

## **Title: The Effects of Chronic War Trauma among Palestinian Children**

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### **Summary**

Trauma occurs when human beings are exposed to sudden and unexpected events. The resulting shock may be the trigger for various psychological, physical, emotional, and social problems. Trauma may be caused by natural phenomena such as earthquakes or by man-made phenomena such as wars, domestic violence, and forced migration.

Our recent study aimed to explore the long-term effects of war and occupation on the Palestinian children in the Gaza Strip. In our sample, 1,137 children aged between 10 and 18 years were randomly selected from all parts of the Gaza Strip to participate in the study. The participants completed a Checklist of Traumatic Experiences (CTE), a Symptoms of Post Traumatic Stress Disorder Scale (SPTSDS) and Personality Assessment Questionnaire (PAQ). This research found that every child in Palestine had been exposed to at least three traumatic events. The most prevalent types of trauma exposure for Palestinian children were as follows: 99% of children had suffered humiliation (either to themselves or a family member); 97% had been exposed to the sound of explosions/bombs; 85% had witnessed a martyr's funeral and 84% had witnessed shelling by tanks, artillery, or military planes.

Importantly, our recent study found that 41% of children suffered from Post Traumatic Stress Disorders (PTSD). Of the 41% of children with PTSD, the levels of symptoms were as follows: 20% (57,606) children suffered from an acute level of PTSD, 22% (67,531) suffered from moderate levels of PTSD, and 58% (180,058) suffered from low levels of PTSD. The children of Palestine form 53.3% (742,200) of the total Palestinian population in the Gaza Strip. The Gaza Strip has a population of (1,400,000) people (the Palestinian Centre of Statistics, 2006). This indicates that there are 305,195 children in the Gaza Strip in need of urgent psychological, social, and medical services in the areas of prevention, counselling, rehabilitation, and therapeutic treatment.

Overall, the exposure to chronic traumatic experiences led to an increase in the symptoms of PTSD among Palestinian children in the Gaza Strip. The most prevalent types of PTSD were: *cognitive symptoms*, from which 25% of children 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); *emotional symptoms* from which 22% suffered (e.g, the child feeling alone, suffering from nightmares, easily getting tense and nervous, feeling sad and fearful, bedwetting); *social behavioural disorders*, from which 22% suffered (eg., aggressive and rude behaviour, rejecting a teacher's or parent's authority, having difficulty enjoying games and hobbies); *academic behavioural disorders*, from which 17% suffered (e.g., difficulty in concentrating on study, increasingly bad academic performance, difficulties in paying attention during school lessons, disruptive behaviour at school); *somatic symptoms*, from which 14% suffered (e.g., headaches, stomach-ache, hypochondriasis, somatization).

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.

In addition, our current study revealed that the support of family, friends, relatives, teachers, and spiritual leaders can be of great help. However, children whose parents had low educational levels received less support and therefore suffered more often than others from PTSD. Governmental and NGO institutions can also help to mitigate the effects of the difficult living conditions and chronic trauma suffered by the Palestinian children. In addition to this, positive traits of personality can reduce the effects of post-traumatic disorders.

We concluded that having a normal childhood in Palestine is unlikely in the current circumstances and the psychological well-being future of Palestinian children is at risk of being compromised by on-going traumatic experiences.

## **Introduction**

Living in war-torn areas is a reality that many people face throughout the world (Qouta & El-Sarraj, 2004). Hundreds of thousands are affected every year, including the victims of the conflicts, their relatives and friends, disaster workers and eye witnesses. Although precise figures on the numbers of children and families affected are not known, it has been estimated that in the ten years from 1990 to 2000 over ten million children have been traumatized by war around the world (United Nations, 2000).

Studies on the effect of war on civilians began after the Second World War, whilst recent studies have focused on contemporary conflicts in the Middle East, South Africa, Ireland and Bosnia, as well as the effect of urban violence targeted at American children. There is a long history of descriptive reports of children's psychological reactions to wartime stress in many regions including Cambodia (Realmuto *et al.*, 1992; Sack *et al.*, 1995a), Afghanistan (Mghir, Freed, Raskin, & Katon, 1995), South Africa (Dawes *et al.*, 1989, 1990), Bosnia-Herzegovina (Smith *et al.*, 2001), Balkans (Ajdukovic, 1998; Zivcic, 1993), Kuwait (Nader *et al.*, 1993), Palestine (Qouta & El-Sarraj, 2004; Hawajri, 2003; El-Khosondar, 2004), Lebanon (Sibai & Sen, 2000), and Iraq (Ahmad *et al.*, 2000). Research showed that children living in war zones are at high risk of developing types of psychopathology, predominantly Post-Traumatic Stress Disorders (PTSD) (Thabet *et al.* 2004; Husain, 2005; Mohlen *et al.*, 2005). In this chapter, we are presenting in details some parts of this research.

