thought Problems	.17	.19*	.10
Attention Problems	.28*	.35**	.16
Delinquency	.10	.23*	.07
Aggression	.21*	.15	.08

* p <.05
* p <.01

Table 34

Correlation Matrix for Problems in Maternal Functioning and Child Symptomatology (T Scores) N=130

	Mother's Depression	Mother's Sense of Incompetency	Mother's Role Restriction
Mother's Depression	1.000	.42**	.17
Mother's Incompetency	.42**	1.00	.19*
Mother's Role Restriction	.17	.19*	1.00
Total Problems	.24**	.14	.04
Internalizing Behavior	.22*	.08	.06
Externalizing Behavior	.23*	.17	.01
Withdrawn	.18	.14	.11
Somatic	.19*	.20*	.08
Depression	.21*	-.03	-.02
Social Problems	.24**	.18	.14
Thought Problems	.15	.12	.06
Attention Problems	.29**	.33**	.14
Delinquency	.08	.11	-.03
Aggression	.26**	.20	.07

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

scores of 52.0. For children who did not experience violence towards their mothers, children with a recent *Intifada* event (N=81) had mean scores of 52.4, while children who experienced an *Intifada* event more than six months ago (N=33) had mean scores of 54.7 (See Table 31).

For social problems, children experiencing physical violence to mother and a recent violent event (N=8) had mean scores of 70.0 (in the clinical range), while children who experienced physical violence to mother and an *Intifada* event more than six months ago (N=7) had scores of 63.3. For children who did not experience violence towards their mothers, children with a recent *Intifada* event (N=81) had mean scores of 58.8, while children who experienced an *Intifada* event more than six months ago (N=33) had mean scores of 60.7 (See Table 32).

For the other combination of categories, in general, children who experienced both types of violence had higher scores than children who experienced only one type of violence. As will be discussed later, the lack of statistical significance was probably due to the small sample size of children in these categories (N<7).

Hypothesis V. Variability in the symptomatology of children experiencing political violence is accounted for by problems in maternal functioning.

Problems in maternal functioning were measured by maternal depression, mother's sense of incompetence, and mother's restriction of role on the Parenting Stress Index. Overall, for both raw scores and T scores on the correlation matrix, the most important aspect of problems in maternal functioning in predicting child symptomatology is maternal depression (See Tables 33 and 34). On the T scores, of the ten correlations which were significant, the strongest was for maternal depression

with eight (i.e. Total Problems, internalizing behavior, externalizing behavior, somatic complaints, depression/anxiety, social problems, attention problems and aggressive behavior) while only two (i.e., somatic complaints and attention problems) were for maternal sense of incompetence and none were for restriction of role. Mother's sense of incompetence is much less strongly related to child symptomatology, with the only robust relationships being with attention problems and somatic complaints. Mother's sense of role restriction appears to be unrelated to child's symptoms. Because raw and T scores were similar, only T scores were used in subsequent analyses.

A correlation matrix was also compiled between problems in maternal functioning and child symptomatology for high and low violence areas. The results are mixed for the 16 pairs of cases that contained significant correlations depending on the specific category of maternal functioning. For maternal depression, of the seven correlations that were significant (i.e., Total Problems, internalizing behavior, externalizing behavior, depression, social problems, attention problems and aggressive behavior), all were in the high violence areas, although there were no statistical differences between the pairs. For sense of incompetence, of the eight significant correlations, all were in the low violence areas (although no statistically significant differences were found between the pairs). Restriction of role had only one pair containing a significant correlation (i.e., social problems), which was not significantly different between high and low violence areas (See Table 35).

Results from the Multiple Regression Analyses

A series of stepwise multiple regression analysis were conducted across all cases, by level of violence in area, by gender, and by age. The model included the independent variables of maternal depression, sense of incompetence, and restriction

of role, and the dependent variables relating to child symptomatology. Results, arranged by dependent variable, are as follows:

Total Problems

1) Maternal Depression

Total Problems were significantly correlated with maternal depression across all cases ($p<.01$), in high violence areas ($p<.01$), and for younger children ($p<.05$).

2) Sense of Incompetence

Total Problems were significantly correlated with sense of incompetence for low violence areas ($p<.05$) and for boys ($p<.05$).

3) Restriction of Role

There were no significant correlations for Total Problems with restriction of role for any of the categories.

Internalizing Behavior

1) Maternal Depression

Internalizing behavior was significantly correlated with mother's depression for high violence areas ($p<.05$), for younger children ($p<.01$) and for boys ($p<.05$).

2) Sense of Incompetence

There were no significant correlations for internalizing behavior with sense of incompetence for any of the categories.

3) Restriction of Role

There were no significant correlations for internalizing behavior with restriction of role for any of the categories.

Table 35

CORRELATION MATRIX FOR MATERNAL WELL BEING AND CHILD SYMPTOMATOLOGY BY LEVEL OF VIOLENCE IN AREA (T Scores)

	Mother's Depression		Mother's Sense of Incompetency		Mother's Role Restriction	
	High Viol	Low Viol	High Viol	Low Viol	High Viol	Low Viol
Mother's Depression	1.00	1.00	.37**	.45*	.22	.09
Mother's Incompetency	.37*	.45**	1.00	1.00	.02	.33*
Mother's Role Restriction	.22	.09	.02	.33*	1.00	1.00
Total Problems	.34*	.20	.01	.29*	-.03	.13
Internalizing Behavior	.26*	.21	-.11	.24*	-.01	.14
Externalizing Behavior	.36**	.16	.07	.29*	-.03	.09
Withdrawn	.21	.13	-.06	.36**	.08	.14
Somatic	.18	.22	.00	.34*	.07	.22
Depression	.23*	.22	-.19	.11	-.04	.01
Social Problems	.31*	.21	.16	.22	.04	.25*
Thought Problems	.21	.15	-.15	.35**	-.07	.20
Attention Problems	.37**	.27*	.17	.46**	.13	.17
Delinquency	.16	.10	-.02	.27*	-.06	.03
Aggression	.38**	.18	.07	.31	.05	.11

N= 67 High Violence
N= 63 Low Violence

* p <.05
** p <.01

Externalizing Behavior

1) Maternal Depression

Externalizing behavior was significantly correlated with maternal depression across all cases ($p<.01$) and for high violence areas ($p<.01$).

2) Sense of Incompetence

Externalizing behavior was significantly correlated with sense of incompetence for low violence areas ($p<.05$), for older children ($p<.01$), and for boys ($p<.01$).

3) Restriction of Role

There were no significant correlations of externalizing behavior with Restriction of role for any of the categories.

Withdrawn Behavior

1) Maternal Depression

Withdrawn behavior was significantly correlated with maternal depression across all cases ($p<.05$) and for younger children ($p<.01$).

2) Sense of Incompetence

Withdrawn behavior was significantly correlated with sense of incompetence for low violence areas ($p<.01$).

3) Restriction of Role

There were no significant correlations with restriction of role.

Depression/Anxiety

1) Maternal Depression

Depression was significantly correlated with maternal depression across all cases ($p<.01$) and for younger children ($p<.05$).

2) Sense of Incompetence

There were no significant correlations of depression with sense of incompetence for any of the categories.

3) Restriction of Role

There were no significant correlations of depression with restriction of role for any of the categories.

Somatic Complaints

1) Maternal Depression

There were no significant correlations of somatic complaints with maternal depression for any of the categories.

2) Sense of Incompetence

Somatic complaints were significantly correlated with sense of incompetence across all cases ($p<.05$), for low violence areas ($p<.01$), for younger children ($p<.01$) and for boys ($p<.01$).

3) Restriction of Role

Somatic complaints were significantly correlated with restriction of role for younger children ($p<.01$).

Delinquent Behavior

1) Maternal Depression

There were no significant correlations of delinquent behavior with maternal depression for any of the categories.

2) Sense of Incompetence

Delinquent behavior was significantly correlated with sense of incompetence for low violence areas ($p<.05$), and for boys ($p<.01$).

3) Restriction of Role

There were no significant correlations of delinquent behavior with restriction of role for any of the categories.

Thought Problems

1) Maternal Depression

Thought problems were significantly correlated with maternal depression for younger children ($p<.05$).

2) Sense of Incompetence

Thought problems were significantly correlated with sense of incompetence for low violence areas ($p<.01$).

3) Restriction of Role

Thought problems were significantly correlated with role restriction for boys ($p<.05$).

Attention Problems

1) Maternal Depression

Attention problems were significantly correlated with maternal depression for children in high violence areas ($p<.01$), for younger children ($p<.05$) and for girls ($p<.05$).

2) Sense of Incompetence

Attention problems were significantly correlated with sense of incompetence across all cases ($p<.001$), for low violence areas ($p<.001$), for older children ($p<.001$), and for boys ($p<.01$).

3) Restriction of Role

There were no significant correlations of attention problems with restriction of role for any of the categories.

Social Problems

1) Maternal Depression

Social problems were significantly correlated with maternal depression across all cases ($p<.05$), for high violence areas ($p<.01$) , and for boys ($p<.01$).

