

## Chapter 7

### Discussion

#### 7.1 Introduction

In this study the researcher investigated the long-term effects of war and occupation on Palestinian children. In this chapter, the findings of current study are discussed in light of the literature view, previous studies and the background of participants as shown below.

Firstly, the prevalence of chronic traumatic experiences, the type of traumatic events and their psychological impact on a large sample of school children living in the Gaza Strip during the second uprising (2000-2005) will be discussed. Next, the exposure to chronic traumatic events with regard to gender, residence (clashing or non clashing areas), and age of participants. Secondly, the types of chronic traumatic events, which will cover 34 traumatic events occurring during the period known as the second Intifada (2000-2006) and the traumatic events that most influence the development of PTSD will be discussed.

Thirdly, PTSD symptoms, such as the prevalence levels of PTSD symptoms and syndrome, the relationship between chronic traumatic events and PTSD and the impact of chronic trauma on children will be discussed.

Fourthly, factors which moderate PTSD symptoms amongst the participants (e.g., gender, age, type of trauma, place of residence (area of active conflict or non conflict), family size, monthly family income, the educational level of the parents, individual personality traits, psychosocial support) will be discussed.

The major findings of the current study were:

#### 7.2 Exposure to chronic traumatic event

*7.2.1 Exposure to traumatic events:* Every Palestinian child of the sample had been exposed to at least three traumatic events (chronic trauma) between 2000 and 2006.

*7.2.2 Exposure to traumatic events by gender:* Boys are more exposed to traumatic experiences than girls.

*7.2.3 Exposure to traumatic events by residence (clashing or non clashing areas):* Children from clashing areas are most exposed to traumatic events.

*7.2.4 Exposure to traumatic events by age:* There were no significant differences between age groups (10-12; 13-15; 16-18 years) with regards to traumatic experiences in the clashing areas.

### 7.3 Type of chronic traumatic events

*7.3.1 Type of traumatic events:* Children had been frequently exposed to all 34 traumatic events (e.g., humiliation, injury, arrest and beating). The Palestinian children in the Gaza Strip have been exposed to several traumatic events. These have been grouped into five types: Direct individual experiences (32.72%), Direct material damage (6.37%), Witnesses of indirect individual experiences (17.57%), Proximate (19.81%) and Distance (23.41%).

*7.3.2 The traumatic events that most influenced the development of PTSD:* The destruction, completely or partially, of the child's house; injury to the degree of losing consciousness; the killing of family members or someone in front of the child's eyes; witnessing shelling by occupying forces. All these strongly affected the development of PTSD symptoms amongst participants more than other types of the traumatic events.

### 7.4 PTSD symptoms

*7.4.1 The prevalence levels of PTSD among Palestinian children:* It was found that 41% of the children in the present study suffered from PTSD in clashing and non-clashing zones. Of these, 20% suffered from high acute levels of PTSD, 22% suffered from moderate levels of PTSD, and 58% suffered from low levels of PTSD. It was also found that 41% of children suffered from PTSD in clashing zones and 40% of children suffered from PTSD in non-clashing zones.

*The prevalence of PTSD syndrome or collections of symptoms of PTSD* consisted of five dimensions (syndromes) as shown below: Non syndrome symptoms applied to 36.1%, single syndrome applied to 15.1%, double syndromes applied to 10.2%, triple syndromes applied to 11.1%, four syndromes applied to 12.0%, some children have been exposed to all syndromes applied to 15.5%.

*7.4.2 The relationship between chronic traumatic events and PTSD:* Exposure to the traumatic experiences led to an increase in symptoms of PTSD.

*7.4.3 The impact of chronic childhood trauma:* The most prevalent types of PTSD were as follows: 25% of children suffered from cognitive symptoms; 22% suffered from emotional symptoms; 22% suffered from social behavioural disorders; 17% suffered from dysfunction academic performance, and 14% suffered from somatic symptoms.

## 7.5 Moderating factors

*7.5.1 The variables most likely to be associated with symptoms of PTSD among children in clashing areas (hot spots):* The results indicated that the variables which are related directly to the symptoms of PTSD were traumatic experiences (overall), personality traits (overall), gender, age, frequency of exposure to traumatic experience, school support, (personality traits, family support).

*7.5.2 Gender moderated PTSD symptoms:* Girls suffered significantly more frequently from PTSD symptoms than boys.

*7.5.3 Age moderated PTSD symptoms:* Middle aged group of children suffered from symptoms of PTSD more than old and young children.

*7.5.4 The types of traumatic events moderating PTSD symptoms:* Children who were exposed to traumatic events such as direct material damage, proximity, indirect individual experience, and direct individual experience developed high levels of PTSD. However factors such as distance from traumatic events produced non-significant on the development of PTSD.

*7.5.5 Place of residence moderating PTSD symptoms:* Children who lived with high exposure to traumatic events suffered significantly more often from PTSD symptoms than children who lived in non-clashing areas.

*7.5.6 Large family size affecting PTSD symptoms:* Whenever family size increased in terms of those who need support, like children or old people, the symptoms of PTSD proliferated.

*7.5.7 Monthly family income (high, moderate, low) moderating PTSD symptoms:* Children living in families with low incomes suffered more than those from families with higher incomes in the clashing zones.

*7.5.8 The educational level of the parents moderating PTSD symptoms:* Children whose parents had low or very low educational levels suffered more than others.

*7.5.9 Individual personality traits moderating PTSD symptoms:* The symptoms of PTSD and its dimensions increased whenever the level of negative personality traits increased such as hostility and aggression, dependency, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability, and negative world view.

*7.6 Psychosocial support moderating PTSD symptoms:* In this study whenever the level of spiritual-religious support, national pride and ideological commitment and family support rose, the symptoms of PTSD decreased.

*7.7 Network of psychosocial support or personality traits reducing symptoms of PTSD:* An increase in the network of psycho-social support (such as family, spiritual/religious and national pride) and positive personality traits both helped to reduce the symptoms of PTSD among the Palestinian children in the Gaza Strip. However, the personality traits were more significant than the network of psycho-social support.

## **7.2 Exposure to chronic traumatic events**

### ***7.2.1 Exposure to chronic trauma among Palestinian children***

Palestinian people have suffered badly from the repeated episodes of war and conflict which have occurred approximately every seven to ten years. Those people suffered and are still suffering from direct conditions (the effects of war) and indirect effects (family and community life and activities; food supplies, entertainment, etc). These people live under severe conditions with the sense that every seven to nine years there is a war or an Intifada (Uprising). The Gaza Strip is one of the most politically and socially unstable places in the world and has been for a considerable time (UNRWA, 2007). Furthermore, the number of Palestinian refugees increased from 1 million in 1950 to more than 7 million in 2007

(UNRWA,2007). Thus, most of the Palestinians in the Gaza Strip are refugees - a situation which increases their suffering.

Exposure to stress and recurring traumatic events in Palestine are part of the daily life of the Palestinian people. Traumatic events might come from natural disasters or human action, but the chronic traumatic events in Palestine have been transferred from generation to generation as a result of war, occupation and conflict since 1948. Although the Palestinian children are used to facing daily trauma, they are still exposed to sudden and unexpected events and continuous damage to their psychological stability and the social structures which support them (Qouta & El-Sarraj, 2004; Thabet & Vostanis, 2000).

The fact that all children in this study were exposed to at least three traumas during the second Intifada (2000-2006) indicates that children in Gaza are at serious risk of developing psychological problems such as PTSD. Chronic trauma means that traumatic events occur several times over an extended period and that these traumas are often multiple, severe, and recurring. These chronic traumatic experiences can lead to high levels of PTSD (Kinzie, 2001a, Kaysen *et al.*, 2003; Norris *et al.*, 2003), as will the sudden loss of an important care giver or other attachment figures.

In a previous study by Qouta and El-Sarraj (2004), it was found that 94.6% of the Palestinian children had witnessed funerals and 83.2% witnessed shootings. This high level of exposure to war can lead to an increase in PTSD, anxiety, depression and behavioural problems (Ventura, 1997). However, Israeli children from areas with high exposure to shelling reported more coping activities than children in non-shelled areas and children focusing on threat reported more psychological stress than children who focussed on avoidance (Solomon, 1994).

Constant exposure to the political conflict, hardship and violence can increase the symptoms of PTSD among the Palestinian children in the occupied West Bank and Gaza Strip. The extent and duration of the conflict and exposure to many traumatic events have had a greater effect on Palestinian children than a single traumatic event. The findings of this study, like those of Qouta and El-Sarraj (2004), suggest that being exposed to on-going traumatic experiences and the continuation of stress for such long periods severely damages the child's psyche and increases the rate of PTSD.

The Palestinian children were exposed to daily trauma which resulted in mental and social disorders that not only damaged them psychologically, but made them actually lose their childhood. Several studies revealed that children or adolescents who have had to cope with traumatic events are more likely to develop mental health difficulties and symptoms of PTSD (e.g., Widom, 1999; Yule, 2001; Wayment, 2004). However, Son (1995) failed to show a significant relationship between the number of previous traumatic experiences and PTSD. The present study to some extent resolves this contradiction by noting the importance of individual personality factors in the child and the nature of the psych-social support.

#### *7.2.1.1 Specific effects on this sample*

Four specific factors were associated with the chronic trauma among Palestinian children: firstly, the long period of potential and actual exposure to traumatic events (five years); secondly, the high number of actual traumas experienced; thirdly, the type and nature of the traumas experienced; and finally, the resilience towards the trauma.

Children such as these, who are living in conditions of political violence and war, have been growing up too soon, becoming tough and responsible and losing the childhood joys of carefree play (Boothby *et al.*, 1992).