## **Children and chronic trauma**

Chronic trauma means that traumatic events (e.g. combat experiences, physical injury, direct threats to life, domestic violence) occur several times over an extended period of time, and that these traumas are often multiple, severe, and recurring (Kinzie, 2001a, Kaysen *et al.*, 2003). Research suggests that individuals who experience chronic trauma have lower rates of recovery from Post Traumatic Stress Disorder (PTSD) (Famularo *et al.*, 1996; Green, 1985; Terr, 1991). Furthermore, longer periods of trauma exposure have been associated with increased PTSD symptomatology (Weaver & Clum, 1995). Chronic traumatization may be psychologically damaging, not just because of the specific and repeated traumatic incidents, but also because of the effects of living in a state of constant danger (Baum *et al.*, 1990; Smith *et al.*, 1999).

The long-term effects of war depend on a complex interaction of different factors that include demographic considerations and the specific nature of the individual's war experiences (Kuterovac-Jagodic, 2000). In general, research on combat veterans and other survivors of traumatic experiences found that more time spent in potential danger can lead to higher levels of PTSD symptomatology in childhood and adulthood (e.g., Norris *et al.*, 2003; Kaysen *et al.*, 2003; Eth, 2001).

Given the apparent relationship between chronicity of exposure to traumatic events and PTSD symptoms, it is important to examine carefully the duration of chronic traumatization, and thereby better understand its relationship to PTSD symptomatology (Kaysen *et al.*, 2003). Regarding children who are exposed to war, ethnic cleansing, political oppression, concomitant interpersonal violence, and flight from their homes, it is not currently known whether the long-lasting impact of these events can be more likened to single-episode traumas (which are associated with a greater degree of recovery) or child maltreatment involving physical and sexual abuse (which is associated with more complex, diverse, and enduring outcomes) (Eth, 2001).

## **Factors associated with the onset of PTSD**

Research is continuing to reveal factors that may lead to PTSD. People who have been abused as children or who have had other previous traumatic experiences are

more likely to develop mental health difficulties (Widom, 1999). Furthermore, it was found that experiencing more than one traumatic event yielded a higher risk for developing PTSD (Breslau *et al.*, 1999a), especially in the situation of war (Ispanovic-Radojkovic, 1993). Research indicated that there is a correlation between previous and the number of traumatic experiences, and PTSD, with more exposure leading to an increase of symptoms of trauma (Smith *et al.*, 2001; Papageorgiou *et al.*, 2000; Wayment, 2004). In particular, a strong association was found between children and adolescents who were exposed to war stressors and high levels of PTSD symptoms and grief reactions (Smith *et al.*, 2001; Thabet & Vostanis, 2000; Papageorgiou *et al.*, 2000).

Some studies, on the other hand, indicated that the meaning of violence is more important than the amount of violence directly experienced. For example, there is evidence from South Africa, the Philippines and Palestine that shows that active engagement in or ideological commitment to political struggle can increase resilience (Dawes & DeVilliers, 1987; Protacio-Marcelino, 1989; Punamaki, 1996). Kostelny and Garbarino (1994) interviewed mothers and children in Palestine and concluded that it was the adolescents' ability to perceive themselves as 'freedom fighters' that made the experiences of invasion and detention less traumatic. Other studies found a complex interaction between exposure to traumatic events, active participation, and beliefs between adolescents living through the Intifada in the Gaza Strip (Punamaki & Suleiman, 1990; Qouta, Punamaki, & El-Sarraj, 1995). However, Son (1995) found no relationship between a number of traumatic experiences and PTSD.

### **The context of this study**

Palestinians are the largest single group of refugees in the world, one in three refugees world wide is a Palestinian. It is estimated that there are about 6.5 million Palestinian refugees in the world (Ministry of Health, 2005). Hundreds of thousands of Palestinian people have been displaced, have fled, or were forced out in 1948 (Leopold & Harrell-Bond, 1994). Under UNRWA's (the United Nations Relief and Works Agency for Palestine Refugees in the Near East) operational definition, Palestine refugees are persons whose normal place of residence was Palestine between June 1946 and May 1948, and those who lost both their homes and means of livelihood as a result of the 1948 Arab-Israeli conflict (UNRWA, 2005).

The Gaza Strip is a small piece 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. Between October 2000 and April 2005 73,567 Palestinian buildings have been completely or partially shelled and destroyed in Palestinian territories by the occupying army. A total of 28,709 of these were in the Gaza Strip, of which 4,778 homes had been completely demolished (PCBS, 2006). From 29<sup>th</sup> September 2000 to July 31<sup>st</sup> 2006, 4,348 Palestinians were killed, 55% of them in the Gaza Strip. The number of wounded in Palestinian territories during this time was 30,638 (PCBS, 2006). 10,073 prisoners are currently being detained within Israeli prisons (B'Tselem, 2006). Not surprisingly, Clinical Psychologists have observed an increasing number of children in these areas suffering from psychological and behavioural problems including bed-wetting, sleep disorders, and speech difficulties (Qouta, 2000).