2) Sense of Incompetence

Social problems were significantly correlated with sense of incompetence for older children ($p<.01$).

3) Restriction of Role

There were no significant correlations of social problems with restriction of role for any of the categories.

Aggressive Behavior

1) Maternal Depression

Aggressive behavior was significantly correlated with maternal depression for high violence areas ($p<.01$), and for older children ($p<.05$).

2) Sense of Incompetence

Aggressive behavior was significantly correlated with maternal sense of incompetence for low violence areas ($p<.01$), and for boys ($p<.01$).

3) Restriction of Role

There were no significant correlations of aggressive behavior with restriction of role for any of the categories.

Results from the ANOVAs:

A main effect was found for mothers who scored in the clinical range for depression on the Total Problems scale ($p<.05$). Mothers who scored in the clinical range for depression (N=7) had a mean score of 65.7, compared to mothers who scored in the normal range (N=142) with a mean score of 58.5.

A main effect was found for mothers who scored in the clinical range on sense of incompetency ($p<.05$) on the Total Problems scale. Mothers who scored in the clinical range (N=29) had a mean score of 62.6, while mothers who scored in the normal range (N=120) had a mean score of 57.9.

No main effect was found for mothers who scored in the clinical range on role restriction. Ten mothers scored in the clinical range with a mean score of 61.0, while mothers scoring in the clinical range (N=139) had a mean score of 58.7.

There were no interactive effects of maternal depression, sense of incompetence or role restriction with level of violence in area, age or gender.

Hypothesis VI. Variability in the symptomatology of children experiencing political violence is accounted for by variations in maternal child rearing style.

Maternal Punishment and Control

Correlation matrices were compiled for both raw and T scores across all cases (See Tables 36 and 37). Overall, for both raw scores and T scores, there was no

relationship between either control by mother or punishment by mother with any of the measures of child symptomatology. Because raw and T scores were similar, T scores were used in subsequent analyses. A correlation matrix was also compiled for high and low violence areas. No significant differences were found in high and low violence areas for maternal control and punishment and symptoms in children (See Table 38).

Moreover, on the multiple regression analyses no significant correlations between maternal control or maternal punishment and Total Problems were found. Analyses were done for all 150 cases, and for high and low violence areas. There were no significant correlations between Total Problems and maternal control or punishment across all 150 cases, or for high or low violence areas. For the ten subscales, the only significant correlation was between withdrawn behavior and maternal punishment for children living in high violence areas.

Maternal Response Style

On the ANOVA, main effects were found for mothers' response style for their children's use of violence on Total Problems, internalizing behavior, depression, and aggressive behavior (See Table 39). Children whose mothers discussed their children's use of violence or who ignored the issue had less symptomatology than children whose mothers threatened or hit them ($p<.05$). No interaction effects were found with gender or age on child symptomatology.

However, an interaction effect was found for maternal response style and children who experienced a violent *Intifada* event. While there was no difference in mean scores between talking about violence (59.4) and ignoring child's use of violence (56.5) on the Total Problems scale, when children did not experience a violent *Intifada*

event, they had significantly higher mean scores of 62.8 on the Total Problems scale, compared to mean scores of 56.5 for children of mothers who talked to them about the event. Children whose mothers threatened or hit them had mean scores of 65.1 if they did not experience a violent *Intifada* event, and mean scores of 63.0 if they did experience a violent *Intifada* event (See Table 40).

Verbal Reasoning by Mother with Child

A main effect was found verbal reasoning by mother. When verbal reasoning was absent, children had mean scores of 59.4 on the Total Problems scale, compared to mean scores of 55.5 when verbal reasoning was present. Furthermore, there was an interaction of age on verbal reasoning. Younger children whose mothers engaged in verbal reasoning with them had mean scores on the Total Problems scale of 51.0, compared to mean scores of 59.9 for younger children whose mothers did not engage in verbal reasoning. For older children, verbal reasoning did not have a significant effect (See Figure 1). There were no interaction effects on gender or level of violence in area.

Hypothesis VII. Variability in the symptomatology of children is accounted for by the number of risk factors in a child's life.

A main effect was found for the number of risk factors a child experienced and child symptomatology. This was true for the 0-3 or more *Intifada* risks ($p<.001$), the 0-3 or more family risks ($p<.001$), and for the 0-4 or more total risks ($p<.001$) (i.e., *Intifada* risks and family risks combined). Across all three categories of risks, with each additional risk factor, child symptomatology increased significantly.

Table 36

Correlation Matrix for Maternal Control and Punishment and Child Symptomatology (Raw Scores) N=142

	Control By Mother	Punishment By Mother
Control By Mother	1.00	.21*
Punishment By Mother	.21*	1.00
Overall Problems	.05	.05
Internalizing Behavior	.04	-.04
Externalizing Behavior	.09	.15
Withdrawal	.01	-.13
Somatic	.00	-.17
Depression	.14	.07
Social Problems	-.02	.07
Thought Problems	.02	-.11
Attention Problems	.01	-.05
Delinquency	-.01	.07
Aggression	.12	.16

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

Table 37

Correlation Matrix for Maternal Control and Punishment and Child Symptomatology T Scores N=142

	Control By Mother	Punishment By Mother
Control By Mother	1.00	.21*
Punishment By Mother	.21*	1.00
Overall Problems	.04	.05
Internalizing Behavior	.03	.06
Externalizing Behavior	.09	.10
Withdrawal	-.04	.16
Somatic	.02	-.14
Depression	.10	.09
Social Problems	-.03	.08
Thought Problems	.06	-.17
Attention Problems	-.01	.00
Delinquency	.09	.07
Aggression	.13	.06

* p <.05
* p <.01

Table 38

Correlation Matrix for Maternal Control and Punishment and Child Symptomatology by Level of Violence in Area (T Scores)

	Control By Mother		Punishment By Mother	
	High Violence	Low Violence	High Violence	Low Violence
Control By Mother	1.00	1.00	.27*	.17
Punishment By Mother	.27*	.17	1.00	1.00
Total Problems	.04	.05	.19	-.05
Internalizing	.12	-.06	.19	-.05
Externalizing	.06	.13	.21	.02
Withdrawal	-.03	-.05	.33*	-.03
Somatic	.05	.00	-.08	-.17
Depression	18	.03	.13	.05
Social Problems	-.06	.01	.03	.12
Thought Problems	.04	.09	-.12	-.19
Attention Problems	-.07	.05	.10	-.06
Delinquency	.08	.13	.19	.01
Aggression	.09	.17	.18	-.02

N= 69 High Violence Areas
N= 73 Low Violence Areas

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

Table 39

Mean Scores on the Child Behavior Checklist as it Relates to Mother's Response to Child's Use of Violence

	Did Nothing (N=23)	Talked About It (N=22)	Threatened/ Hit (N=20)
Total Problems	60.13	58.35	64.05*
Internalizing	57.87	56.50	61.14*
Externalizing	58.00	57.15	62.24
Withdrawn	57.91	57.10	60.05
Depressed	59.48	58.75	63.00*
Social Problems	60.35	60.55	61.43
Attention Problems	58.43	57.15	59.62
Thought Problems	62.91	59.40	64.52
Delinquent Behavior	62.70	62.05	66.24
Somatic Complaints	53.96	51.40	53.90
Aggressive Behavior	56.96	55.35	60.14

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

Table 40

Mean Scores on the Total Problems Scale of the Child Behavior Checklist as it Relates to Mother's Response to Violence and Child's Experience with Violent *Intifada* Event

	Did Nothing (N=23)	Talked About It (N=22)	Threatened/ Hit (N=20)
Absence of Intifada Violence	57.7 (N=12)	59.4 (N=15)	65.1 (N=13)
Presence of Intifada Violence	62.8 (N=11)	56.5 (N=7)	63.0 * (N=7)

* $p<.05$

First, as the number of risks related to *Intifada* violence increased (i.e., violent *Intifada* event, arrest of family member and *Intifada*-related injury) the level of child symptomatology also increased significantly: children who had no *Intifada* risks had mean scores of 56.1 on the Total Problems scale, compared to mean scores of 60.3 for one risk, 65.2 for two risks, and 63.0 for three risks (See Figure 2).

Second, as the number of family risks increased (i.e., chronic violence to child, physical violence to mother, verbal aggression to mother, maternal depression, maternal sense of incompetence and punitive child rearing style), so did child symptomatology. Children who had no family risks had mean scores on the Total Problems scale of 55.7, children with one risk had mean scores of 59.6, children with two risks had scores of 65.0, while children with three or more risks had mean scores of 73.0—in the clinical range (See Figure 3).

Finally, child symptomatology also increased as the total number of risks increased. Children who had no risks had mean scores on the Total Problems scale of 53.0, children with one risk had scores of 56.7, children with two risks had scores of 61.7, children with three risks had scores of 64.1, while children with four or more risks had scores of 69.1 (See Figure 4).