Many studies have found that a child or an adult who has been exposed to traumatic events for a long time is in danger of developing more PTSD symptoms or other psychological problems (e.g., Kaysen *et al.*, 2003; Qouta & El-Sarraj, 2004; Melhem *et al.*, 2004). For instance, children in Lebanon who were exposed to shelling, death, and forced displacement were 1.7 times more likely to manifest regression, depression, and aggression than those who were not (Chimienti, Nasr, Kalifeh, 1991). When the duration of trauma lasted more than one year, 73% of the children had PTSD symptoms compared to only 37% when the duration of trauma was less than one year (Wolfe *et al.*, 1994). Moreover, research suggests that individuals who experience chronic trauma have lower rates of recovery from PTSD (Famularo *et al.*, 1996; Green, 1985; Terr, 1991).

The cumulative effect of multiple traumas is especially present in the situation of war (Ispanovic-Radojkovic, 1993). Research indicated that earlier traumatic experiences and the

number of current experiences were related to the development of PTSD, with more exposure leading to an increase of symptoms (e.g., Smith *et al.*, 2001; Wayment, 2004; Yule, 2001). It has been shown that the impact of a traumatic event is likely to be greatest in the child or adolescent who previously has been the victim of child abuse or some other form of trauma, or who already had a mental health problem (Duncan *et al.*, 1996; Boney-McCoy & Finkelhor, 1995; Roth *et al.*, 1997). Moreover, children and adolescents living in a war zone who were exposed more frequently to war stressors exhibited high levels of PTSD symptoms and grief reactions (Smith *et al.*, 2001; Thabet & Vostanis, 2000; Papageorgiou *et al.*, 2000).

Several studies found that greater direct exposure to traumatic events has been associated with higher levels of PTSD (e.g. Ishii, 2003; Zvizdic & Butollo, 2001; Resick, 2001; Nelson-Goff & Schwerdtfeger, 2004). However, indirect exposure to trauma also negatively affected the children. For instance, a study of the Oklahoma City attack found that two years after the bombing, 16% of children and adolescents who lived approximately 100 miles from Oklahoma City. They were not directly exposed to the trauma or related to victims who had been killed or injured, reported significant PTSD symptoms (Pfefferbaum *et al.*, 2000). In general, research revealed that more time exposed to war trauma, political conflicts, civil war and domestic violence, can lead to higher levels of PTSD symptoms among children and adults (e.g., Kaysen *et al.*, 2003; Eth, 2001; Norris *et al.*, 2003).

Finally, there is some evidence from South Africa, the Philippines and Palestine which shows that active engagement in or ideological commitment to political struggle can increase resilience (e.g., Dawes & De Villiers, 1987; Kostelny & Garbarino, 1994; Punamaki, 1996). In other studies of adolescents living through and participating in the Intifada in the Gaza Strip, it was found that there is a complex interaction between exposure to traumatic events, active participation, and beliefs (Punamaki & Suleiman, 1990; Qouta, Punamaki, & El-Sarraj, 1995).

Some children who find ideological commitment and who go out and throw stones at the occupying forces, find release for pent-up resentment and therefore suffer less from PTSD symptoms. Their behaviour becomes a therapeutic 'death' game (Abu-Hein, 1993). It is very dangerous, but gives temporary psychological support. Later in their lives they may feel the trauma and the loss of childhood. However, the majority of war victims in general suffer

immediately from psychiatric disorders when exposed to severe traumatic events such as war and combat experiences, torture, starvation (De Jong, 2002). Most Palestinian children who were exposed to chronic traumatic events showed a high risk of suffering from PTSD in the Gaza Strip (e.g., Qouta & El-Sarraj, 2004; Thabet, Abed & Vostanis, 2004; Kanninen *et al.*, 2003).

### **7.2.2 Trauma exposure and gender**

The present study found that male Palestinian children have a greater degree of exposure to traumatic experiences than females. This may be due to girls in most eastern societies not being allowed to go outside their homes and fight as boys do. Even in the west, an , in African Americans aged 7–18 years, males were more likely than females to be victims of, and witnesses to, violent acts (Fitzpatrick & Boldizar, 1993).

Other studies agree with the above results in the current research which found males to be more vulnerable than females in United States (Breslau *et al.*, 1998; Kessler *et al.*, 1995), and Israel (Amir & Sol, 1999). Brosky and Lally (2004) found a high prevalence of trauma in both genders. However, females had significantly higher rates 75% than those reported in males 51%. Scott (1998) found that boys experienced far more victimization and witnessed more violence than girls. In addition, Fitzpatrick and Boldizar (1993) found girls to be less vulnerable to trauma.

My finding showed that although boys were more exposed to traumatic event, girls showed more symptoms. This may reflect boys perhaps being more protected by issues such as ideological commitment and national pride etc.

However, there is some disagreement in the literature with Kaminer *et al.*, (2000) indicating that girls appear to be more vulnerable to post-traumatic stress reactions than boys. A few studies have found girls to be equally as vulnerable as boys to nonsexual trauma such as physical assault and witnessing violence (Giaconia *et al.*, 1995; Lipschitz *et al.*, 1999), while others have found no gender differences (Servan-Schreiber *et al.*, 1998).

### ***7.2.3 Exposure to traumatic experience by residence (clashing or non clashing areas)***

The Gaza Strip is a very small area of land that stretches along the Mediterranean Sea, located in the south western part of Palestine. It covers 360 square km<sup>2</sup> with a population of 1.4 million (PCBS, 2006), of which 74% are refugees (UNRWA, 2005). Before the Israeli withdrawal in September 2005, 40% of the land (144 km<sup>2</sup>) was occupied by Israeli settlers. The Gaza Strip has the highest population density in the world at 6,018 people per 1km<sup>2</sup>. There are eight crowded refugee camps, four cities and some villages. Over the last 60 years the Palestinian people in the Gaza Strip have suffered a variety of traumatic events, increasingly so in recent years. When armistice lines were drawn up between Israeli and Arab forces in 1949, the Gaza Strip became, along with the West Bank of the River Jordan, one of the two parts of Palestine left in Arab hands. Originally administered by Egypt, Gaza Strip was occupied by the Israeli army after the 1967 war (Qouta and El-Sarraj, 2002).

The current research found that children from clashing areas are most exposed to traumatic events. It is obvious that the people who live close to war and the continuing invasion by the occupation forces will be exposed to traumatic events more than those who live further away from the clashing areas such as occupation border areas, check points or settlements.

Thus, the current results agreed with Punamaki (1989) found that the more Palestinian children and adolescents were exposed to daily traumatic events, the more they suffered from psychological problems.

### ***7.2.4 Age effects***

There were no significant differences between age groups (10-12; 13-15; 16-18 years) with regard to traumatic experiences in the clashing areas, but each group reacted differently.

The age of the person being studied appears to be associated with the level of trauma symptoms. Age was the strongest risk factor for predicting global distress following trauma and also the symptoms of PTSD varied widely depending on the age of the child (e.g., Resick, 2001, Ahmad *et al.*, 2000; Johnson, 1998). In addition, some young people were more vulnerable to trauma than others, for reasons scientists do not yet fully understand. As noted before, it has been shown that the impact of a traumatic event is likely to be greatest in the child or adolescent who previously has been the victim of child abuse or some other form of

trauma, or who already had a mental health problem (Duncan *et al.*, 1996; Boney-McCoy *et al.*, 1995; Roth *et al.*, 1997).

Recent physiological research reveals the complexity of neurobiological responses to childhood stress and trauma (Teicher *et al.*, 2003; Stien & Kendall, 2006). Thus, children or adults can be affected badly by big or small traumatic events, particularly, if they have experienced many small traumatic events. The cumulative effects of trauma on the developing brain are likely to be profound and long lasting, especially, in those with a genetically encoded vulnerability. Trauma, both big and small, can significantly compromise functioning and cause several psychiatric and psychological disorders and problems (Wheeler, 2007).

There is general agreement that the death of a parent of school-age children is a very stressful experience (Garmezy, 1987). In addition, children are often exposed to other risks associated with war-like situations, often more so than adults. For example, 75% of the injuries from landmines in the rural areas of Somalia were sustained by children between the ages of five and 15 years old (ICRC, 1994). In the current study, the results showed that there are no significant differences with regard to traumatic experiences in the clashing areas between different age groups of Palestinian children aged between 10 and 18 years. It may be that since the overcrowded population living in this small area collectively experience these traumatic events, the exposure to traumatic events will be similar although responses may be different. However, the previous studies showed that some children are more vulnerable to traumatic events than others. The different reactions of the age groups will be described later.

### **7.3 Types of chronic traumatic events**

#### **7.3.1 Types of traumatic events**

Children in this study had been exposed to all 34 traumatic events described in the Checklist of Traumatic Events (Appendix 3). They had experienced an extraordinarily high level of war exposure (e.g. humiliation, injury, arrest, and beating). The present study revealed that the most prevalent types of trauma exposure for Palestinian children during the second Intifada were humiliation by the occupying forces (99%); hearing the sound of explosions/bombs (97%); witnessing a martyr's funeral (85%); witnessing shelling by tanks, artillery, or military

planes (84%); friends, neighbours, or relatives being killed (79%); the occupying forces using their house, block, or zone as a cordon (66%); and 65% had witnessed people being shelled and bombed. Similarly, in an earlier study Qouta and El-Sarraj (2004) found that the most prevalent types of trauma exposure for Palestinian children in the Gaza Strip were witnessing funerals (94.6%), witnessing shooting (83.2%), seeing injured or dead who were not relatives (66.9%), and a family member being injured or killed (61%). Furthermore, studies conducted in the Gaza Strip found that children living in war zones are at high risk of suffering from PTSD and depressive disorders (Thabet, Abed & Vostanis, 2004; Qouta *et al.*, 1997). After the Gulf War, it was found that the exposure to dead bodies and body parts were the best predictor of PTSD intrusion symptoms. This event corresponds to traumatic experiences for children in Gaza. The exposure is intense because of the very strong sensory impressions that go with it (e.g. smelling burning bodies, hearing screams for help). This may well result in more severe re-experiencing symptoms (Dyregrov and Raudalen, 1992) either soon or much later. This form of exposure to traumatic events may also lead to chronic effects of severe trauma (Ishii, 2003) and to severe physical and psychological damage (Geltman & Stover, 1997).