### **Aims of the study**

In the present study we aim to examine the long term effects of war and occupation on Palestinian children by examining the traumatic experiences of a large sample of children living in the Gaza Strip. Some of our research questions were:

1. How many children have been exposed to traumatic events?
2. What type of traumatic events were the children exposed to?
3. How many children showed PTSD symptomology?

### **Method**

#### *Participants*

The sample consisted of 1,137 children aged between 10-18 years (mean age: 14.36; SD 1.79), randomly selected from all parts of the Gaza Strip. 43.8% of the sample were boys (n: 498), while 50.3% were girls (n: 639). 19.9% (n: 226) of the children were at primary schools (ages: 10-12 years), 47.5% (n: 540) were at the preparatory

school (ages: 13-15 years), and 32.6% (n: 370) were at the secondary school (ages: 16-18 years).

### *Measurements*

#### Development of questionnaires

Checklist of Traumatic Experiences (CTE) and Symptoms PTSD Scale (SPTSDS) have been developed by the researcher (Altawil), tested to ensure their validity and reliability (See Appendix 1–2). Moreover, the Arabic versions of the questionnaires were reviewed by seventeen researchers and experts in the fields of mental health and clinical psychology in Palestine and Egypt. Thereafter the questionnaires were translated to English and examined by a group of specialist referees in the UK. The researcher also adapted the Gaza Traumatic Events Checklist by Abu Hein *et al.* (1993) and the Child Post Traumatic Stress Reaction Index (CPTSD-RI: Pynoos *et al.*, 1987). After getting ethical approval a pilot study was conducted with 120 children in the Gaza Strip. The sample of the pilot study consisted of three groups of 40 students from primary, preparatory, and secondary school, with an equal number of males and females.

#### Checklist of traumatic experiences

This scale was adapted from the Gaza Traumatic Event Checklist (Abu Hein *et al.*, 1993) and the Trauma Questionnaire Scale (Qouta & El-Sarraj, 2004), and includes 34 items covering the most traumatic events that a Palestinian child may have been directly exposed to during the war and the occupation period. The children are required to indicate whether or not they have been exposed to each event. If they have been exposed to an event then they had to indicate how often on the scale of CTE (see the scale in appendix 2). Validity was assessed by discriminatory validity (t-test [ $t = 15.86, p=0.000$ ], concurrent validity with trauma questionnaire scale (Qouta & El-Sarraj, 2004 by pearson correlation [ $r = .706, p<0.01$ ]). Reliability was measured by Internal consistency (pearson correlation [ranged from  $r = .26$  to  $.80, p < 0.01$ ], split half method (pearson correlation [ $r = .64, p<0.01$ ], Cronbach's Alpha =  $.84$ , test-retest reliability (pearson correlation [ $r = .60, p<0.01$ ]). In this research the criteria for chronic traumatic experiences is that the child had been exposed to repeated or to different trauma events more than three times during the second Intifada (2000-2005).

#### Symptoms PTSD Scale (SPTSDS)

The Symptoms of Post Traumatic Stress Disorders Scale assessed children having been exposed to chronic traumatic experiences and stressful life events in the Gaza Strip in the last five years of the Al-Aqsa Intifada. This scale was adapted from the Children Post Traumatic Stress Reaction Index (CPTSD-RI) (Pynoos, Frederick, & Nader 1987), (World Health Organization ICD-10, 1992), (American Psychiatric Association DSM-IV,1994), (El-Khosondar, 2004), (Hawajri, 2003). The scale consists of sixty items which included five dimensions (somatic=8 items, cognitive=17 items, emotional symptoms=10 items, social behavioural=14 items, academic behavioural disorder=11 items), and based on the procedure of Pynoos *et al.* (1987) scoring norms were created. Items were rated from 0 (never) to 4 (always). The scores of this scale were classified from mild level of PTSD (1-60 scores) to very severe level (above 181 scores).

The items were validated by (DSM-IV, 1994; ICD-10, 1992; Hawajri, 2003; El-Khosondar, 2004; Pynoos, *et al.*, 1987). Validity was measured by discriminatory validity ( t-test [ $t = 25.335$ ,  $p=0.000$ ]), concurrent validity with reactions of the traumatic events (Hawajry, 2003) (pearson correlation [ $r = .52$ ,  $p<0.01$ ]) and concurrent validity with children post traumatic stress reaction index (PTSD-RI) (Pynoos *et al.*, 1987) (pearson correlation [ $r = .43$ ,  $p<0.01$ ]). Reliability was assessed by Internal consistency by pearson correlation [ranged from  $r = .77$  to  $.92$ ,  $p < 0.01$ ], split half method by pearson correlation [ $r = .86$ ,  $p<0.01$ ], Cronbach's Alpha =  $.92$ , test-retest reliability by pearson correlation [ $r = .64$ ,  $p<0.01$ ]).

### *Procedure*

Ethical approval for the study was obtained from the ethical committee at University of Hertfordshire and the ethical committee at the Palestinian educational ministry and UNRWA's Education Programme. Participants completed the questionnaires in two sessions with a trained researcher and a school counsellor. Each session included 7 to 10 children and both sessions lasted approximately 1 hour (primary school children were given extra time). All scales were tested prior to administration to ensure reliability and validity (including a pilot study). Those scales are available in English and Arabic.