Number of Risk Factors and Gender

There was a significant interaction effect of number of risks and gender on child symptomatology. For *Intifada* risks, girls with no risks had mean scores on the Total Problems scale of 55.3 compared to mean scores of 56.9 for boys. For one risk factor, girls had mean scores of 59.3 compared to mean scores of 61.2 for boys. Finally, boys who experienced two or more risk factors showed significantly more

symptomatology ($p<.01$) than girls who experienced two or more risk factors, having mean scores of 64.1 compared to mean scores of 60.4 for girls (See Figure 5).

For family risks, girls with no risk factors had mean scores on the Total Problems scale of 56.0 compared to mean scores of 55.4 for boys. For one risk factor, girls had mean scores of 58.7 compared to mean scores of 60.4 for boys. Moreover, boys who experienced two or more risk factors displayed significantly more problems ($p<.01$) than girls with two or more risk factors, with boys having mean scores of 69.9 on the Total Problems scale compared to 61.4 for girls (See Figure 6).

For total risk factors, girls who had no risk factors had mean scores on the Total Problems scale of 53.4 compared to mean scores of 52.7 for boys. For one risk factors, girls had mean scores of 57.6 compared to mean scores of 55.6 for boys. For two risk factors, girls had mean scores of 60.6 compared to mean scores of 62.7 for boys. Finally, boys who experienced three or more risks displayed significantly more symptomatology than girls who experienced three or more risks. Boys had scores on the Total Problems scale of 68.2 compared to 60.4 for girls (See Figure 7).

Number of Risk Factors and Age

There were also significant interaction effects for number of risk factors and age on child symptomatology. For total risk factors, younger children who displayed three or more risk factors displayed significantly more psychological and behavioral problems ($p<.05$) than older children who had three or more risk factors. For *Intifada* risks, younger children who experienced two or more risk factors showed significantly more symptomatology ($p<.05$) than older children who experienced two or more risk factors (See Figure 8). On the Total Problems scale, younger children with no risk factors had mean scores of 56.0 compared to 56.3 for older children. For one risk

factor, younger children had mean scores of 61.1 compared to 59.3 for older children. And for two risk factors, younger children had mean scores of 64.6 compared to mean scores of 61.4 for older children. There were no interactive effects of number of risks and level of violence in area.

Number of Risk Factors and Verbal Reasoning by Mother

As reported previously, a main effect for maternal reasoning was found. Children whose mothers engaged in a high amount of verbal reasoning with them had significantly less symptomatology than children whose mothers did not engage in a high amount of verbal reasoning. Moreover, for each number of risk factors, children whose mothers engaged in verbal reasoning had significantly less ($p<.05$) symptomatology. For total risk factors, when verbal reasoning was present, children with no risk factors had mean scores on the Total Problems scale of 52.4 compared to 53.2 for no verbal reasoning. For one risk factor, children with verbal reasoning had mean scores of 52.3 compared to 57.4 with no verbal reasoning. For two risk factors, children with verbal reasoning had mean scores of 56.8 compared to mean scores of 62.6 for no verbal reasoning. And for three risk factors, children with verbal reasoning had mean scores of 62.2 compared to mean scores of 66.4 when no verbal reasoning was present (See Figure 9).

Figure 1

Interaction of Verbal Reasoning by Mother and Age of Child on the Total Problems Scale of the Child Behavior Checklist

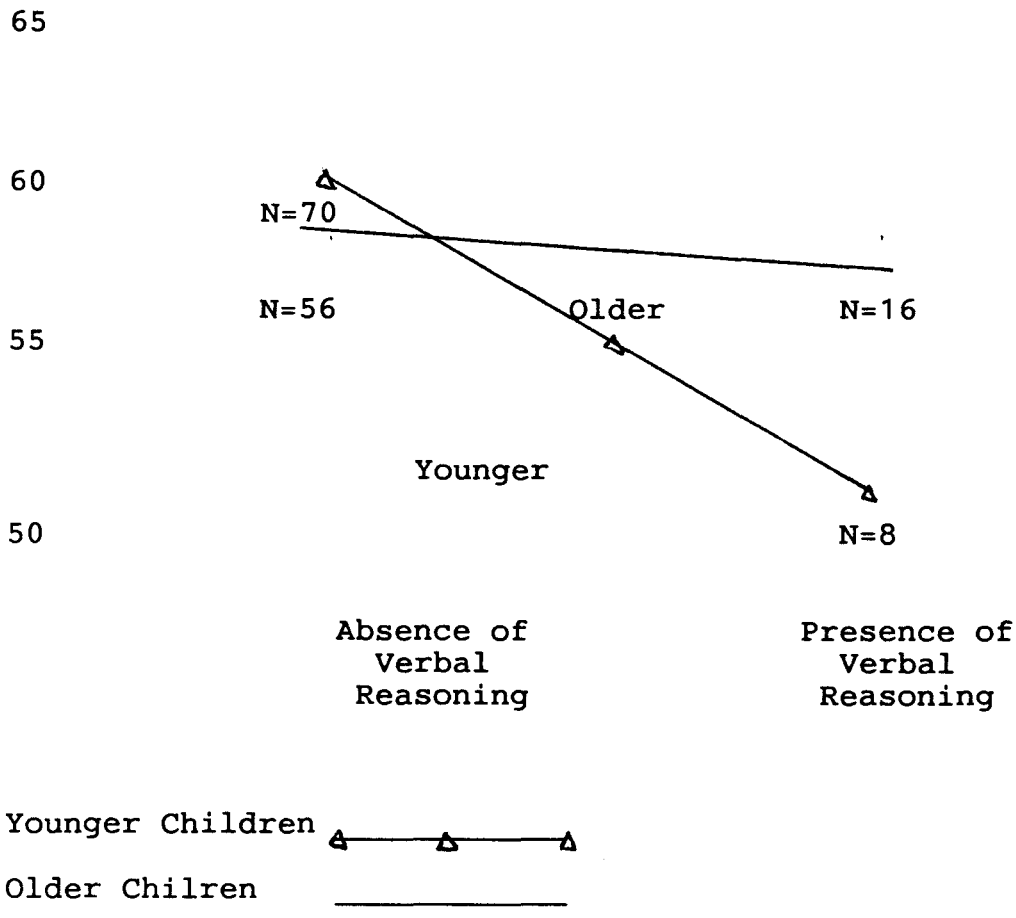
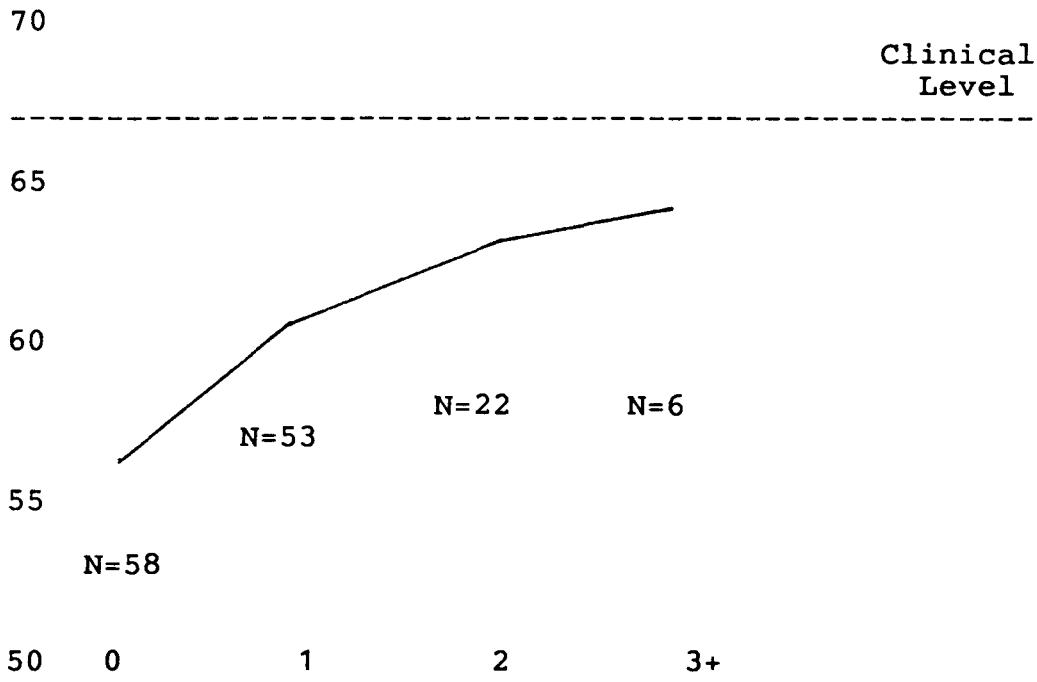