The Palestinian children in the Gaza Strip have been exposed to several traumatic events which can be grouped into five types as shown below:

*A) Direct individual experience*

The first group of traumatic events is the direct individual experience which means a child might be exposed to trauma directly such as inhaling tear gas, injured through shelling by tanks, artillery, or military planes, or shot with live ammunition or a rubber bullet etc. This group represent the highest exposure to trauma at 32%.

*B) Direct material damage*

The second group of traumatic events is direct material damage which means a child's house might be destroyed completely or partially and the land belonging to the child's family or neighbour. This group represent the lowest exposure to trauma at 6.37%.

*C) Indirect individual experience*

The third group of traumatic events is the indirect individual experience which means a child might be exposed to trauma indirectly such as hearing and seeing a destructive event itself,

e.g. witnessing the destruction of someone's house or witnessing a martyr's funeral or the occupying forces not allowing an ambulance to reach a hospital or injured person. This group represent 17.57%.

D) *Proximate experience*

The fourth group of traumatic events is the proximate experience which means a child is exposed to trauma on an intimate level such as one of a child's close family members being killed or injured, sometimes killed in front of a child's eyes. Proximate experience also includes exposure to humiliation or the injury and killing of any people close to the child. This group represent 19.81%.

E) *Distant experience*

The fifth group of traumatic events is the distant experience which means a child might be indirectly exposed to trauma, such as witnessing people exposed to traumatic events. This group represent 23.41%.

### **7.3.2 *The traumatic events that most influenced the development of PTSD***

Several studies found that intense exposure to traumatic events has been associated with a greater level of PTSD (e.g., Ishii, 2003; Resick, 2001; Ward *et al.*, 2001; Zvizdic & Butollo, 2001; Nelson-Goff & Schwerdtfeger, 2004). They suggest there is a greater likelihood of PTSD if the child directly experiences the trauma rather than witnessing the event (Macksoud & Aber 1996). Vila *et al.*, (1999) tested 26 young hostages who had been taken hostage in their school 18 months earlier. Standardized clinical interviews and self-administered questionnaires were used. They were compared with 21 children from the same school who had not been taken hostage (indirect exposure). They found that symptoms of acute stress were observed in 25 (96%) of the children who were directly involved in the traumatic event more than children who were indirectly exposed to the trauma.

In the current study, the traumatic experiences that most influenced the development of PTSD symptoms on Palestinian children were found to be as follows:

a) The complete or partial destruction of the family house, b) Injury to the degree of losing consciousness, c) The killing of family members or someone close to them in front of their

eyes, and d) Witnessing shelling by occupying forces.

These traumatic events were more powerful and sever than the rest of the checklist of traumatic events which included the direct traumatic event such as the complete or partial destruction of the family house; injury to the degree of losing consciousness; the killing of family members or someone close in front of their eyes and indirect traumatic event such as witnessing shelling by occupying forces. Generally, the findings agree with the previous studies that exposure to traumatic events is more powerful than witnessing them.

Nader *et al.*, (1990) found that guilt and grief reactions were higher among children that were further removed from a school sniper shooting (e.g., not on the playground but who knew the victims) than for those children directly exposed to the event.

However, the recent findings in the current study also revealed that the witnessing of certain indirect traumatic events, such as the witnessing of shelling by occupying forces, is detrimental to a similar degree as direct exposure to traumatic events. It might be because of the Palestinian children are witnessing the shelling constantly. Therefore, this type of trauma has a similar effect to the other three traumatic events.

When families witness the destruction of Palestinian homes by occupying soldiers, for example, the psychological effects can be serious and the loss of the home can be a traumatic experience not only as material loss but also as psychological deprivation. A home signifies shelter and the heart of family life. It contains memories of joy and pain as well as attachment to the family's belongings. One's home is associated with feelings of security and consolation (Qouta & El-Sarraj, 2004).

Ishii (2003) found that Cambodian holocaust survivors were suffering from the chronic effects of severe trauma. Qouta *et al.*, (1997) showed that adults who were exposed to house demolition in Palestine showed a higher level of anxiety, depression, and paranoiac symptoms than the witness and control groups with regard to the type of trauma. In a cross-sectional survey, Goldstein *et al.* (1997) found that 364 internally displaced 6 to 12 year old Bosnian children with greater symptoms had witnessed death, injury, or torture. Also, Geltman & Stover (1997) found that children who were internally displaced or living in refugee camps in Zaire as a result of the genocide, suffered trauma which led to severe physical and

psychological damage. These studies agreed with the current findings among the Palestinians children.

Subsequently, if a child has witnessed destruction, mutilation, or death, if the child's life has been in serious danger, or if the child has suffered injuries, that child is at a greater risk of long-term psychological harm. Elementary school-aged children who had lost a family member or had a family member injured experienced more post-traumatic stress symptoms than those who merely knew someone injured or killed in the blast (Gurwitch *et al.*, 1998). These studies agreed with the current results that severe traumatic events which the Palestinian children exposed to were the most influence to lead to symptoms of PTSD.

Several studies have found that great exposure to traumatic events has been associated with greater levels of PTSD (e.g., Ishii, 2003; Resick, 2001; Ward *et al.*, 2001; Nelson-Goff & Schwerdtfeger, 2004). Also, Qouta *et al.*, (1997) showed that adults who were exposed to house demolition in Palestine showed a higher level of anxiety, depression, and paranoid symptoms.

Thus, if a child experienced serious danger, or witnessed destruction, mutilation, or death or suffered injuries, that child was at a greater risk of long-term psychological harm (Lee *et al.*, 2002). Moreover, even if the child does not seem to be badly affected immediately, he or she could well be affected badly later. For example, two years after the bombing, 16% of children and adolescents who lived approximately 100 miles from Oklahoma City reported significant PTSD symptoms related to the event (Pfefferbaum *et al.*, 2000). This is an important indicator that the rest of Palestinians children who exposed to traumatic event, they did not show up symptoms of PTSD. They are still under risk that the symptoms of PTSD might come up later because of the Palestinian children faced chronic war trauma for a long time for their lives and their father or grandfathers.

## 7.4 PTSD symptoms

### 7.4.1 *The prevalence levels and syndromes of PTSD among Palestinian children*

Children living in war and conflict areas inevitably show very high levels of PTSD symptoms, for example in Cambodia, South Africa, Croatia, Bosnia, Iraq, Iran, North Ireland, Lebanon, Palestine (e.g., Husain, 2005; Gannage, 2003, Mohlen *et al.*, 2005). It is also clear, however, that the PTSD rates vary from 15% to 50% (De Jong, 2002) among these victims of war and persecution. The rate of Palestinian children who suffer from PTSD is 41% according to the current results which means that these children are at very high risk. The current result agrees with epidemiological studies of chronicity which suggested that when children were exposed to chronic traumatic experiences for more than a year, 33-47% suffered from PTSD symptoms (Davidson *et al.*, 1991 & Helzer *et al.*, 1987).

As mentioned above, the present study found that 41% of the children suffered from PTSD. Of these, 20% suffered from high acute levels of PTSD, 22% suffered from moderate levels of PTSD, and 58% suffered from low levels of PTSD. The prevalence of PTSD syndrome or collections of symptoms of PTSD consisted of five dimensions (syndromes) as shown below: non syndrome symptoms applied to 36.1%, single syndrome applied to 15.1%, double syndromes applied to 10.2%, triple syndromes applied to 11.1%, four syndromes applied to 12.0%, all syndromes applied to 15.5%.

In addition, it was found that 41% of children suffered from PTSD in clashing zones. Meanwhile, 40% of children were found to be suffering from PTSD in non-clashing zones. All Palestinians in Gaza are likely to be exposed to similar traumatic experiences and harsh conditions, because most of them live in a very small area which is considered to be the most over-crowded population area in the world. The clashing areas represent the first hot line and the non-clashing areas represent the second hot line, but they have both been exposed to trauma. The clashing zones seem to be more at more obvious risk than the non-clashing zones. However, the people in non-clashing zones seem to suffer from anxiety and worry over what *might* happen. In this sense they have as many psychological problems as those in clashing zones.

Prevalence levels: The current findings of prevalence of PTSD symptoms among children in the Gaza Strip corresponds with rates of PTSD prevalence (14-50%) which have been found in various other studies (e.g. Summerfield, 1997). Incidentally, studies of chronicity found that 33-47% of PTSD patients reported that they experienced symptoms more than a year after the traumatic event (Davidson *et al.*, 1991 & Helzer *et al.*, 1987).

When Qouta *et al.* (2003) examined 121 Palestinian children (6-16 years) living in the area of bombardment in Gaza Strip, the results showed that 57% of children suffered from PTSD. Of these, 54% of the children suffered from severe PTSD, 33.5% from moderate PTSD and 11% from mild and doubtful levels of PTSD. The current study, conducted in March 2006, found 41% of children suffered from PTSD, that is, 16% less than Qouta found in 2003. There are three possible reasons for this.

**a)** In the three years, these children have possibly learned more about how to cope with the daily traumatic events. Some studies suggest that although high rates of anxiety and PTSD are found in the first weeks after the trauma, these rates start to decrease in the fifth week after the initial event (Rosenbaum and Ronen, 1992).