### *Statistical analysis*

Data collected on questionnaires were encoded for computer analysis with SPSS for Windows software (release 10.0.0, SPSS, Chicago). The data for each child were examined and outliers were verified before the data were combined with the main study data set for analysis. Pearson correlation and Cronbach's Alpha were used to test for reliability and validity. T-Test and mean outcomes were compared with use of Standard Deviations (SD), as appropriate to compare levels of traumas and chronic trauma for children.

### **Results**

The results show the prevalence of the chronic traumatic experiences, the type of traumatic events and psychological and social suffering among Palestinian children living in the Gaza Strip during Al-Aqsa Intifada (second uprising 2000-2005).

#### ***Result I: Exposure to traumatic events***

Every child in Palestine had been exposed to at least three traumatic events i.e. chronic trauma from 2000 to 2005. The percentages of children who have been exposed to number of traumatic events (N: 1,137) are shown in Table 1.

**Table 1:** Number of traumatic experiences and their frequency (N: 1,137)

<b>Number of the traumatic experiences</b>	<b>Frequency</b>	<b>Percentage (%)</b>
3 traumas	3	0.3
4-5 traumas	25	2.2
6-10 traumas	233	20.5
11-15 traumas	291	25.6
16-20 traumas	323	28.4
21-25 traumas	220	19.3
25-34 traumas	42	3.7
Total	1137	100.0

**Result II: Type of traumatic events**

Children had been frequently exposed to all 34 traumatic events (e.g., humiliation, injured, arresting, and beating). The events with the highest exposure are shown below in Table 2.

**Table 2:** Frequency of different types of traumatic event (N: 1,137)

<b>The statements of traumatic events</b>	<b>Item no</b>	<b>Frequency</b>	<b>(%)</b>
Have you been exposed to humiliation by occupying forces?	21	1134	99.74
Have any of your close family members been exposed to humiliation by occupying forces?	22	1126	99.03
Have you been exposed to explosion sounds or the sound bombs?	24	1099	96.66
Have you witnessed a martyr's funeral?	29	971	85.40
Have you witnessed shelling by tanks, artillery, or military planes?	26	954	83.91
Have any of your friends, neighbours, or relatives been killed by occupying forces?	15	900	79.16
Have the occupying forces used your house, block, camp, or zone as a cordon?	11	751	66.05
Have you witnessed people being shelled and bombed?	28	736	64.73
Have any of your friends, neighbours, or relatives been injured by the occupying forces?	17	733	64.47
Have the occupied forces destroyed a land or farm of yours or of a dear person by a bulldozer.	23	731	64.29

### **Result III: PTSD symptoms**

It was found that 41% of the children suffered from Post Traumatic Stress Disorders (PTSD). Of these, 20% suffered from acute level of PTSD, 22% suffered from moderate levels of PTSD, and 58% suffered from low levels of PTSD (see Table 3 & Figure2).

**Table 3:** Frequency of the levels of PTSD symptomology\* (N: 1,137)

<b>Symptoms levels of PTSD (overall score)</b>	<b>Items No</b>	<b>Upper score</b>	<b>Lower score</b>	<b>Frequency</b>	<b>Percentage ** (%)</b>
Acute	60	121	240	18134	7.72
Moderate		61	120	12352	9.05
Mild		1	60	16467	24.13
Total	60	1	240	46953	40.9

\* The classification of for the symptoms levels (acute, moderate, mild) were based on Pynoos's criteria (Pynoos *et al.*, 1987).

\*\* Equation of the percentage = (Summation of frequencies \* 100) / (Upper score \* N)

## **Discussion**

### *Summary of the findings*

In the present study we investigated the long-term effects of war and occupation on Palestinian children by examining the prevalence of the chronic traumatic experiences, the type of traumatic events and psychological and social suffering of a large sample of school children living in the Gaza Strip during the second uprising (2000-2005). The major findings of the present study were:

- 1. Exposure to traumatic events:** Every child in Palestine had been exposed to at least three traumatic events (chronic trauma) between 2000 and 2005.
- 2. Type of traumatic events:** Children had been frequently exposed to all 34 traumatic events (e.g., humiliation, injured, arresting, and beating).
- 3. PTSD symptoms:** It was found that 41% of the children suffered from Post Traumatic Stress Disorders (PTSD). Of these, 20% suffered from acute level

of PTSD, 22% suffered from moderate levels of PTSD, and 58% suffered from low levels of PTSD.

### *Chronic trauma among Palestinian children*

The fact that all children in Palestine were exposed to at least three traumas during the second Intifada (2000-2005) indicates that these children are at serious risk of developing psychological problems such as PTSD. 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 toward the trauma. Children such as these who are living in conditions of political violence and war have been growing up too soon and losing their childhood (Upton & Sultan, 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 severe PTSD symptoms or psychological problems (e.g., Kaysen *et al.*, 2003; Yule, 2001; 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 (Smith *et al.*, 2001; Papageorgiou *et al.*, 2000; Wayment, 2004). 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; Roth *et al.*, 1997). Moreover, children and adolescents living in a war zone that were exposed more frequently to war stressors lead to high

levels of PTSD symptoms and grief reactions (Smith *et al.*, 2001; Thabet & Vostanis, 2000; Papageorgiou *et al.*, 2000).