Figure 2

Child Symptomatology as a Function of Number of Intifada Risk Factors

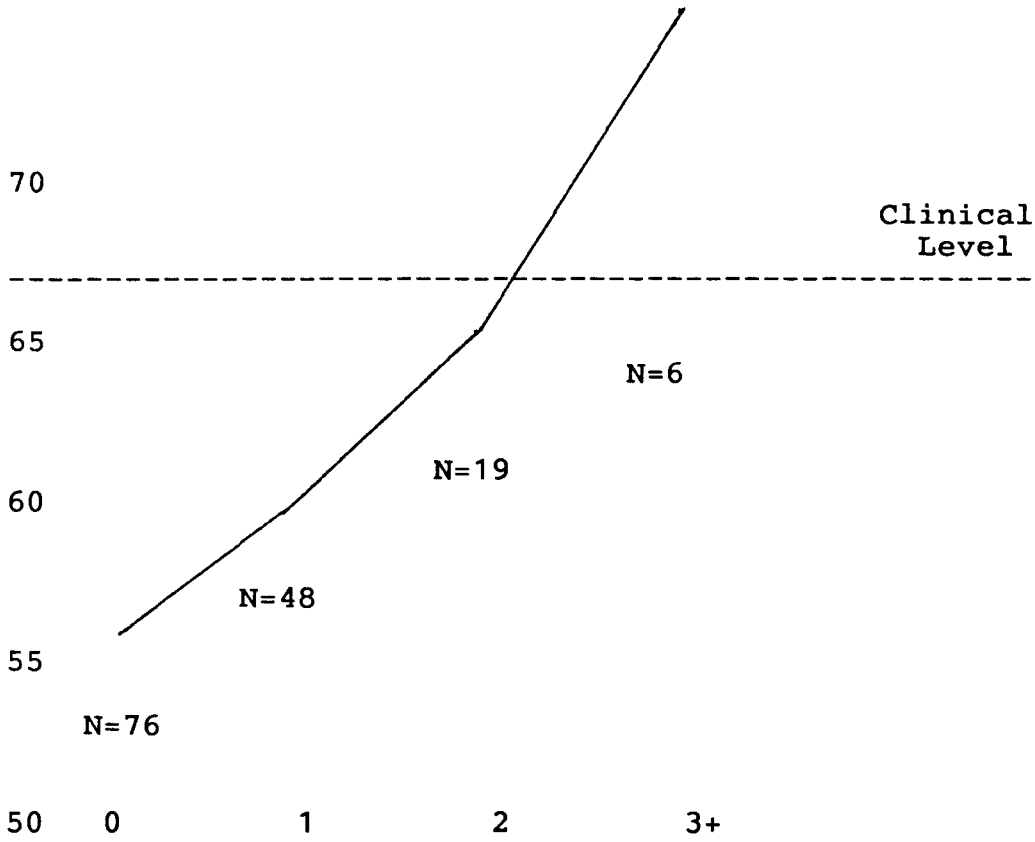


Risk Factors:

Violent Intifada Event
Arrest of Family Member
Intifada-Related Injury

Figure 3

Child Symptomatology as a Function of Number of Family Risk Factors

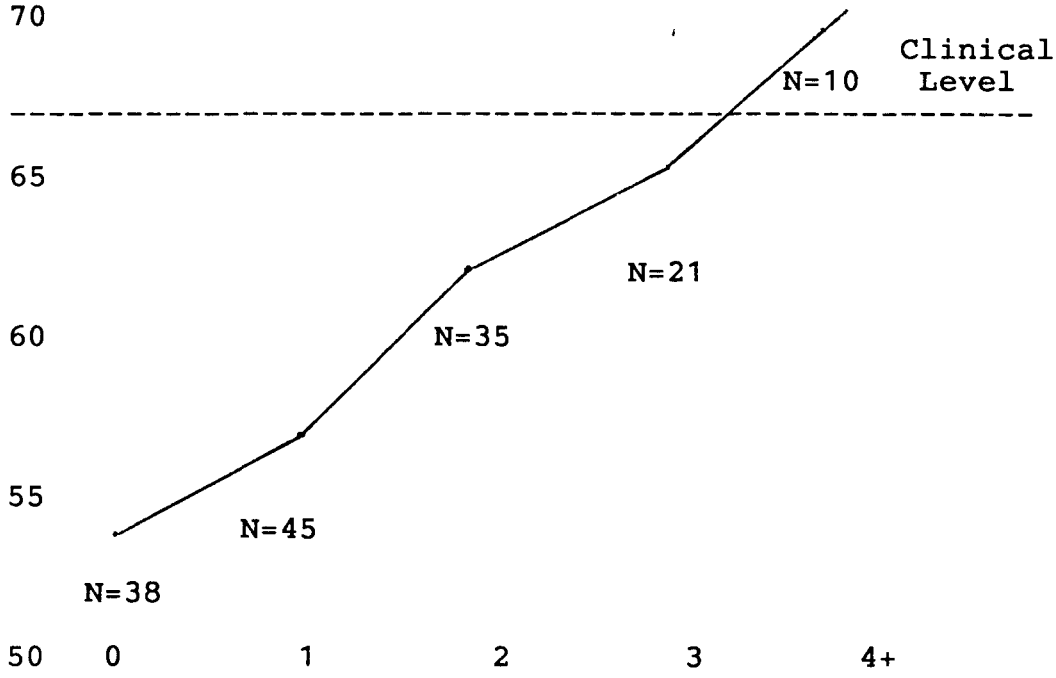


Risk Factors:

Chronic violence to child
Physical violence to mother
Verbal aggression to mother
Maternal depression
Maternal sense of incompetence
Punitive child rearing style

Figure 4

Child Symptomatology as a Function of Number of Total Risk Factors

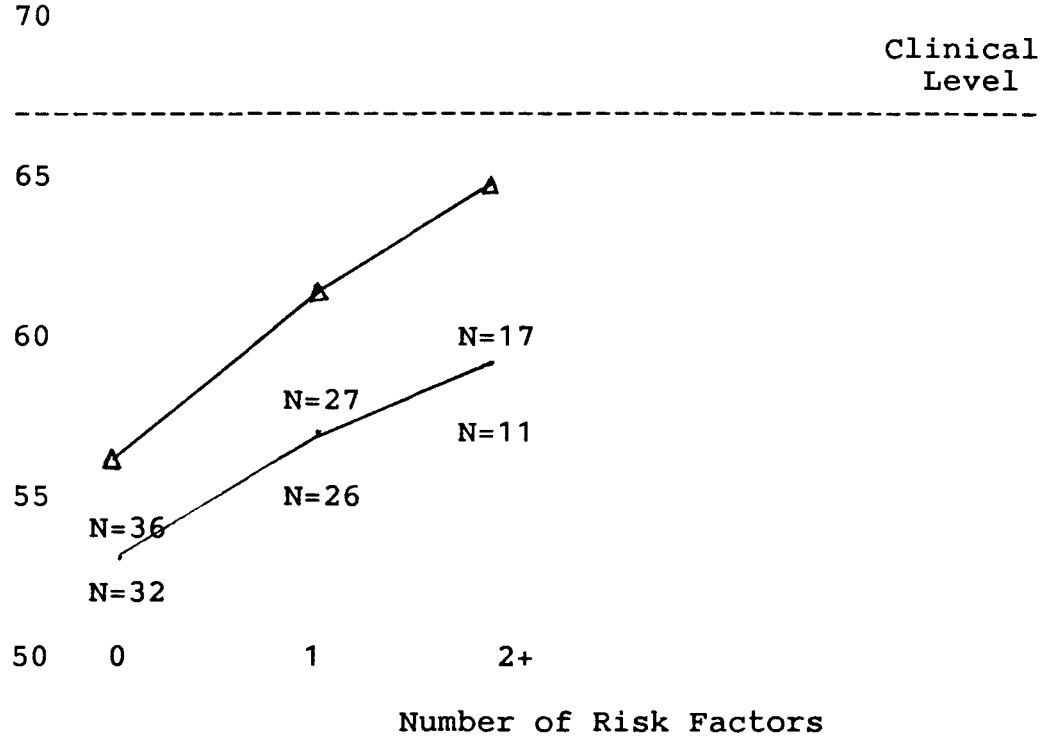


Risk Factors:

Intifada-related injury
Arrest of family member
Violent Intifada event
Chronic violence to child
Physical violence to mother
Verbal aggression to mother
Maternal depression
Maternal sense of incompetence
Punitive child rearing style

Figure 5

Child Symptomatology as a Function of Number of Intifada Risk Factors and Gender



Risk Factors:

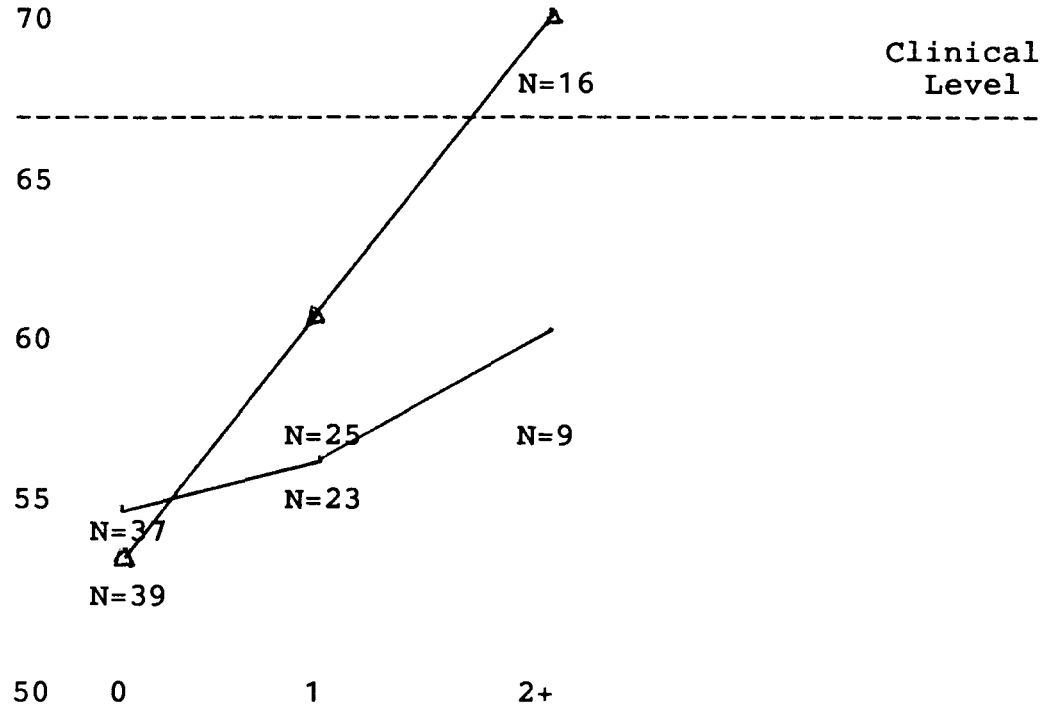
Intifada-related injury
Arrest of family member
Violent Intifada event

Boys (N=80)

Girls (N=70)

Figure 6

Child Symptomatology as a Function of Number of Family Risk Factors and Gender



Risk Factors:

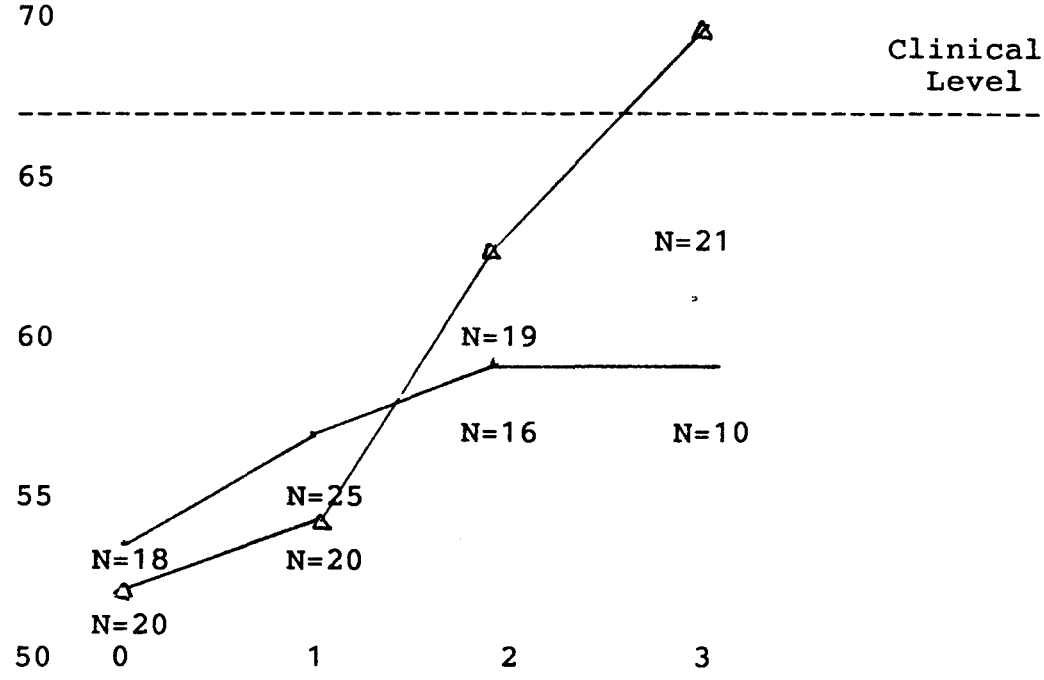
Chronic violence to child
Physical violence to mother
Verbal aggression to mother
Maternal depression
Maternal sense of incompetence
Punitive child rearing style

Boys (N=80)

Girls (N=70)

Figure 7

Child Symptomatology as a Function of Number of Total Risk Factors and Gender



Risk Factors:

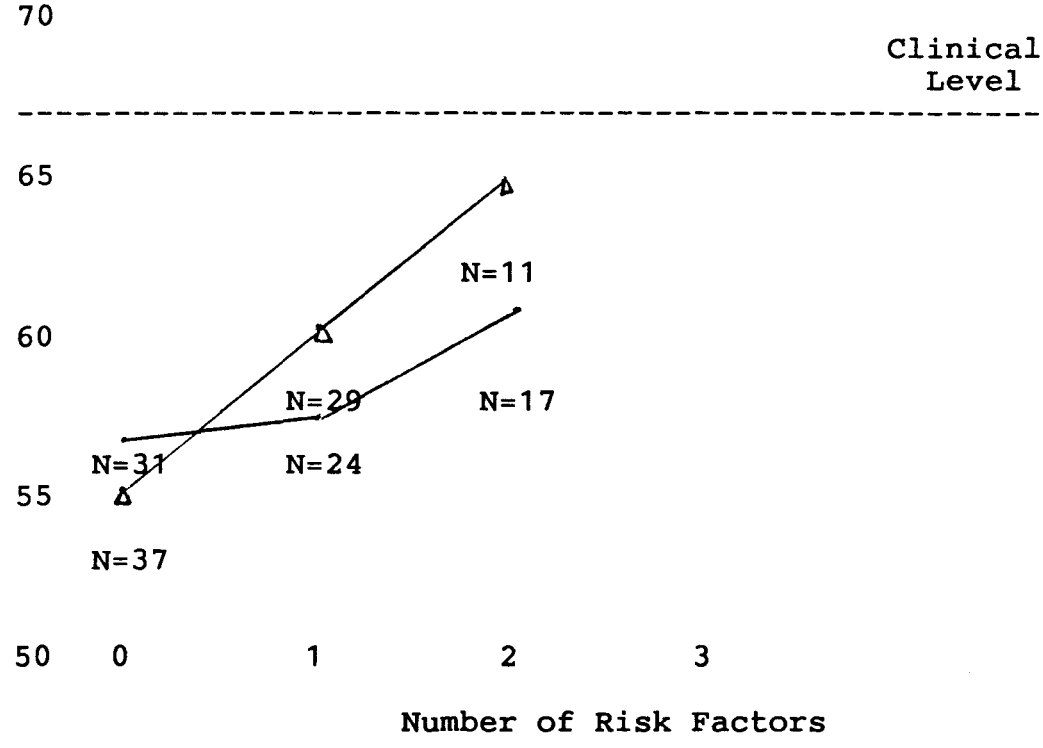
Intifada-related injury
Arrest of family member
Violent Intifada event
Chronic violence to child
Physical violence to mother
Verbal aggression to mother
Maternal depression
Maternal sense of incompetence
Punitive child rearing style

Boys (N=80)

Girls (N=70)

Figure 8

Child Symptomatology as a Function of Number of Intifada Risk Factors and Age



Risk Factors:

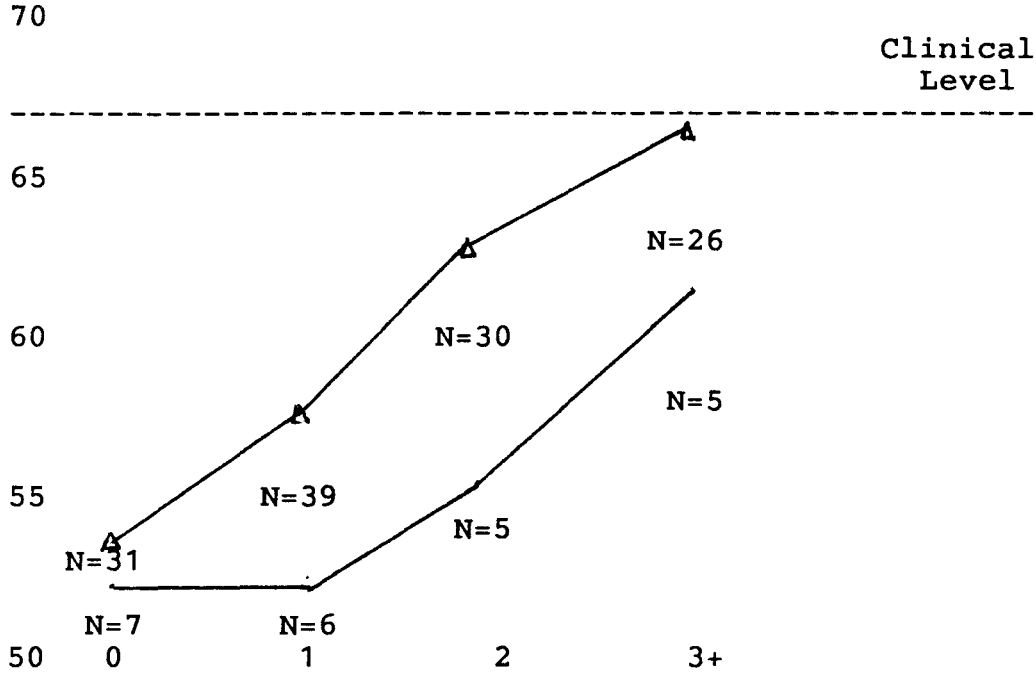
Intifada-related injury
Arrest of family member
Violent Intifada event

Younger Children (N=77)

Older Children (N=72)

Figure 9

Child Symptomatology as a Function of Number of Intifada Risk Factors and Verbal Reasoning By Mother



Risk Factors:

Intifada-related injury
Arrest of family member
Violent Intifada event

No Maternal Reasoning (N=126)

Maternal Reasoning (N=24)

CHAPTER V

DISCUSSION OF FINDINGS

This study was an attempt to examine the psychological and behavioral consequences of political violence on Palestinian children in the context of their social environment, particularly at the microsystem level of the family. Thus, risks relating to family violence, maternal functioning, and child rearing styles, and protective factors relating to maternal mediation were explored in light of children's experiences with political violence. In addition to these risks and protective factors assessed in this study at the microsystem level, it is suggested that links to other systems in the child's social environment, particularly ideology at the macrosystem level, also shape causal relationships for Palestinian children.