**b)** The current study occurred after the withdrawal of the occupying forces from Gaza Strip, which might have helped these children to feel more freedom in spite of the shelling of the Gaza Strip from the air and sea. The civilian population at least did not see the occupying soldiers as much as before. This reason is supported by findings which suggest a dramatic difference as soon as war or conflict stops. During the six to ten months after the end of the first Intifada (1987-1993), PTSD decreased from 41% to 10% (Thabet & Vostanis, 2000; Qouta, Punamaki & El-Sarraj, 1995b; Qouta *et al.*, 2001). Similarly, a U.S. study of Cambodian adolescents in 1986 showed a 50% prevalence rate of PTSD (Kinzie *et al.*, 1986), but one in 1993 noted a fall to 21% of PTSD symptoms (Sack *et al.*, 1994). In addition, in war time, resilience can help some people to overcome the hardships of life. For example, children who had been refugees for longer than 18 months showed less prevalence of PTSD than children who had recently become refugees (Servan-Schreiber *et al.*, 1998).

**c)** The size of sample in both of these studies is different.

The Palestinian Central Bureau of Statistics indicates that the Palestinian children under the age of 18 represent a ratio of 53.3% of the total Palestinian population in the Gaza Strip and

West Bank (PCBS, 2006). Consequently, the number of Palestinian children in the Gaza Strip is 742,200, which leads us to conclude that approximately 305,195 Palestinian children might be suffering from PTSD symptoms. Other studies conducted among children in the Gaza Strip concur with this finding and raise concern about the ongoing nature of the suffering of Palestinian children (Baker, 1990; Punamaki, 1996; Hawajri, 2003).

*Syndromes of PTSD:* All syndromes, or collections of symptoms, of PTSD applied to 15.5% of the population of 742,200 children. This means that 115,041 Palestinian children might be suffering from all the syndromes of PTSD. A certain number suffered from all syndromes of PTSD not just because they were exposed to sudden traumatic events, but also due to other difficult circumstances such as poverty, the insecurity of refugees and the ongoing hazards of long term conflict which increase the levels of anxiety and fear in the children's lives.

The majority of Palestinian children in this study were born as refugees.

The rest of the Palestinian children did not show symptoms of PTSD, but this does not mean that they are safe from developing PTSD, because there are some studies which found that people who were exposed to war trauma could suffer later on from PTSD symptoms. The symptoms of PTSD can appear much later after the first exposure to traumatic events, for example in Iraq after five years (Ahmed *et al.*, 2000); in Kuwait after five years and seven months (Abdel-Khalek, 1997) and after four years among Cambodian adolescents in the USA (Kinzie *et al.*, 1986).

Over ten million children have been traumatized by war around the world (United Nations, 2000). Research from former Yugoslavia and from the Middle East found that children who experienced high levels of exposure to war exhibited higher levels of PTSD (Nader *et al.*, 1993). Considering the amount of traumatized children in the Gaza Strip, there are worrying indications that for the vast majority of Palestinian children war has become normal life. They have to adjust to not only losing security and carefree enjoyment, but also learn to compete for subsistence living in overcrowded camps. As refugees they have no settled sense of home. When a child listens to a parent or grandparent, he hears similar stories of uprooting, poverty, and violence that he sees around him today. Daily traumas form the experience of each generation. S/he has no hope that the circle of suffering will end. Thus, most of the Palestinian

children and their families are traumatised from long term exposure to traumatic events. In this sense, a child's life as well as his security and liberty have been taken away (Article 3, Universal Declaration of Human Rights, 1948).

#### ***7.4.2 The relationship between chronic traumatic events and PTSD***

The current research found that exposure to chronic traumatic experiences increases symptoms of PTSD.

Since the Second Intifada 2000, the constant pain and the cycle of suffering have become overwhelming for Palestinians, particularly in the Gaza Strip. This small area experiences the worst conditions inside or outside Palestine. The current studies found that exposure of the Palestinian children to chronic trauma increased the symptoms of PTSD. It is also clear that, as many studies have found, a child or an adult who has been exposed to traumatic events for a long period of time is in danger of developing PTSD symptoms or psychological problems of greater severity (e.g., Norris *et al* , 2003; Kaysen *et al.*, 2003; Qouta & El-Sarraj, 2004; Melhem *et al.*, 2004). For instance, children in Lebanon who were exposed to shelling, death, and forced displacement were 1.7 times more likely to manifest regression, depression, and aggression than those who were not (Chimienti, Nasr, Kalifeh, 1991). When the duration of trauma lasted more than one year, 73% of the children had PTSD symptoms compared to only 37%, when the duration of trauma was less than one year (Wolfe *et al.*, 1994). Moreover, research suggests that individuals who experience chronic trauma have lower rates of recovery from PTSD (Famularo *et al.*, 1996; Green, 1985; Terr, 1991).

In addition, Qouta and Punamaki (1997) examined 108 Palestinian boys and girls of 11 to 12 years of age. The results of their study showed that exposure to traumatic events increased psychological adjustment problems. However, there is some evidence from South Africa, the Philippines and Palestine that shows that active engagement in or ideological commitment to political struggle can increase resilience (e.g., Kostelny & Garbarino, 1994; Protacio-Marcelino, 1989; Punamaki, 1996). In other studies of adolescents living through and participating in the Intifada in the Gaza Strip, it was found that there is a complex interaction between exposure to traumatic events, active participation, and beliefs and political ideology (Punamaki & Suleiman, 1990; Qouta, Punamaki, & El-Sarraj, 1995). It may be an adaptive

behaviour in a radicalised group who can provide the best means of protection in a highly dangerous area.

#### ***7.4.3 The impact of exposure to chronic trauma on children (dimensions of PTSD)***

The present study found that nearly 41% of Palestinian children who had been exposed to chronic traumatic experiences during the last five years of the second Intifada, suffered from PTSD symptoms. This level of PTSD symptomatology among children in the Gaza Strip corresponds with rates of PTSD prevalence (14-50%) which has been found in various other studies (e.g. Summerfield, 1997). Incidentally, studies of chronicity found that 33-47% of PTSD patients reported that they experienced symptoms more than a year after the traumatic event (Davidson *et al.* 1991; Helzer *et al.*, 1987).

Trauma is an unavoidable part of the human experience and affects all aspects of the person. Psychological trauma has been posited to underlie or contribute to a wide range of psychiatric disorders or medical problems. Also, trauma can disconnect the person physically, emotionally, spiritually, cognitively, interpersonally, and socially (Hennessey *et al.* 2004; Wheeler, 2007).

In general, many children and adolescents who are exposed to traumatic events, particularly war trauma, can be affected in several ways: first, physically (e.g., stomach pains, breathing problems, headaches) (Newman, 2002; Resick, 2001; APA,1994), second, psychologically (e.g., low sense of self-esteem, anxiety or depressive symptoms, nightmares, regression) (Nader, 2001; Chimienti *et al.* 1991; Punamaki, 1997), third, socially (e.g., aggressive behaviour, social withdrawal, adjustment difficulties, poorer school performance, social disruption) (Palinkas *et al.*,2004; Rummens & Seat, 2004; McNally, 2003) and finally, educationally (e.g. low scores in academic performance, learning problems, academic difficulties and disruptive behaviour, bullying, a great reluctance to talk, weakness of concentration, lack of school adjustment, forgetfulness, truancy from school) (Hutchison, 2005; Pasagic, 2000; Yule & Gold, 1997).

The Palestinian Central Bureau of Statistics indicates that the Palestinian children under the age of 18 represent a ratio of 53.3% of the total Palestinian population in the Gaza Strip and

West Bank (PCBS, 2006). It is a very high percentage which provides a clear indication of what the expected behaviour will be for a large number of traumatised children growing up after being exposed to numerous traumatic events and difficult living situations.

Consequently, 305,195 Palestinian children in the Gaza Strip might be suffering from PTSD symptoms. Other studies which had been conducted among children in the Gaza Strip concur with this finding and raise concerns about the ongoing suffering of Palestinian children (Baker, 1990; Punamaki, 1996; Hawajri, 2003). Another study found that Palestinian children in the Gaza Strip who were exposed to traumatic events had educational problems (Qouta, Punamaki & El-Sarraj, 1997). Moreover, some studies found that Palestinian children in the Gaza Strip who were exposed to traumatic events showed somatoform disorders (Baker, 1990; Kanninen *et al.*, 2003).

This research found that the most prevalent types of PTSD were:

*a) Cognitive symptoms*, from which 25% of children (approximately 76,298) suffered (e.g., a child might take a long time to get to sleep, or cannot stop thinking about the trauma he was exposed to, or feels everything around him is not safe).

Cuffe *et al.*, (1998) and Terr (1991) revealed that the cognitive effects of trauma represent some of the most widespread symptoms in children exposed to trauma. In children, cognitive changes involve recurrent and intrusive recollections. The trauma group reported more dreams than the comparison group and, within the trauma group, children who were repeatedly exposed to traumatic events recalled more dreams than those exposed to fewer traumas (Punamaki, 1997). The results from the Gaza children confirm earlier research showing that increased dream recall accompanied the ongoing and acute trauma (Brown & Donderi, 1986; Cartwright & Lloyd, 1994).

*b) Emotional symptoms*, from which 22% (approximately 67,143) suffered (e.g, the child feeling alone, suffering from nightmares, easily getting tense and nervous, feeling sad and fearful, bedwetting);

Studies have shown many different psychological outcomes from traumatic experiences on children and adolescents, such as a low sense of self-efficacy and self-esteem (Worden, 1996; Saigh *et al.* ,1995), anxiety or depressive symptoms (Chimienti *et al.* 1991), fear (Foa *et al.*,

1999); horror, anger, sadness, humiliation, and guilt (Foa *et al.*, 1999); losing childhood (Boothby, Upton, & Sultan, 1992), behavioural and emotional difficulties (Giaconia *et al.*,1995), more dreams (Punamaki, 1997), psychological disturbances (Baker, 1990; Jensen, 1994; Garbarino & Kostelny, 1993; Moro *et al.*,1998), depression (Clarke *et al.*, 1993), cognitive distortions or lapses in memory (McLeer *et al.*,1998; behavioural disturbances (Vila *et al.*, 1999), regression (Nader, 2001).