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%); had friend, neighbours, or relatives been killed (79%); had the occupied forces used 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 for those who had witnessed funerals (94.6%), witnessed shooting (83.2%), saw injured or dead who were not relatives (66.9%), and saw 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). For example, after the Gulf War, it was found that the exposure to dead bodies and body parts were the best predictor of PTSD intrusion symptoms. Moreover, the exposure to very strong sensory impressions (e.g. smelling burning bodies, hearing screams for help) may result in more severe re-experiencing symptoms (Dyregrov and Raudalen, 1992). Being exposed to traumatic events may also lead to chronic effects of severe trauma (Ishii, 2003) and to severe physical and psychological damage (Geltman & Stover, 1997).

Several studies found that greater direct exposure to traumatic events has been associated with higher levels of PTSD (e.g. Bramsen *et al.*, 2000; Nelson-Goff & Schwerdtfeger, 2004). However, the indirect exposure of 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 and 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).

Finally, 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 (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).

#### *The prevalence of PTSD among Palestinian children*

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, 1991; Helzer, 1987).

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 (The Palestinian Central Bureau of Statistics, 2006). Consequently, the number of Palestinian children in the Gaza Strip is 742,200 children, which leads us to conclude that approximately 305,195 Palestinian children might be suffering from PTSD symptoms. Other studies which had been conducted among children in the Gaza Strip concurs likely with this finding and raise concern about the ongoing suffering of Palestinian children (Baker, 1990; Punamaki, 1996; Hawajri, 2003).

In this study the majority of participants were born as refugees. Many earlier studies found that the experiences of refugees often lead to a high risk of developing types of PTSD (Mollica *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).

### *The impact of chronic childhood trauma on family relationships*

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 parental bonds. Moreover, 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).

### *Strengths and limitations of the study*

Most of the studies that were conducted in Gaza Strip or West Bank found that Palestinian children living in war zones have only focused on a small number of traumatic experiences. But the present study aimed to examine the traumatic experiences of children living in Gaza Strip using a large sample. Two new scales were developed and adapted for the Palestinian children and included a measure of exposure to a large number of possible traumatic events. The wide sample of this study were selected by cluster randomly groups which represent likely most of the children in Gaza Strip based on location, schools (e.g., elementary, preparatory, secondary), classrooms, gender, age. Moreover, this study is one part of a big research about the chronic trauma in Palestine.

### *Clinical implications*

The extent to what children in the Gaza Strip has been traumatized calls attention to the urgent for clinical intervention to help alleviate their distress. Then, intervention will be offered very depending on the severity of the disorders and the resources available for trauma. I view the following implication should be carrying out:

1. Debriefing should not be offered routinely immediately following a trauma.
2. Children and young people with PTSD, who have experienced traumatic events, should be offered a course of trauma-focused cognitive behaviour therapy adapted appropriately to suit their age, circumstances and level of development.
3. Trauma-focused cognitive behavioural therapy should be offered to older children with severe symptoms of PTSD in the first month after the traumatic event.
4. Drug treatment should not be routinely prescribed for children and young people with PTSD.

### **Conclusion**

The war and the long term occupation of Palestinian territory expose children to recurrent traumatic events which violate their human rights: the right to live, to learn, to be healthy, to live with his/her family and community, to develop his/her personality, to be nurtured and protected, and the right to enjoy childhood. The potential for having a normal childhood in Palestine is unlikely in the current circumstances and the future psychological well-being of Palestinian children is at risk of being compromised by on-going traumatic experiences.