Furthermore, the interaction of age and gender was examined in relation to risk and protective factors in the child's social environment. Although no main effects were found for age or gender on child symptomatology, interaction effects of both age and gender with a number of variables related to *Intifada* violence, family violence, maternal functioning, and child rearing strategies were found to be significant, with boys and younger children more vulnerable to risks as well as benefiting more from protective factors.

Level of Violence in Area Where Child Lived

Based upon prior research, a main effect of political violence on psychological and behavioral symptoms was expected. Paradoxically, children who lived in high violence areas did not display significantly more psychological and behavioral symptoms than children living in low violence areas, where violence occurred on a more sporadic basis. Although significantly more children experienced *Intifada*-related violence in high violence

areas than in low violence areas (62.5% vs. 37.5% reported an *Intifada* event as the most violent event experienced; 84.6% vs. 15.4% experienced a serious injury; and 58% vs. 42% experienced the arrest of a family member) overall, children in high violence areas had lower levels of psychological and behavioral symptoms. The mean score on the Total Problems scale of the Child Behavior Checklist was 57.9 for children in high violence areas, compared to a mean score of 59.7 for children in low violence areas, although this difference was not statistically significant.

Interaction of Level of Violence in Area Where Child Lived and Gender

Although no main effects of level of violence in area on child symptomatology were found, of interest, however, were the interaction effects of level of violence in area with gender. Boys living in high violence areas displayed significantly more psychological and behavioral problems than girls in living in high violence areas. In addition to higher mean scores on the Total Problems scale (60.0 vs. 55.5), boys from high violence areas also showed significantly higher mean scores on internalizing behavior (60.3 vs. 55.1), depression/anxiety (62.0 vs. 57.2), and withdrawn behavior (60.4 vs. 54.9).

These findings confirm studies by Rutter (1979), Garmezy (1983) and Werner (1990) of risk factors in the child's social environment: boys are more susceptible to negative outcomes from risk factors than are girls. It also parallels McCauley and Troy's (1983) research which reported that approximately 50% more boys than girls were referred for psychiatric problems during periods of political violence in Northern Ireland.

Based on an additional analysis of ideological themes in Palestinian children's stories on the Thematic Apperception Test (Kostelny, 1993), it is suggested that strong adherence to ideology is correlated with lower psychological problems for older Palestinian girls. In the high violence areas, ideological themes emerged in the stories of 78% of the older girls, compared to 52% of the older boys. In the low violence areas,

ideological themes were present in the stories of 45% of the older boys compared to 29% of the older girls. Younger children did not portray as many ideological themes in their stories: in both low and high violence areas only 20% of boys and 17% of girls had ideological themes in their stories. This finding corresponds to the results from this study indicating lower psychological and behavioral symptoms for girls in high violence areas.

It is generally acknowledged by observers of Palestinian society that changes in the family structure occurred during the *Intifada*, providing new roles and increased status for women and girls. With the *Intifada*, many women's groups emerged. Although each was generally affiliated with one nationalist party or another (e.g., PLO-FATAH, PFLP, etc.) their overall objective was the strengthening of women's position in the context of the Uprising against the occupation.

The emergence of Palestinian women's groups may be compared with the changing role of women in Algeria during the war of liberation from France up to 1962. With the end of the war and the rise of religious fundamentalism, these groups lost much of the power they had attained. It remains to be seen whether the same will occur for these Palestinian women's groups.

Based on reports from the field, girls living in high violence areas acquired more responsibilities because of the *Intifada* than girls in low violence areas. Research by Werner on children living in Kauai and research by Elder on children of the Depression in the 1930s, found that children who had productive roles of responsibility, when associated with close family ties, were more resilient than children who did not have such productive roles. In areas of high violence, Palestinian girls had increased responsibility such as caring for younger siblings during curfews, conducting informal classes in the home when schools were closed, as well as participating in protests against the occupation.

Research by Werner (1990) and Block & Gjerde (1986) has demonstrated that independence and an absence of overprotection is associated with resiliency for girls, while

structure, rules, parental supervision, an adult male role model, and the expression of emotions is associated with resiliency for boys. Thus, the *Intifada* provided girls with more opportunity for risk-taking and independence than they traditionally had, promoting resilience. However, the factors which boys needed to foster resilience (i.e., structure, rules, and parental supervision) diminished with the *Intifada*, as young boys increasingly disregarded the authority of their parents to become involved in *Intifada*-related activities. Additionally, there was a depletion of male role models, as increasingly more men were killed, jailed, or in hiding.

This result parallels Elder's (1974) findings of the impact of the Great Depression on family structure and developmental consequences for children: young boys growing up during the Depression suffered more developmental disturbances than did young girls. With the unemployment of fathers during the Depression came a resulting shift in responsibilities to women and children. Mothers were more likely to be employed in situations of hardship, thus attaining increased influence in the household. Unemployed fathers were viewed as a moral failures with resulting shame, ridicule and decreased influence in the household.

Such changes in the family structure in families had important implications for the social independence of boys and girls, with boys encountering more problems in transitions to traditional adult roles than girls. More influenced by fathers, boys suffered because of fathers diminished status in the family. Girls, on the other hand, more influenced by mothers, were positively influenced by the mother's increased status in the family.

For Palestinian children, women have taken on increased roles and responsibilities, serving as positive role models for their daughters. Men, on the other hand, have suffered more unemployment, thus increasing the possibility of diminished status in the family, and decreased influence on their sons.

Children's Personal Experience of *Intifada*-Related Violence

One of the major findings of this study demonstrated that children's personal experience with political violence was related to increased levels of psychological and behavioral symptomatology. Of the five variables relating to children's personal experience with *Intifada* violence (ongoing *Intifada* violence, violent *Intifada* event, time of occurrence of violent *Intifada* event, *Intifada* injury, and arrest of a family member), main effects were found for three of these variables on child symptomatology: *Intifada* injury, arrest of a family member and time of occurrence of violent *Intifada* event. These findings parallel previous research on children in war zones, indicating increased psychological, social and behavioral problems for children experiencing war-related events (Macksoud, 1993; Boothby, 1992, Rosenthal, 1983).

For Palestinian children who directly experienced *Intifada*-related violence, political violence was part of their microsystem. For children in high and low violence areas who did not have personal experiences with *Intifada*-violence, political violence remained at the exosystem level. Children who were seriously injured as a result of *Intifada* violence displayed significantly more psychological and behavioral problems than children who were not injured. The seriously injured children had significantly higher levels of symptomatology on their overall functioning as measured on the Total Problems scale of the Child Behavior Checklist (62.3 vs. 58.1), as well as on the subscales of externalizing behavior (58.5 vs. 55.8), delinquent behavior (63.2 vs. 61.7) and attention problems (59.4 vs. 56.5).

While boys experienced slightly more injuries than girls (N=14 vs. N=12), boys showed more problems related to psychological and behavioral functioning. Boys who were injured obtained mean scores on the Total Problems scale of 65. 4 (approaching the

clinical level of 67) compared to mean scores of 58.4 for girls. However, because of the small number of cases, this finding was not statistically significant.

Children who had a family member arrested also displayed significantly higher levels of psychological and behavioral problems on the Total Problems scale (61.6 vs. 57.4), and the subscales of internalizing behavior (59.5 vs. 56.9), externalizing behavior (58.8 vs. 55.0), depression (61.7 vs. 58.5), attention problems (58.9 vs. 56.0) and thought disorders (63.1 vs. 60.2) than children who did not have a family member arrested. Although this study did not determine which family member was arrested, because of the significantly higher differences in symptomatology of children who experienced the arrest of a family member, whatever their relationship to the child, it is clear that the arrest of a family member is stressful for children.