In addition, several studies found that Palestinian children in the Gaza Strip who were exposed to traumatic events showed psychological problems (e.g., fear, withdrawal behaviour, difficulties sleeping, nightmares, nail biting, depression, bed-wetting, speech difficulties and anxiety) which range from 8.3% to 66.9% of PTSD symptoms (e.g., Qouta, 2000; Husain *et al.*, 1998; Thabet, Abed, & Vostanis, 2002).

*c) Social behavioural disorders*, from which 22% (approximately 67,143) suffered (e.g., aggressive and rude behaviour, rejecting a teacher's or parent's authority, having difficulty enjoying games and hobbies).

In this current study found that 22% of Palestinian children in this study suffered from social behavioural disorders associated with PTSD. If generalized to the whole population, it can be estimated that some 67,143 children might be affected in this way. Previously, many studies found psychosocial effects on traumatized children and adolescents, such as problems within the home or school environment (Thabet & Vostanis, 2000), adjustment difficulties (Rummens & Seat, 2004), increased cigarette use, and poorer school performance (Lipschitz *et al.*, 2000; Schwab-Stone *et al.*, 1999; Glodich, 1998; Acosta,2000), social disruption (Palinkas *et al.*,2004), behavioural disorders (Glodich, 1998), poorer memory (Moradi *et al.*, 2000; Acosta,2000; McNally, 2003), extreme anxiety and fear (Moradi *et al.*, 2000), social disruption psychological pain and disturbance (Eldeep,1992; Herman, 1992; Green *et al.*, 1991), constant adaptation to sudden, rapid changes in the social and psychological environment leading to greater expressions of fear of the future, nervous, regressive, aggressive, and depressive behaviour reactions (Chimienti *et al.*,1989).

*d)Dysfunction of academic performance*, from which 17% (approximately 51,883) suffered (e.g., difficulty in concentrating on study, increasingly bad academic performance, difficulties

in paying attention during school lessons, disruptive behaviour at school).

The current study found that 17% of Palestinian children in this study suffered from academic disorders as a result of PTSD, which led to the disturbance of functional behaviour in general. This finding applied to approximately 51,883 children. Many studies have shown the negative effects of traumatic experiences on the academic performance of children and adolescents. These include learning problems (Rossman, 1998), decline in school performance (Hutchison, 2005), decline in academic performance (Saigh, Mroueh & Bremmer, 1997; Pasagic, 2000), academic difficulties and aggressive behaviour (Worden, 1996) school staff under pressure (Yule & Gold, 1997). Also, it was reported that Bosnian adolescents affected by the war had problems which led to increasing school dropout rates, poor academic performance, lack of preparation for future professional and family life, alcohol and drug abuse, and lack of confidence in social institutions (Pasagic, 2000).

*e) Somatic symptoms*, from which 14% (approximately 42,728) suffered (e.g., headaches, stomach-ache, hypochondriasis, somatization).

The present study found that 14% of Palestinian children suffered from somatic symptoms, which led to disturbance in their academic and social life. This applied to approximately 42,728 children. Many studies have found that physical health problems in childhood and adolescence are related to traumatic experiences (e.g., somatization symptoms, sleep disturbance, headaches, stomach-aches, dizziness, breathing difficulties, stomach upsets, and other physical ailments) (e.g., Newman, 2002; Montgomery & Foldspang, 2001; APA, 1994; Wayment, 2004; McCarroll *et al.*, 2002).

Finally, it is important to remember that the majority of Palestinian participants in this study were born as refugees. Many earlier studies found that the experiences of refugees often led to a high risk of developing types of PTSD (e.g., Mollica *et al.*, 2001; Ahmad *et al.*, 2000; Papageorgiou *et al.* 2000; Smith *et al.*, 2001; De Jong *et al.*, 2001). In addition, most of the studies that were conducted in the Gaza Strip or West Bank found that Palestinian children living in war zones are at high risk of suffering from PTSD, somatic disorders, and psychosocial problems (e.g., Qouta & El-Sarraj, 2004; Kanninen *et al.*, 2003; Thabet, Abed & Vostanis, 2004). Moreover, it is clear that exposure to traumatic events not only causes PTSD, but also a number of other psychological disorders (Kinzie *et al.*, 1986).

#### ***7.4.3.1 The impact of traumatized children on their families***

Parents and family members also might be affected badly from exposure to traumatic events. They may suffer from symptoms of PTSD, for example, and as a result they may have difficulties interacting with their children, or may become less sensitive, less tolerant, and less able to feel and express love for their children. They may also be less able to maintain normal rules and boundaries for their children. Sometimes, they become overprotective, irritable or violent (Field, 1995; Cairns, 1996; Kalantari *et al.*, 1993). These results agreed with the current study which found that when the Palestinian children were traumatized and suffered from symptoms of PTSD, not only they suffered from these symptoms, but so did their parents and other family members which led to much disturbance at home.

PTSD badly affects children and others close to them such as their parents and care-givers (Ahmad *et al.*, 2000; Dawes *et al.*, 1989, 1990; Smith *et al.*, 2001). However, children showed higher levels of PTSD than their mothers (Soysa, 2002). Researchers (e.g. Garbarino and Kostelny, 1993) suggest that experiences related to political violence and war might constitute a serious risk for the well-functioning family. Parent-child attachment is considered important in providing a protective shield for children's psychological well-being in dangerous conditions (Freud & Burlingham, 1943; Garbarino, Kostelny & Dubrow, 1991). However, parents are often unable to protect their children from seeing destruction, violence, and abuse. As a result the protective shield that is essential for children's mental health is often compromised when families are faced with the shelling and demolition of their homes (Qouta & El-Sarraj, 2004). In other words, war and political conflict have the potential to disrupt some of the basic parental functions, such as protecting children and enhancing trust in security and human virtues. Not surprisingly, Palestinian parents have expressed serious concerns about the future consequences of chronic childhood trauma on parent-child bonds. Furthermore, some Palestinian parents also believe that children who threw stones – 'children of the stones' – and fought against the occupation army are also likely to challenge other authority figures such as their parents. Research confirmed that traumatic experiences can affect children's relationships with their parents. For example, traumatized children might start to perceive their parents as more disciplining and rejecting (Qouta, 2000). The findings in the current study indicated that 22% (approximately 67,143) had a disruptive influence on their

families due to their aggressive and rude behaviour, rejecting a teacher's or parent's authority, and when having difficulty enjoying games and hobbies.

Consequently, it is of great importance that parents and teachers are aware of the normal responses of a child to a death in the family, as well as being able to detect the signs when a child has difficulties in coping with trauma or grief. It can be difficult to know how badly a child is affected by a frightening experience, especially younger children who cannot speak.

#### ***7.4.4 The variables which are most likely to be associated with symptoms of PTSD among children in clashing areas (hot spots)***

The results in the current study indicate that the main variables which are related directly to the symptoms of PTSD were as follow:

- a) Traumatic experiences (overall): the findings suggested that chronic traumatic experiences to which Palestinian children are exposed to lead them to develop symptoms of PTSD.
- b) Frequency exposure to traumatic experience: the frequency exposure to traumatic events contributes to the development of PTSD.
- c) Personality traits (overall), the symptoms of PTSD decreased whenever the level of positive personality traits increased.
- d) Gender: girls suffered significantly more frequently from PTSD symptoms than boys.
- e) Age: middle aged group of children suffered from symptoms of PTSD more than old and young children.
- f) School support: whenever the level of school support rose, the symptoms of PTSD decreased.
- g) Family support: whenever the level of family support rose, the symptoms of PTSD decreased.

People respond differently when they are faced by trauma which depends on their developmental stage, genetic vulnerability, gender, past experiences, pre-existing neural physiology, cognitive deficits, emotional maturity, hardiness, coping skills, relationships with others, socio-cultural factors, and a host of other factors (Antai-Otong, 2002).

It seems that the participants in this study showed different reactions to the traumatic experiences that they had experienced. Some of the children in another study, when exposed to traumatic events, suffered from symptoms at the beginning that later disappeared, while others initially responded to their displacement without problems, but developed symptoms of stress later on (De Jong, 2002). Several factors can positively or negatively influence the reaction of children and adolescents to traumatic events, such as a previous experience before the trauma, an ability to cope with stress and the kinds of help and support a person gets from family. Other factors include friends, professionals and teachers, poverty, intelligence and education, chronic traumatic experiences, family history of psychiatric disorder, levels of exposure to trauma, type of traumatic event, attitudes, and values, and media exposure (Dempsey, 2002; Punamaki, 1987; Williams, 1990, Smith *et al.*, 2001). However, not all individuals with high levels of trauma exposure develop PTSD. This is due to certain moderating factors (e.g., Grady, 1998; Dempsey, 2002; Joseph *et al.*, 1993). These have an influence on whether people develop PTSD symptoms immediately after the exposure to traumatic events or later, or whether responses occur without developing symptoms of PTSD (Punamaki, 1987; Williams, 1990).

Several factors might affect the reactions of children when they are exposed to traumatic events. For example, Kenyan adolescents showed much lower rates of PTSD compared to other PTSD sufferers in Africa, because of cultural factors (Seedat *et al.*, 2004). The cultural, ideological commitment, social support, and coping strategies might alleviate some of the symptoms of PTSD among the children in wartime, as shown in Sri Lanka and Nairobi (Seedat *et al.*, 2004; Soysa, 2002). In the current study, the most affective factors were reacted amongst the Palestinian children when they are faced some certain traumatic events such as: (chronic of exposure to traumatic, frequency exposure to traumatic experience, personality traits, gender, age, school support, family support).