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## References

- =Abu Hein, F., Qouta, S., Thabet, A. & El Sarraj, E. (1993). Trauma and mental health of children in Gaza. *British Medical Journal*, 306, pp. 1130-1131.
- =Ahmad, A., Sofi, M., Sundelin-Wahlsten, V., & von Knorring, A. (2000). Post traumatic stress disorder in children after the military operation "Anfal" in Iraqi Kurdistan. *Eur Child Adolesc Psychiatry*, 9, pp. 235-243.
- =Ajdukovic, M. (1998). Displaced adolescents in Croatia, sources of stress and post-traumatic stress. *Adolescence*, 33, pp. 209-217.
- =Baker, A. (1990). The psychological impact of the Intifada on Palestinian children in the occupied West Bank and Gaza: An exploratory study. *The American Journal of Orthopsychiatry*, 60, pp. 496-505.
- =Baum, A., O'keefe, M., & Davidson, L. (1990). Acute stressors and chronic response: The case of traumatic stress. *Journal of Applied Social Psychology*, 20, pp. 1643-1654.
- =Bramsen, I., Dirkzwager, A., & van der Ploeg, H. (2000). Predeployment personality traits and exposure to trauma as predictors of post-traumatic stress symptoms: A prospective study of former peacekeepers. *American Journal of Psychiatry*, 157, pp. 1115-1119.
- =Breslau, N., Chilcoat, H., Kessler, R., & Davis, G. (1999a). Previous exposure to trauma and PTSD effects of subsequent trauma: results from the Detroit area survey of trauma. *American Journal Psychiatry*, 156, pp. 902-907.
- =B'Tselem (2006) "Intifada statistics" , *B'Tselem- report*, 29-7-2006. ([www.btselem.org/English/index.asp](http://www.btselem.org/English/index.asp))
- =Chimienti, G., Nasr, J., & Khalifeh, I. (1991). Children's reactions to war-related stress: Affective symptoms and behavior problems. *Social Psychological Psychiatry Epidemiology*, 24, pp. 282-287.
- =Davidson, J., Jughes, D., Blazer, D., & George, L. (1991). Post-traumatic stress disorder in the community: An epidemiological study. *Psychological Medicine*, 21, pp. 713-721.
- =Dawes, A. (1990). The effects of political violence on children: A consideration of South Africa and related studies. *International Journal of Psychology*, 25, pp. 13-31.
- =Dawes, A., & De Villiers, C. (1987). Preparing children and their parents for prison: the wynberg seven. In D. Hanson (Ed.), *Mental health in transition*. Cape Town: OASSSA Second National Conference Proceedings.
- =De Jong, J., Komproe, I., Van Ommeren, M., El Masri, M., Mesfine, A., Van de Put, W., & Somasundaram, D. (2001). *Prevalence and co-morbidity of psychiatric disorders in traumatized communities from Algeria, Cambodia, Ethiopia, and Gaza*. Manuscript submitted for publication.
- =Duncan, R., Saunders, B., Kilpatrick, D., Hanson, R., & Resnick, H. (1996). Childhood physical assault as a risk factor for PTSD, depression, and substance abuse: findings from a national survey. *American Journal of Orthopsychiatry*, 66(3) pp. 48-437.

- =Dyregrov, A., & Raundalen, M. (1992). The impact of the Gulf war on the children of Iraq. Paper presented at the International Society for Traumatic Stress Studies World Conference, "Trauma and Tragedy", Amsterdam, June.
- =El-Khosondar, I. (2004). *The effect of rational behaviour therapy in reducing the effect of post-traumatic stress disorder among Palestinian children*. Unpublished doctoral dissertation, Ain Shams University, Cairo, Egypt.
- =Eth, S. (2001). PTSD in children and adolescent. In J. Oldham, M. Riba (Eds.), *Evaluation and assessment of PTSD in Children and Adolescents*. Review of Psychiatry, 1(20), Washington, DC: American Psychiatric Publishing, Inc., pp. 1-31.
- =Famularo, R., Fenton, T., Augustyn, M., & Zuckerman, B. (1996), Persistence of pediatric posttraumatic stress after two years. *Child Abuse Negl*, 20,1245–1248.
- =Freud, A., & Burlingham, D. (1943). *War and Children*. New York: Ernest Willard.
- =Garbarino, J., Kostelny, K. (1993). Children's response to war: What do we know? In L.A. Leaved & N.A. Fox (Eds.), *The Psychological effects of war and violence on children* (pp.23-39). Hillsdale, NJ: Lawrence Erlbaum Association, Inc.
- =Garbarino, J., Kostelny, K., & Dubrow, N. (1991). What children can tell us about living in danger. *American Psychologist*, 46(4), pp. 376-383.
- =Geltman, P., & Stover, E. (1997). Genocide and the plight of children in Rwanda. *Journal of the American Medical Association* ((JAMA)), 277(4), pp. 289-294.
- =Green, B. (1985). Children traumatized by physical abuse. In: *Posttraumatic Stress Disorder in Children*, Eth S, Pynoos RS, eds. Washington, DC: American Psychiatric Press, pp. 133–154.
- =Hawajri, A. (2003). *Effectiveness of a suggested counseling program to alleviate trauma among the students of basic stage in Gaza Governorate*. Unpublished master dissertation, Islamic University, Gaza, Palestine.
- =Helzer, J., Robins, L., & McEvoy, L. (1987). Post-traumatic stress disorder in the general population: findings of the epidemiologic catchment area survey. *N Engl Journal Med*, 317,pp.1630-1634.
- =Husain, S., Nair, J., Holcomb, W., Reid, J., Holcomb, W., Reid, J., Vargas, V., Nair, S. (1998). Stress reactions of children and adolescents in war and siege conditions. *American Journal Psychiatry*, 155(12),pp.1718-1719.
- =Ishii, T (2003). The relationship of self-concept, ego defense mechanisms, and religious beliefs with severity of psychiatric symptoms among a clinical sample of cambodian holocaust survivors. *Dissertation Abstracts International: SectionB: The Sciences and Engineering*. 63 (11-B), p. 5520.
- =Ispanovic-Radojkovic, V. (1993). Impact of war trauma on children. *Psihijatrija Danas*, 25(1-2), pp.33-54.
- =Kanninen, K., Punamaki, R., & Qouta, S. (2003). Personality and Trauma: Adult Attachment and Posttraumatic Distress Among Former Political Prisoners. *Journal of Peace Psychology*, 9, (2), pp. 97-126.
- =Kaysen, D., Resick, P., & Wise, D. (2003). Living in danger, the impact of chronic traumatization and the traumatic context on post –traumatic stress disorder. *Journal of Trauma, Violence, & Abuse*, 4(3), pp. 247-264.