The arrest of a family member has important implications for family functioning as well as the family structure, especially if the arrest was of the child's father. For children who are separated from a parent or significant caregiver, a deep sense of loss, especially for young children, may be manifest. Additionally, a great amount of uncertainty for the child and his family often accompanies arrests, detention, and imprisonment. Once arrested, Palestinians may be held up to six months in detention without being charged with a crime, and once charged, they may remain in prison for up to two years before a trial. The uncertainty of when the family member will return and anxiety over potential abuses in prison are additional stresses related to arrest. Furthermore, when the father is arrested and thus absent from the home, the family often suffers the additional stress of the loss of income from the primary wage earner.

Finally, the time of occurrence of an *Intifada*-related violent event on children's psychological and behavioral symptoms proved to be significant. Children who experienced a violent *Intifada* event occurring within the past 6 months showed significantly more psychological and behavioral symptomatology than children who

experienced an *Intifada*-related violent event that occurred more than 6 months ago (61.1 vs. 57.0 on the Total Problems scale). This finding confirms research by Terr (1990) that acute stressors may have only limited effects on children which last for a short time. Eventually, the child is able to assimilate the event into his existing world view and return to his "normal" state. As will be further discussed in the section on maternal mediation, the effects of acute stressors and traumas are short lived if occurring in the context of a stable relationship with a nurturing adult, especially if the child is engaged with the adult in a dialogue which includes cognitive processing of conflict and trauma.

Again, more boys experienced a recent violent *Intifada* event than did girls (N=24 vs. N=16), and also displayed more psychological and behavioral problems, though this difference was not statistically significant. Boys obtained a mean score of 62.5 on the Total Problems scale compared to 58.9 for girls.

Children's Experience of Family Violence

Violence within the family was significantly related to child symptomatology on seven of the ten measures of family violence: 1) chronic violence to child, 2) physical violence to mother, 3) verbal aggression to mother, 4) physical violence to child, 5) total family aggression, 6) severe physical violence to mother, and 7) severe verbal aggresssion to mother. The three variables of verbal aggression to child, severe physical violence to child, and severe verbal aggression to child were not statistically significant.

Children who experienced chronic family violence as measured on the Violence Questionnarie evidenced significantly more behavioral and psychological problems than children who did not experience chronic family violence. On the Total Problems scale, children with chronic family violence obtained mean scores of 63.1 compared to 58.1 for children not experiencing chronic family violence. They also obtained higher scores on the

subscales of internalizing behavior (61.1 vs. 57.3), delinquency (66.4 vs. 61.0) and attention problems (61.1 vs. 56.1).

Moreover, the total family aggression variable (i.e., the composite score of physical violence to child, verbal aggression to child, physical violence to mother, and verbal aggression to mother) was significantly correlated with total problems as well as all ten subscales (r=.30 for total problems, and ranging from r=.19 to r=.36 on the ten subscales).

Interaction of Children's Experience of Family Violence and Gender

Boys displayed a pattern of developmental problems related to all forms of family violence which girls did not. In particular, boys were especially vulnerable to aggression against the mother by the father. On the multiple regression analysis, significant correlations of the four family violence variables from the Conflict Tactics Scale (i.e., verbal aggression to mother, physical violence to mother, verbal aggression to child, and physical violence to child) and child symptomatology were obtained for boys but not for girls. First, verbal aggression to mother was significantly correlated with total problems and eight of the ten subscales (i.e., internalizing behavior, externalizing behavior, aggression, depression, somatic complaints, delinquency, thought problems, and attention problems). Second, physical violence to mother was significantly correlated with the two subscales of withdrawn behavior and social problems. Third, physical violence to child was significantly correlated with total problems and five subscales (i.e., internalizing behavior, externalizing behavior, aggression, attention problems, and social problems) Finally, verbal aggression to child was significantly correlated with the two subscales of somatic problems and delinquency.

Moreover, on the four family violence measures of severe violence (i.e., physical violence to mother, severe verbal aggression to mother, severe physical violence to child,

and severe verbal aggression to child), boys who experienced these family violence risks also had higher levels of symptomatology than girls. For severe physical violence to child, boys had higher levels of symptoms than girls on the Total Problems scale and on eight of the subscales (i.e., internalizing behavior, externalizing behavior, withdrawal, somatic complaints, thought problems, attention problems, and aggressive behavior). For severe physical violence to mother, boys displayed significantly more problems on the Total Problems scale and on withdrawn behavior. For severe verbal abuse to mother, boys obtained higher levels of symptoms than girls on the Total Problems scale, as well as on six of the subscales (i.e., internalizing behavior, externalizing behavior, depression, delinquency, and somatic complaints).

Interaction of Violence Within the Family and Age

Younger children who experienced violence within the family manifest more psychological and behavioral problems than older children who experienced family violence. First, for younger children, verbal aggression to the mother was significantly correlated with Total Problems and seven of the subscales (i.e., internalizing behavior, externalizing behavior, depression, somatic complaints, delinquency, thought problems, and attention problems), while for older children, verbal aggression to mother was only correlated with withdrawn behavior and thought problems. Second, for younger children, physical violence to mother was significantly correlated with withdrawn behavior and social problems, while for older children, physical violence to mother was only correlated with delinquent behavior. Third, for younger children, physical violence to child was significantly correlated with externalizing behavior, aggressive behavior, and social problems, while for older children, physical violence to child was only correlated with attention problems. Finally, for younger children, verbal aggression to child was

significantly correlated with somatic complaints, while for older children, there were no significant correlations between verbal aggression to child and any of the CBCL scales.

Children's Experience of *Intifada* Violence and Family Violence

The intersection of political violence with family violence puts children in double jeopardy for psychological and behavioral consequences. Children who experienced violence within the family were more susceptible to the negative consequences of political violence, having higher levels of psychological and behavioral symptoms than children who did not experience violence within the family.

Although main effects were found for children who sustained *Intifada*-related injuries, arrest of a family member, and a recent *Intifada*-related violent event, when coupled with family violence, child symptomatology was dramatically higher. Significant differences were found for physical violence to child by mother and *Intifada*-related injury, and physical violence to mother by father and recent violent *Intifada* event.

For example, children who did not experience physical violence, but who had sustained a serious *Intifada*-related injury, had mean scores of 61.1 on the thought disorders scale, compared to children who experienced both physical violence and sustained an *Intifada* injury, who obtained mean scores of 70.2—in the clinical range on the Child Behavior Checklist.

Furthermore, various combinations of the *Intifada* risks and the family violence risks produced higher psychological and behavioral symptoms in children, though not statistically significant because of the small number of cases. For example, for the combination of violence to child and arrest of family member, 1) children who experienced neither risk had scores of 56.7; 2) children who experienced violence but not arrest had scores of 59.9; 3) children who experienced arrest but no violence had scores of 61.1, and 4) children who experienced both violence and arrest of a family member had scores of

63.9. However, because there were only 8 cases of both physical abuse and arrest of a family member occurring, this finding did not reach statistical significance.

Thus, an important factor to consider in assessing the influences of political violence on children is evaluating the microsystem of the family, especially as it relates to violence within the family. Stressful factors from the environment may stimulate maltreatment and family dysfunction through the pressure and stress they place on families, as is the case with political violence. This mirrors research by Cicchetti, Belsky, and Garbarino with regard to environmental stressors and community influences on child maltreatment (Cicchetti, 1993; Belsky, 1980; Garbarino & Kostelny, 1992).

To the extent that stress within the family is already high, the presence of negative exosystem factors, in this case political violence, may increase the likelihood of maltreatment. This is evident in the different rates of physical violence to the child in high and low violence areas. The rate in high violence areas is 58% higher than in low violence areas: 25.3% of children in high violence areas report severe physical violence by the mother compared to 14.6% of children in low violence areas. While these results are confounded by low socio-economic status, observers in the field report that they have observed increases in child maltreatment since the *Intifada* began (Arafat, 1992). Certainly one outcome of the *Intifada* has been decreased socio-economic status because of increased unemployment, and research conducted in the United States has demonstrated that low socio-economic status and unemployment are correlated with higher rates of maltreatment.

Problems in Maternal Functioning

Problems in maternal functioning were found to be additional risk factors for children in situations of political conflict. Mothers who were depressed were impaired in their ability to mediate negative effects of political violence for their child. Maternal

depression was significantly correlated with negative developmental outcomes for children. One consequence of living in high violence areas for mothers, is that the mother's exposure to political violence increased the likelihood of her depression. Significantly more mothers from high violence areas (9.2%) fell into the clinically depressed category on the Parenting Stress Index than mothers from low violence areas (1.4%). This pattern of depression for mothers in high violence areas is similar to research of mothers in refugee camps in Cambodia and high crime areas in the United States where mothers were more depressed than in less violent areas (Garbarino, 1992, Osofsky and others, 1993). However, while Palestinian mothers in high violence areas were more depressed than Palestinian mothers in low violence areas, they were still less depressed than mothers in other settings of war and communal violence where it is estimated that approximately 50% of mothers are depressed (Garbarino, 1992; Osofsky and others, 1993).