## 7.5 Moderating factors

### 7.5.1 Gender moderated PTSD symptoms

The current study found that girls suffered more often from PTSD symptoms than boys. This finding corresponds with several other studies which suggested that females suffered from PTSD more than males (e.g., Brosky & Lally, 2004; Durakovic-Belko *et al.*, 2003; Soysa, 2002). In general, the females appear to be at greater risk than males for developing PTSD in the aftermath of exposure to traumatic events. Also, Tousignant *et al.* (1999) found that girls had a higher rate of psychopathology than boys in a sample of adolescents from refugee families which included 203 adolescents, aged 13 to 19 years, coming from 35 countries. Girls appear to be significantly more vulnerable to post-traumatic stress reactions than boys. Some studies report that rates of post-traumatic stress disorder are six times higher in girls (Kaminer *et al.*, 2000).

This is supported by research showing females with higher symptoms of PTSD than males in the Gaza Strip (Hawajri, 2003), Kuwait (Abdel-Khalek, 1997) and Croatia (Ajdukovic, 1998). Moreover, in one study somatoform pain disorders were found to coexist with PTSD only among females (Hubbard *et al.*, 1995). Several studies showed that females have higher rates of PTSD symptoms than males, particularly when they are exposed to war trauma (e.g., Brosky & Lally, 2004; Soysa, 2002; Abdelkhalek, 1997).

However, in other studies males and females showed similar levels of PTSD (Grover, 1999; Ajdukovic, 1998; Kukerovac *et al.*, 1994). A few studies have found girls to be equally as vulnerable as boys to nonsexual trauma such as physical assault and witnessing violence (Giaconia *et al.*, 1995; Lipschitz *et al.*, 1999).

Some others have found no gender differences in vulnerability to traumatic events and suggest that gender cannot be attributed to the differences in the development of PTSD symptoms (e.g., Seedat *et al.*, 2004; Marshall, 1999; Servan-Schreiber *et al.*, 1998). Whereas some studies found a higher rate of symptom development in girls, others reported an elevated rate in boys, and a third group of studies concluded that boys and girls develop PTSD with equal frequency (Pfefferbaum, 1997).

With regard to vulnerability to traumatic experiences, some studies found that boys are more vulnerable and more easily victimised than girls (Fitzpatrick and Boldizar, 1993; Scott, 1998). However, Kaminer *et al.*, (2000) indicated that girls appear to be more vulnerable to post-traumatic stress reactions than boys.

The current researcher inferred that Palestinian females suffered from PTSD more than males, possibly due to a lack of emotional debriefing among females in the Palestinian community compared to males. Moreover, the males could go to sport and social clubs in order to get some fun, entertainment, and knowledge, whereas girls tended to stay at home. During the Al-Aqsa Intifada, Palestinian males exhibited dysfunction academic performance significantly more often than females, often because the males had active roles in resisting the occupying forces and so felt less need than the females to pay attention to their studies. Also sex role stereotyping may make girls appear more vulnerable because they show more reactions emotionally instead of displacing them through activity as the boys do.

### **7.5.2 Age moderated PTSD symptoms**

The current study found that young teenagers (13 – 15 year olds) suffered from symptoms of PTSD more than older teenagers (16 – 18 yr. olds). Young teenagers naturally have to face many emotional, physical, physiological and cognitive changes in their development. This period of adolescence is a critical stage of development. Being exposed to the additional pressures of ongoing traumatic events seems to add greatly to their suffering and produces more symptoms of PTSD.

Several studies agreed with the above result which found age to be the strongest risk factor for predicting the symptoms of PTSD. The symptoms can vary widely depending on the age of the child (e.g., Resick, 2001, Ahmad *et al.*, 2000; Johnson, 1998). In addition, some youngsters are more vulnerable to trauma than others, for reasons scientists do not yet fully understand. In particular, children before the age of eleven are three times more likely to develop symptoms of PTSD than those who experienced traumatic events later in their lives (Goodman *et al.*, 2002, Garmezy, 1987).

In addition, many studies found that young children show higher levels of PTSD symptoms than adolescents (e.g., Dinan *et al.*, 2004; Qouta & El-Sarraj, 2004; Rummens & Seat, 2004). On the other hand, a few studies have found that the age is not related to the symptoms of PTSD (e.g., Goldstein *et al.*, 1997; Melhem *et al.*, 2004). For example, school children showed greater symptoms of PTSD than junior high pupils; and junior high pupils demonstrated more symptoms of PTSD than high school students as a response to war (Schwarzwald *et al.*, 1993; Klingman, 1992; Mintz, 1992). In addition, small children can often not express their feelings with words so they may express their distress through becoming ill or by behaving in an unusual way, while adolescents are more comfortable talking about traumatic events with peers than with adults (Turner, 2005; Goldman, 2000). There is general agreement that the death of a parent of school-age children is a very stressful experience (Garmezy, 1987). Differences in the manifestation of traumatic effects in boys and girls also become more visible during middle childhood (Mahony & Campell, 1998).

### ***7.5.3 Types of traumatic events moderating PTSD symptoms***

In the current study, children who were exposed to direct material damage, proximate, indirect individual experience, and direct individual experience were found most strongly to develop PTSD, except trauma of distance experience which has a weak impact in developing PTSD. For example, Palestinian children who were exposed to serious trauma such as witnessing the killing of family member, exposure to bombardment or witnessing the demolition of their homes, had a high level of psychological symptoms (e.g., Punamaki *et al.*, 2001; Thabet *et al.*, 2002; Qouta, Punamaki & El-Sarraj, 1997). This also applied to people who witnessed the attacks of September 11<sup>th</sup> 2001 in the USA (Lee *et al.*, 2002). Also, Grover (1999) found that the victims of violent events demonstrated greater PTSD levels than witnesses to violent events. It means the types of traumatic events can play a variable but effective role in determining how the person might respond. For example, the current study's findings showed that the child who was a victim of having his house demolished was affected to a greater degree than when he had witnessed other people's houses being demolished.

So, this study adds weight to the idea that the level of PTSD depends on the type of traumatic event experienced. For example, American adolescents who were exposed to traumatic events

had greater PTSD levels than others who were not exposed to the events. The actual victims of violent events also demonstrated greater PTSD levels than the bare witnesses of violent events (Grover, 1999). Furthermore, children and adolescents who had been exposed to traumatic events in Sarajevo, lost one or more of their family members and were deprived of basic needs had more symptoms of PTSD (Husain *et al.*, 1998).

Also, Thabet *et al.* (2002) found that children who were exposed to bombardment and home demolition showed greater increases in the levels of PTSD than the control group that had been exposed to other types of traumatic events. It is apparent that severe traumatic events have been detrimental to Palestinian children as well as to the children in the studies already mentioned.

It seems obvious that there is a greater likelihood of PTSD if the child directly experiences the trauma rather than just witnesses the event or suffers proximate exposure rather than distance exposure (Vila *et al.*, 1999; Macksoud & Aber 1996). In some cases, though, children who were exposed to indirect trauma (e.g., media reports or hearing about trauma) showed significantly more symptoms of PTSD than children who were exposed to direct trauma (Nader *et al.*, 1990; Pfefferbaum *et al.*, 2000). However, another study showed that media experiences produce anticipatory anxiety and cognitive expressions of distress in children, unlike the symptoms observed in children who were directly exposed to trauma during the Al-Aqsa Intifada (Thabet *et al.*, 2002).

#### **7.5.4 Place of residence moderating PTSD symptoms**

Children in this study who lived in clashing areas suffered significantly more often from PTSD symptoms and its dimensions than children who live in non-clashing areas.

The current researcher can confirm these results based on his own experiences of living in both areas. He argues that the children in the clashing areas live in harsher conditions than others in terms of the level of the main services given to them, the poor conditions of fields and parks, the few green areas, the inadequate amount of entertainment and leisure opportunities, like sports clubs, etc. The current results were consistent with Thabet and Vostanis (2004)'s findings that Palestinian children aged 9-15 years who lived in refugee

camp and also in war zones suffered from PTSD and depressive disorders more than children who lived in other areas which were less dangerous. Subsequently, it was found that Palestinian children who are living in refugee camps and in war zones for a long period of time are at high risk of suffering from PTSD and psychological problems (e.g., Thabet, Abed, & Vostanis, 2004, Qouta & El-Sarraj, 2004).

#### ***7.5.5 Extended family size moderating PTSD symptoms***

The current study found that whenever extended family size increases, the symptoms of PTSD will proliferate.

The current researcher argues that these results were significant because the Palestinian people have a high population density and an extremely difficult life. For example, thousands of Palestinian houses have been destroyed during the last six years in the Gaza strip. Additionally, they are suffering from tragic circumstances and they have a serious lack of the basic daily amenities (e.g. water, medicine, electricity, gas, etc). Thus, when the family size increases, it is probable that the parent cannot find enough time to give to the children and faces difficulties to support them properly. Also, it could be that in an extended family in a dangerous area children are more likely to know relatives who have been killed or injured.

The Gaza Strip is a small piece of land and the majority of the population are refugees. It has the highest population density in the world. There are 6,018 people for each one km<sup>2</sup>, which is an index of environmental adversity. There are eight crowded camps and four cities and some villages (PCBS, 2005). The influence of the extended family has two aspects in Gaza. The first is a positive feature. It is a reliable network of support, giving the family a hand to deal with the difficulties which constantly arise. Secondly, the extended family can be a burden if there are too many infirm, dependent relatives. Also, its size in this very crowded area and the poverty of the area could increase the problems between these families leading to violent conflicts. Parents might therefore be unable to provide appropriate education or guidance to their children because there is no time to sit with each child and look after them properly.

### **7.5.6 Monthly family income (high, moderate, low) moderating PTSD symptoms**

The current study found that children who belonged to families with low incomes suffered more than others. In Gaza, the poverty is very high indeed. Nearly 87% of the population live below the poverty line. This has increased the risk of psycho-social problems in children (UNRWA, 2007). The people who are stricken with poverty have no choice but to reside in the most dangerous areas as the wealthy are able to move to safer areas.