=Kinzie, J. (2001). Cross-Cultural treatment of PTSD. In J. Wilson, M. Friedman, & J. Lindy (Eds.), *Treating psychological trauma and PTSD*. New York: Guilford Press, pp.255-277.

=Kostelny, K., & Garbarino, J. (1994). Coping with the consequences of living in danger: the case of Palestinian children and youth. *International Journal of Behavioral Development*, 17, 595-611.

=Kuterovac-Jagodic, G. (2000). Long-term consequences of war on children in Croatia. In S. Powell & E. Durakovic-Belko (Eds.), *Sarajevo 2000: The psychological consequences of war: Results of empirical research from the Territory of Former Yugoslavia*. Sarajevo: UNICEF Bosnia-Herzegovina, pp.208-210.

=Leopold, M., & Harrell-Bond, B. (1994). An overview of the world refugee crisis. In: A. Marsella, T. Bornemann, S. Ekblad, & J. Orley (Eds.). *Amidst peril and pain: The mental health and well-being of the world's refugees*, Washington: American Psychological Association, pp. 17-32.

=Melhem, N., Day, N., Day, R., Reynolds, C., & Brent, D. (2004). Traumatic grief among adolescents exposed to a peer's suicide. *American Journal Psychiatry*, 161, pp. 1411-1416

=Mghir, R., Freed, W., Rashin, A., & Katon, W. (1995). Depression and post traumatic stress disorder among a community sample of adolescent and young adult Afghan refugees. *Journal of Nervous and Mental Disease*, 183, pp. 24-30.

=Ministry of Health (2005). Israeli Occupation of the Palestinian Territory, Gaza: Palestine ([www.moh.gov.ps](http://www.moh.gov.ps)).

=Mohlen, H., Parzer, P., Resch, F., & Brunner, R. (2005). Psychosocial support for war-traumatized child and adolescent refugees: Evaluation of a short-term treatment program. *Australian & New Zealand Journal of Psychiatry*, 39(1-2), pp. 81-87.

=Mollica, R., Sarajlic, N., Chernoff, M., Lavelle, J, Vukovic, I., & Massagli, M.P. (2001). Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees, *Journal of the American Medical Association*, 286(5), pp. 546-554.

=Nader, K., Pynoos, R., Fairbanks, L., Al-Ajeel, M., & Al-Asfour, A. (1993). A preliminary study of PTSD and grief among the children of Kuwait following the Gulf crisis. *British Journal of Clinical Psychology*, 32, pp.407-416.

=Nelson-Goff, B., & Schwerdtfeger K.(2004). The systemic impact of traumatized children. In: D. Catherall (Eds.), *Handbook of stress, trauma, and the family*. New York: Brunner-Routledge, pp.179-202.

=Norris, F., Murphy, A., Baker, C, Perilla, J. (2003). Severity, timing, and duration of reactions to trauma in the population: An example from Mexico. *Biological-Psychiatry*, 53(9), pp.767-778.

=Papageorgiou, V., Frangou-Garunovic, A., Iordanidou, R., Yule, W., Smith, P., & Vostanis, P. (2000). War trauma and psychopathology in Bosnian refugee children. *European Child and Adolescent Psychiatry*, 9, pp. 84-90.

=PCBS [The Palestinian Central Bureau of Statistics] ( 2006). Intifada Statistics - 2006, National Palestinian Authority, West Bank-Ramallah: Palestine (<http://www.pcbs.gov.ps>)