However, while living in high violence areas was associated with more depression for mothers, living in low violence areas was associated with a higher sense of incompetence and a higher sense of role restriction for mothers. Moreover, a higher sense of incompetence was related to child symptomatology, although role restriction was not. More mothers in low violence areas scored in the clinical range on the Parenting Stress Index of sense of incompetence and sense of role restriction than mothers in high violence areas. As discussed previously, it is hypothesized that high violence areas were more ideological, and thus empowering for women, providing new roles and more involvement in the wider social context than they had previously. With the depletion of men because of death, injury and imprisonment, women took over roles traditionally held by men.

Child Rearing Styles

Although no significant results were found for child rearing styles and child symptoms on the Cornell Behavior Description, a significant difference was found for mothers response style to violence engaged in by her child and child symptoms on the Violence Questionnaire. Mother's response style appeared to be an important mediator of psychological and behavioral problems for children who engaged in violence (i.e., "used violence to obtain a personal goal"). One limitation of this study was that the type of violence engaged in was not specified. In future research it would be important to know if differences existed for child symptomatology for maternal response style and type of violence engaged in (i.e., ideologically driven violence vs. other-related violence).

Mothers who talked with their children about their use of violence had children who displayed less psychological and behavioral problems than mothers who used a child rearing style which either ignored their child's use or violence, or which was verbally or physically punitive. Main effects were found on the Total Problems scale as well as on the subscales of internalizing behavior, depression, and aggressive behavior. Moreover, mother's response style was found to be crucial for children who had experienced violent *Intifada* events. While significant differences were not found for maternal response style when children did not experience *Intifada* violence, significant differences were found when children did experience *Intifada* violence: children whose mother's ignored their child's use of violence had significantly higher levels of symptomatology than mothers who talked with their child about it. Children whose mothers ignored their use of violence had mean scores on the Total Problems scale of 57.7 when the child did not experience a violent *Intifada* event. However, when the child did experience a violent *Intifada* event, the mean score rose dramatically to 62.8—as high as the punitive response style. Thus, in situations where the child engaged in violence, the mother's response style was significantly related to better psychological and behavioral outcomes. This empirical

finding parallels Baider and Rosenfeld's (1974) case studies of Israeli children during the Yom Kippur war. Children whose mothers interpreted war-related events for them developed fewer psychological problems.

Finally, verbal reasoning by mother with child (as measured on the Conflict Tactics Scale) proved to be an important mediator for the negative effects of political violence on children. Children whose mothers engaged with them in a high degree of verbal reasoning demonstrated significantly fewer psychological and behavioral symptoms; children whose mothers did not engage in a high amount of verbal reasoning with them had mean scores of 59.4 on the Total Problems scale, compared to mean scores of 55.5 for children whose mothers engaged in verbal reasoning. Moreover, verbal reasoning appeared to serve as an important protective factor for young children. Young children whose mothers engaged in verbal reasoning with them had mean scores on the Total Problems scale of 51.0, compared to scores of 59.9 for young children whose mothers did not engage in verbal reasoning. For older children, verbal reasoning did not have a significant effect (57.4 vs. 58.8 for children whose mothers did not engage in verbal reasoning). Thus, in addition to the research literature which indicates that a stable relationship with an emotionally healthy caregiver is a protective factor for young children, this finding indicates that cognitive processing with the mother is also an important protective factor for young children.

Accumulation of Risk Factors

The number of risk factors a child experienced was significantly related to the amount of psychological and behavioral problems the child manifested. This was true for the *Intifada* risks (ranging from 0 to 3 risk factors), the family risks (0 to 3 or more risks), as well as for the combined total risks category (0 to 4 or more risks).

First, as the number of risks related to *Intifada* violence increased, the level of child symptomatology also significantly increased: children who had 0 *Intifada* risks had

mean score of 56.1 on the Total Problems scale, compared to mean scores of 60.3 for 1 risk, 62.5 for 2 risks, and 63.0 for 3 risks.

Second, as the number of family related risks increased (i.e., violence within the family, problems in maternal functioning and punitive child rearing style), so did child symptomatology. Children who had no family risks had mean scores on the Total Problems scale of 55.7, children with one risk had mean scores of 59.6, children with two risks had scores of 65.0, while children with three or more risks had mean scores of 73.0—in the clinical range.

Finally, child symptomatology also increased as the total number of risks increased. Thus, while children who had no risks had mean scores on the Total Problems scale approaching U.S. norms (53.0), and one risk increased scores only moderately (56.7), children with two risks had scores of 61.7, children with three risks had scores of 64.1, while children with 4 or more risks had scores of 69.1—in the clinical range.

Permanent developmental damage is more likely to occur when multiple risks are present in a child's environment (Rutter, 1987). The risk of developmental harm from exposure to violence increases when that exposure is compounded by other risks. Thus, developmental harm tends to occur when a child is subjected to cumulative stress from a variety of stressors throughout the course of development. A single risk, according to Rutter, is no more likely to cause developmental harm than no risk at all; when risk factors accumulate, however, the chance of damaging consequences increases dramatically, and when four or more risk factors occur, the risk increases tenfold. Sameroff and his colleagues (1987) report that average IQ scores of 4-year-old children are related to the number of psychological and social risk factors present in their lives. Average IQ for children with 0-2 risk factors is above 115, while the addition of a third and fourth risk factor drops the score to nearly 85, with relatively little further decrement with the accumulation of the fifth through eighth risk factors.

Accumulation of Risk Factors with Age

Younger children were more susceptible to the negative consequences of multiple risks than were older children. When young children experienced three or more total risks, their mean score on the Total Problems scale was 68.8—in the clinical range—compared to 62.3 for older children. Likewise, for family risks, younger children scored in the clinical range when two or more risks were present (68.6 compared to 65.0 for older children). For *Intifada* risks, young children experiencing two or more risks had scores of 65.6 compared to 61.4 for older children.

These findings support studies by Davidson and Smith (1990) who found that children aged 11 and younger were three times more likely to develop psychiatric symptoms than children who experienced trauma as teens, and by studies of young children experiencing violence which found young children displayed more psychological distress than older children (Groves, Zuckerman, Marans, & Cohen, 1993). In general, young children have less cognitive competence than older children in understanding stressors and traumas in their environment (Garbarino & Stott, 1989; Garbarino & Associates, 1992). Furthermore, older children are better able to use ideology as a protective factor and find refuge in action than younger children (Garbarino, Kostelny & Dubrow, 1991; Fraser, 1974).

Accumulation of Risk Factors and Gender

Boys were more vulnerable to multiple risks than girls. While girls who experienced three or more total risks had mean scores on the Total Problems scale of 60.4, boys who experienced the same number of risks had scores of 68.2—in the clinical range. Similarly, for family risks, boys with two or more risks had scores of 69.9

compared to 61.4 for girls. For *Intifada* risks, boys who experienced two or more risks had scores of 64.1 compared to scores of 60.4 for girls.

It is suggested that the accumulation of risk factors relating to violence in the family and political violence represent chronic violence for children. Thus, children who experienced only one risk factor were able to assimilate the stressful event into their world view. This is also supported by the finding that children who experienced a violent event more than 6 months ago had significantly fewer psychological and behavioral symptoms than children who experienced a violent event less than 6 months ago. Especially for children whose mothers engaged in a high amount of verbal reasoning with them, their symptoms were no higher than children experiencing no risks. However, when risks accumulate, the developmental toll on children is profound, as evidenced in the dramatically higher levels of symptoms in children.

Accumulation of Risk Factors and Maternal Mediation

Children whose mothers engaged in verbal reasoning with them had significantly fewer symptoms than children whose mothers did not engage in verbal reasoning. This was true for all numbers of risk factors (i.e., the 0-3 *Intifada* risks, the 0-2 or more family risks, and the 0-3 or more Total risks). Of interest, maternal reasoning was especially effective for children who experienced only one family risk or total risks. Children who experienced only one of these risks and maternal reasoning, displayed no higher symptomatology than children experiencing 0 risks, while children who experienced one risk and no maternal reasoning had significantly more symptoms. For example children who experienced 0 family risks and no verbal reasoning had a mean score on the Total Problems scale of 56.3. Children who experiened 0 family risk and verbal reasoning had a mean score of 52.9, while children who experiened one family risk and verbal reasoning had a mean score of 52.8. However, the mean score jumped dramatically to 60.2 for one

family risk when no verbal reasoning was present. Thus, one must examine both risk factors and protective factors in the child's social environment when assessing children's development and overall functioning.

This has attempted to begin to identify some of the risks in the child's exosystem of political violence, that, in combination with risks and protective factors at the microsystem level of the family, shape children's development. The variables examined in this study indicate the multiple levels of social influence and the complexity of the interactions on children's development. Additional research is needed to assess further the complex interactions of the multiple risks and protective factors in children's lives.

Future research in this area needs to be expanded to include individual characteristics of the child, as well as risk and protective factors at all levels of the child's social environment that interact to influence developmental outcomes. For example, the variables of ideology—both of the child and the family—and social support from the community would be important to examine as influencing both family and child functioning. It is hoped that through such research efforts a more comprehensive perspective of the risks and opportunities for child development will emerge.

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The final copies have been examined by the director of the dissertation committee and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the committee with reference to content and form.

The dissertation is, therefore, accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

April 16, 1993 — Date

James Garbarino — Director's Signature