There are several factors which can lead to an increase in the symptoms of PTSD for children living in war, such as living as refugees, poverty, and siege (e.g., Sack *et al.*, 1994; Ventura, 1997). 90% of the Angolan adolescents from refugee groups suffer from PTSD compared to 82% of non-refugees. Also, Davidson *et al.* (1991) studied a community sample of 2985 people and found that those with PTSD were three times more likely to have experienced parental poverty.

The current study found that the low socio-economic status increases the risk of developing PTSD more than high socio-economic status of Palestinian children (Hawajri, 2003; Thabet *et al.*, 2002). Thus, when the families do not have enough income, they cannot maintain their children's needs and give them enough physical and social support. Therefore, in the recent report of the Palestinian Centre of Statistics (2007), it was found that half of Palestinian households suffer from low income (50% decreased) during the past four years. This low level of income only exacerbates the already intolerable situation further. Furthermore families cannot afford basic needs such as education and school students' needs. 48% of the population is unemployed and 87% live below the poverty line (PCBS,2007; B'Tselem,2007; UNRWA, 2007).

### **7.5.7 The educational level of the parents' moderating PTSD symptoms**

The current study found that children whose parents have low or very low educational levels suffered more than others. The parents' level of knowledge and awareness of culture make it easier for them to provide proper support and guidance for their children. Their style of dealing with their children, especially when the children are exposed to war and chronic traumatic experiences, is an important factor in preventing or mitigating PTSD. The influence of parents is important even before the trauma occurs, because the level of

education they give can equip the child with the strength to cope when difficulties arise. Positive family factors appeared to have a general protective effect and proved more influential than other risk or protective factors (Madison, 2003). Many studies found that family support, particularly from the parent, tends to be protective for children in traumatic and post-traumatic situations (Lie *et al.*, 2004; Webb, 2004; Gil-Rivas *et al.*, 2004).

### **7.5.8 Individual personality traits moderating PTSD symptoms**

The current study found that the symptoms of PTSD significantly increase whenever the level of negative personality traits increases, such as hostility and aggression, dependency, negative self-esteem, negative self-adequacy, emotional unresponsiveness, emotional instability, and negative world view.

The current research suggests that children in Gaza Strip have personality traits which corresponded with those in studies by Kunzmann, Little and Smith (2002) and Hyer, Rafalson and O'hea (2004). Thus, several studies revealed that temperament/personality traits play important roles in alleviating the symptoms of PTSD and other psychosocial problems (e.g., Dempsey, 2002; Miller, 2003; Hyer, Rafalson, & O'hea, 2004). Personality traits include hardiness, tolerance, self-esteem, sense of control, personal control and emotional resilience, all of which help an individual to reduce the risk of PTSD (e.g., Yule, Perrin & Smith, 1999; Kunzmann, Little, & Smith, 2002; Waller, 2001).

In addition, many studies found that a positive style of coping helps to alleviate symptoms of PTSD and psychosocial problems (e.g., Widows *et al.*, 2000; Miller, 2003). Moreover, the resilience affects positively through three relatively stable coping styles (Payne *et al.* 1999): (a) Perceived control (Rutter, 1990); (b) Self-efficacy (Bandura, 1977); (c) Hardiness, which has three components: commitment, control, and challenge (Kobasa, 1979). However, a few research studies indicated that there is no correlation between coping style and symptoms development (e.g., Madison, 2003; Stevens & Higgins, 2002).

The impact of personal traits for Palestinians is important for survivors of trauma and long-term strategies for victims of PTSD. Hardiness of personality is considered necessary to keep a person healthy despite the experience of stressful life events (Sutherland & Cooper, 1990).

The question arises, however, as to where the personality traits come from and to what degree are they socially induced. Radan (2000) found that social support affects tolerance and self-esteem, assisting individuals to alleviate PTSD. In addition, personal control interacts with coping strategies to influence adjustment to life stress (Hyer, Rafalson, & O'Shea, 2004). So the coping strategy can become a feature of personality. Affective or emotional resilience involves the ability of children to manage their emotional reactions, to experience and express a broad range of emotions, and to maintain a sense of humour (Apfel & Simon, 1996; Waller, 2001). Several studies have indicated that coping plays an important role in moderating the relationship between trauma exposure and PTSD and helps to alleviate psychological distress and PTSD (Soysa, 2002; Widows *et al.*, 2000; Miller, 2003).

However, the impact of exposure to chronic traumatic experiences might have a damaging effect on personality traits and cause other psychological and social problems which affect personal development. The adolescent child has an unstable personality which is very vulnerable to outside influence. Therefore, at this point the current researcher is interested in investigating how exposure to trauma could damage personality traits. A few authors indicate that there is no correlation between coping style and symptoms development (e.g., Madison, 2003; Stevens & Higgins, 2002), but another study shows that children living in shelled areas used more coping strategies than children from non-shelled areas (Solomon, 1994).

### ***7.6 Psychosocial support reduce PTSD symptoms***

The current study found that social factors such as spiritual-religious support, national pride and ideological commitment, family support and school support enabled the symptoms of PTSD to decrease whenever these factors rose. In other words, some social factors potentially help to protect the individual from the development of PTSD, such as family support, school, culture, and ideology, friend/peers. Those factors facilitate adaptation after exposure to traumatic events and protective factors should be identified to assess people's resiliency. However, other factors such as the network of psycho-social support involving friends, relatives and neighbours and governmental and NGOs foundations do not significantly protect the Palestinian children from PTSD symptoms.

One of the key factors in determining a child's recovery after exposure to traumatic events is the availability of social support (De Jong, 2002; Garnezy, 1983; Webb, 2004). Therefore, a high level of social support, family cohesiveness, and family communication has been found to protect children by mediating the effect of war trauma (Cohen and Dotan, 1976; Figley, 1983). For example, Mohlen *et al.* (2005) found that psychosocial support programs for war-traumatized child and adolescent refugees reduced symptoms of post-traumatic stress disorder, anxiety, and depression from 60% to 30%. Other factors, however, can increase the risk of PTSD development, such as a family history of psychiatric disorders, weak school support, negative usage of culture/faith or religion. Many studies found that an individual with support is less vulnerable to the effects of traumatic events (Mohlen *et al.*, 2005; Soysa, 2002; McNally, 2003). Therefore, social support only works one way – critical or unhelpful social interaction (e.g, coldness, lack of sympathy, criticism) makes things worse but good social support (e.g, warmth and encouragement) does not, in itself, have a direct mediating effect on PTSD symptoms (Brewin, 2003).

The current research found that the most effective social factors are family support, spiritual, religious support, political/ideological and national pride support among the Palestinian children. Those three factors are the most influential in helping to protect the Palestinian individuals from exposure to the chronic traumatic events, even more than other factors such as friends, relatives and neighbours, governmental and NGOs foundations, and school support. Therefore, the Palestinian children are more likely to cope and keep well if they have been provided the three main protective social factors mentioned above. Other studies might also consider those social factors as the main form of social protection but it will depend on the historical context of the background and current living conditions of the majority of the population.

### **7.6.1 Family support**

In the current study the family support was very significant among the children for alleviating the symptoms of PTSD.

Many studies found that family support, particularly from parents, can protect children from the development of PTSD. Children and adolescents who lack family support are more likely to have a poor recovery from trauma (Webb, 2004; Gil-Rivas *et al.*, 2004). A family history of psychiatric disorders or a parental history of previous trauma negatively affects the development of trauma in a child or grandchild (Soysa, 2002; Schumm, Vranceanu, & Hobfoll, 2004). In addition, some studies found that the effects of PTSD can survive for two generations, as seen in Cambodian refugees, Vietnam veterans and Israeli Kibbutzim children (Sack *et al.*, 1995; Dan, 1996; Bachar *et al.*, 1994). However, Sagi-Schwartz *et al.* (2003) indicated that the trauma effects did not appear to transmit across generations. Study of the Palestinian situation has not yet resolved this question.

The Palestinian parents during these tragic circumstances have faced many difficulties trying to protect their children from the sights of destruction, violence, and abuse. The protective shield that is essential for children's mental health is significantly compromised when their families are faced with the shelling and demolition of their homes (Qouta & El-Sarraj, 2004). For example, traumatized children start to perceive their parents as more disciplining and rejecting (Qouta, 2000).

### **7.6.2 Spiritual support**

In the current study the spiritual support was very significant among the children for alleviating the symptoms of PTSD.

Several studies found evidence of the positive psychological effects of deep faith, prayer and spiritual support, which were significant in alleviating the levels of post-traumatic disorder to cope better with uncontrollable life events, to enhance pain management, to improve surgical outcomes, to protect against depression and to reduce the risk of suicide (e.g., Cunningham, 2004; Grady, 2004; Walsh, 2004). In this thesis the term 'spiritual support' is used rather than religion because in secular societies people may be more comfortable referring to their

spiritual beliefs rather than to religion. Nevertheless, the Palestinian young people who lack belief in the future, or do not see the point in struggling, might easily suffer increasing psychological and social problems if there is no spiritual support (Thabet *et al.*, 1998).

However, it has to be pointed out that in some cases, religious beliefs can be a source of potentially dangerous aggression (Domino & Miller, 1992; Zainuddin, 1993; Ellison, 1983). Ideological commitments among Palestinian children and what they believe as the right to be a freedom fighter help to alleviate the effects of traumatic experiences (Punamaki, 1996).

### **7.6.3 Culture, political and ideological support**

In the current study the resistance culture, political commitment and ideological support was significant among the Palestinians children in alleviating the symptoms of PTSD.

Aldwin (1994) suggests that culture can affect the process of coping positively or negatively with traumatic events in four ways: a) The cultural context shapes the types of stressors that an individual is likely to experience. b) Culture may also affect the appraisal of the stressfulness of a given event. c) Culture affects the choice of coping strategies that an individual has utilized in any given situation. d) The culture provides different institutional mechanisms by which an individual can cope with stress. Therefore, the clinician and people working in psychology or other social fields need to appreciate the power of the belief system and culture in the grieving process for relatives and the associated destructive impact of blame, shame, and guilt surrounding the death as well as in healing some of the other symptoms of PTSD (Rolland, 1994; Walsh, 1999; 2004; De Jong, 2002).