- =Pfefferbaum, B., Gurwitsch, R., McDonald, N., Leftwih, M., Sconzo, G., Messenbaugh, A., & Schultz, R. (2000). Posttraumatic stress among children after the death of a friend or acquaintance in a terrorist bombing. *Psychiatric Services, 51*, pp. 386-388.
- =Protacio-Marcelino, E. (1989). Children of political detainees in the Philippines: Sources of stress and coping patterns. Sources of stress and coping patterns. *International Journal of Mental Health, 18*, pp.71-86.
- =Punamaki, R. (1996). Can ideological commitment protect children's psychosocial wellbeing in condition of political violence ?. *Child Development, 67*, pp. 55-69.
- =Punamaki, R., & Suleiman, R. (1990). Predictors and effectiveness of coping with political violence among Palestinian children. *British Journal of Social Psychology, 29*, pp. 67-77.
- =Pynoos, R, Frederick, C., Nader. K., Arroyo, W., Steinberg, A., Eth, S., Nunez, F., & Fairbanks, L. (1987). Life threat and post-traumatic stress in school-age children, *Arch Gen Psychiatry, 44*, pp. 1057-1063.
- =Qouta, S. (2000). *Trauma, and violence and mental health: The Palestinian experience*. Unpublished doctoral dissertation, Vrije University, Amsterdam.
- =Qouta, S., & El-Sarraj, E. (2004). Prevalence of PTSD among Palestinian children in Gaza Strip. *ArabPsyNet Journal, 2*, pp. 8-13.
- =Qouta, S., Punamaki, R. & El Sarraj, E. (1997). House demolition and mental health: victims and witnesses. *Journal of Social Distress and Homeless, 6*, pp. 203-211.
- =Qouta, S., Punamaki, R.L. & El Sarraj, E. (1995). The relations between traumatic experiences, activity, and cognitive and emotional responses among Palestinian children. *International Journal of Psychology, 30*, 289-304.
- =Realmuto, G., Masten, A., Carole, L., Hubbard, J., Groteluschen, A., & Chhun, B. (1992). Adolescent survivors of massive childhood trauma in Cambodia: life events and current symptoms. *Journal Traumatic Stress, 5*, pp.589-599.
- =Roth, S., Newman, E., Pelcovitz, D., Van der Kolk, B., & Mandel, F. (1997) Complex PTSD in victims exposed to sexual and physical abuse: results from the DSM-IV field trial for Post-traumatic Stress Disorder. *Journal of Traumatic Stress, 10*(4), pp. 539-55.
- =Sack, W., Clarke, G., & Seeley, J. (1995). Posttraumatic stress disorder across two generations of Cambodian refugees. *Journal of the American Academy of Child & Adolescent Psychiatry, 34*(9), pp. 1160-1166.
- =Sibai, A., & Sen, K. (2000). *War and traumatic injury related disability: The need for rehabilitation in the after math of war in Lebanon (1999)*. This study was part of a larger study funded by the European Commission's INCO-DC Program (1996-1999) in Lebanon and Palestine. IC 18 CT 96 0036. It involved AUB Lebanon, INED France and Cambridge UK .
- =Smith, P., Perrin, S., Yule, W., & Rabe-Hesketh, S. (2001). War exposure and maternal reactions in the psychological adjustment of children from Bosnia-Herzegovina. *Journal of Child Psychology and Psychiatry, 42*, pp.395-404.
- =Smith, P., Smith, J., & Earp, J. (1999). Beyond the measurement trap: A reconstructed conceptualization and measurement of woman battering. *Psychology of Women Quarterly, 23*, pp. 177-193.

- =Son, L. (1995). Understanding the psychological impact of war trauma and the refugee camp experience on Cambodian refugee children residing in site two. *Dissertation Abstracts International Section A: Humanities & Social Sciences*. 55(8-A), p. 2285.
- =Summerfield, D. (1997). The effect of conflict on civilian populations. In: D. Black, M. Newman, J. Harris-Hendriks, & G. Mezey (Eds.), *Psychological Trauma: A Developmental Approach*. London: Gaskell, pp.148-175.
- =Terr, L. (1991). Childhood trauma: An outline and overview. *American Journal of Psychiatry*, 148, pp.10-20.
- =Thabet, A & Vostanis, P. (2000). Post-traumatic stress disorder reactions in children of war: A longitudinal study. *Child Abuse and Neglect*, 24, pp.291–298.
- =Thabet, A. M., Abed, Y., & Vostanis, P. (2004). Comorbidity of PTSD and depression among refugee children during war conflict. *Journal of Child Psychology and Psychiatry*,45(3), pp.533-542.
- =United Nations (2000). What the United Nations does for humanitarian assistance. <http://www.un.org.Overview/brief4.html>.
- =UNRWA [ United Nation Relief and Work Agency] (2005). The Public Information Office, UNRWA Headquarters, Gaza: Palestine (www.UNRWA.Org)
- =Wayment, H. (2004). It Could Have Been Me: Vicarious Victims and Disaster-Focused Distress, *Pers Soc Psychol Bull*, 30(4),pp. 515 - 528.
- =Weaver, T., & Clum, C. (1995). Psychological distress associated with interpersonal violence: A meta-analysis. *Clinical Psychology Review*, 15(2), pp.115-140.
- =Widom, C. (1999).. Posttraumatic stress disorder in abused and neglected children grown up. *American Journal of Psychiatry*, 156(8),pp. 1223-9.
- =Wolfe, D., Sas, L., & Wekerle, C. (1994). Factors associated with the development of post-traumatic stress disorder among child victims of sexual abuse. *Child Abuse & Neglect*, 18, pp.37-50.
- =Yule, W. (2001). Posttraumatic stress disorder in the general population and in children. *Journal of Clinical Psychiatry*, 62(suppl 17),pp. 23-28.
- =Zivcic, I. (1993). Emotional reactions of children to war stress in Croatia. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32,pp.709-713.