Punamaki (1996) concluded that ideological support for Palestinian children living in the West Bank and Gaza Strip may buffer some of the stress of war. Despite the constant threat of danger, the children derived strength from their ideological and political commitment to their country's struggle. Similar patterns were observed among concentration camp survivors during World War II. Individuals who held strong political and ideological beliefs were more able to endure the privations that surrounded them. Nelson Mandela, the ex-president of South Africa who spent 27 years in jail, is a good example on that. Though these contexts are different in many respects, in both situations, it was clear who the enemy was and why the war was

happening. Therefore, ideological commitments are an important as well as a paradoxical source that must be taken into account when attempting to understand the dynamics between political violence and psychological processes. On the one hand, ideology can provide purpose and meaning to a political struggle (Punamaki, 1983, 1987).

#### ***7.6.4 School support***

In the current study the school support was significant among the children which lead to alleviate the symptoms of PTSD (As shown in table 28).

Several studies showed that school offers security at a time of insecurity to a child. Furthermore, school support by teachers, peers, administration staff and counsellors helps to alleviate symptoms of PTSD and psychological problems. Thus, teacher may also be important in the ideological support and encouragement of children. This support is especially important in the time between the exposure to a traumatic event and the first appearance of PTSD symptoms (Capewell, 1999; Webb, 2004; Yule, 2002). However, the school might have a negative impact when the administration and teachers are unaware of the underlying cause of academic or behaviour problems in a child which are a result of the exposure to a traumatic event (e.g., difficulties in concentration, loss in motivation to learn, lack of energy). When these traumatised children need help and support, they may instead be disciplined and punished (Wass, 1991).

#### ***7.6.5 The support of friends***

In the current study the support of a friend was not significant among the Palestinian children. It might be because the exposure to chronic traumatic events was widespread in addition to being severe and so none of the children was strong enough to be a consistent agent of support. The most significant psycho-social support was from the family, or ideological commitment and national pride, spiritual support and school.

However, friend/peer support can play an important role in the recovery from traumatic events. Several studies found that friend/peer support significantly reduced the levels of psychological distress and symptoms of PTSD (e.g., Coffman, 1998; Madison, 2003; Colarossi & Eccles, 2003). Additionally, the quality of childhood peer relationships strongly

predicted adolescent peer relationships for both males and females, which in turn predicted psychological health and the quality of social relationships in adulthood, including marital satisfaction. In situations of mass trauma other children are similarly bereaved, and the shared experience can provide the opportunity for mutual support (Webb, 2004; Skolnick, 1986).

#### ***7.6.6 Governmental and non-governmental organizations support***

In the current study the school support was not significant among the children. It might be because of the big influence of chronic traumatic events in addition to the boring aspects of life in Gaza. Whatever the governmental and non-governmental foundations can build, the ongoing nature of the traumatic event makes it very difficult to help many children and their families to recover. On many occasions a lot of hard work has been invested in the Palestinian community and then later on for an unjustifiable reason whatever good had come from that hard work has been destroyed.

However, in different situations, there is growing evidence that social and community support which includes governmental and non-governmental organizations are important for physical and psychological health as well as for survival (House *et al.*, 1988). Furthermore, several studies found that social support helps to alleviate the effects of traumatic experiences or psychological problems (Taylor, 2004; Ganzel, 2004; Maercker & Muller, 2004). This was observed in Ugandan children and Sudanese refugees (Paardekooper *et al.*, 1999), Vietnam veterans (Barrett & Mizes, 1988), and American civilians after the attacks of September 11<sup>th</sup> 2001 (Galea *et al.*, 2002). Therefore, when there have been many deaths in a mass war trauma situation, often the community mourns together, and this global response can be very supportive and provide a sense of support to the survivors.

#### ***7.7 Network of psychosocial support or personality influence on symptoms PTSD***

In the current study, an increase in both the network of psycho-social support (such as family, spiritual/religious and national pride) and positive personality traits serves to reduce the symptoms of PTSD among the Palestinian children in the Gaza Strip. However, the personality traits were more often significant than the network of psycho-social support.

In light of the factors which might influence positively or negatively, it is generally assumed that the parents should be the main support upon which the child can depend when coping with intense traumatic events. However, the researcher found, when working with Palestinian children for eight years in school psychological counselling, that an unfortunate change had occurred in parent/child relationships. The father's image had become weak, because the child found himself alone confronting traumatic events. Many parents seemed unable to protect or guide their children, or keep their sons away from the dangerous and horrifying circumstances. Thus, the child would find himself confronting the severity of traumatic events sometimes alone. Therefore, some of these children take the initiative in coping with traumatic events and in trying to understand the circumstances in which they find themselves.

Moreover, a significant number of parents are killed, injured, or arrested in front of their child's eyes. In these cases, the personality traits of the child became of paramount importance in the ability to cope with trauma. The parents cannot even save themselves at times and this awareness has made the children in Gaza suddenly grow up and become responsible, because they are standing on their own. So they lose their childhood in the serious business of learning how to survive. The three main psychosocial support systems (spiritual-religious support, national or ideological pride, and family support) help strengthen the personality of this suddenly grown-up child, but the most important factors in the front line of confronting exposure to trauma are the character and resilience of the child himself.

### **7.8 Strengths and limitations of the study**

Most of the studies that have been conducted on Palestinian children living in war zones in the Gaza Strip or West Bank have only focused on a small number of traumatic experiences. The present study, however, aimed at examining the range of traumatic experiences for children living in Gaza Strip using a large sample. Five new questionnaires were adapted to measure Palestinian children's exposure to a large number of possible traumatic events. These questionnaires after adaptation in the current study were more related to the culture of the participants, and asked more appropriate research questions in order to fill in the gaps of previous questionnaires. The wide sample of this study was selected by clustering random groups representing most of the children in the Gaza Strip based on location, schools (e.g.,

elementary, preparatory, secondary), gender and age.

The limitations for this study were in collecting data which was not easy because the field work was both dangerous and constantly interrupted by the conflict. Adaptation of the questionnaires to be used required a lot of work and time. In addition, a large number of participants were very difficult to find, especially in a war area. Access to clashing areas was prevented by the occupying forces and eventually all the border crossings were closed. The methodological problems in this study were dealt with by developing/adapting five new scales which were tested to ensure their validity and reliability: Lie Scale (LS); Checklist of Traumatic Experiences (CTE); Symptoms of PTSD Scale (SPTSDS); Network of Psycho-Social Support (NPSS); Personality Assessment Questionnaire (PAQ), and schedule interview. The researcher faced some challenges to complete this work in a limited period of time in addition to spending some time in translating it into English and doing proof-reading. The study ensured reliability and validity by conducting a pilot study which took a couple of months. Collecting data from the Gaza Strip for the pilot study proved to be difficult and involved the researcher taking considerable personal risks. The areas that he visited for this research were areas of armed conflict. In order to carry out this research with a large sample of 1,138 children, the researcher had no choice but to visit these areas of armed conflict. Several attempts to return to Gaza over the past two years failed due to the unfortunate closure of the borders which form the only crossing points into and out of Gaza via Egypt. Data input on computers was often interrupted by power cuts – a familiar event in Gaza.

### **7.9 Clinical implications**

The extent to which children in the Gaza Strip have been traumatized calls attention to the urgent need for clinical intervention to help alleviate their distress. Then, intervention will be offered depending on the severity of the disorders and the resources available for the treatment of trauma. The following points should be noted when carrying out treatment:

a) The current study found that 41% of the Palestinian population in Gaza Strip suffered from symptoms of PTSD. The researcher suggested rapid response activities such as giving children problem-solving skills in addition to several entertainment activities such as bus's games (It contains games and materials for drama show), educational cinema, sport, psychodrama, trips to some community foundation, open day for children and their families, open day for children

and their schools, art activities and other activities. The duration of this kind of program ranged from one to two months and would cover 3,000 to 5,000 children in the war zone areas (This programme has been created by the current researcher for Palestine Trauma Centre for Victims' Welfare-[www.ptcgaza.cjb.net](http://www.ptcgaza.cjb.net)).

b) In light of the large number of Palestinian children in the Gaza Strip who suffer from symptoms of PTSD, the researcher suggested the availability of Cognitive Behavioural Treatment (CBT) for children and adult and psycho-education for their families which should reach as many as of those traumatized children as possible.

c) Debriefing should not necessarily be offered routinely immediately following every traumatic experience. It can be used at first in order to release the tension and mental disturbance in a child and to stop him/her repressing feelings and keeping the bad experiences inside (Wolpert *et al.*, 2006). After that, the child should, in the first instance, be taught how to cope on his/her own with stressful experiences. However, physical and verbal debriefings (e.g., talking out, drawing, writing notes) should be made available to all traumatised children in Gaza Strip who go on and develop (different levels) of PTSD symptoms.

d) One has to be careful not to simply view the traumatised child as the only or main problem, but also consider the wider society in which he or she lives. Psychological therapies on offer are not cures for larger societal problems (e.g., war); they can only provide treatment of psychological symptoms. A more complete 'cure' can ultimately only come from a resolution of the political situation and the violence generated by the occupation and the internal conflicts. In the context of this study, individual childhood trauma can therefore be seen as a 'normal' reaction to an 'abnormal' society.

### **7.10 Future research**

In future studies of Palestinian children, the researcher suggests the following areas should be examined:

a) Developing preventive measures, counselling, rehabilitation and therapeutic programmes which should be readily available and easy to access for Palestinian children and their families.

b) Quantitative and qualitative studies on the traumatised children should be conducted at a

later date following the current research to find out what has happened to these children in the tragic situation of complete siege in the Gaza Strip since June 2006.

c) What is the relationship between exposure to traumatic events and academic school performance?