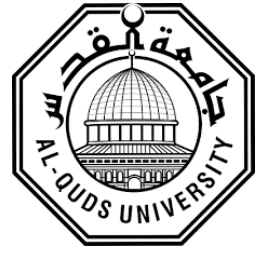


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Effects of War Trauma on Preschool Children Anxiety and Post-traumatic Stress Disorder in Gaza strip

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Effects of War Trauma on Preschool Children Anxiety and Post-traumatic Stress Disorder in Gaza strip

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**A thesis Submitted in Partial Fulfillment of the Requirements for
the Master Degree of Community Mental Health**

School of Public Health- Al- Quds University

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Dedication

I would like to dedicate this work

To my beloved mother who is the sun that brightens my way.

"Words can never express how grateful I am for you, and I cannot tell you how thankful I am for being always there for me".

To my dear father for being supported and encouraged me during the period of my study.

To my dear sister and my two brothers who are always there for me.

To my precious son who brought meaning and joy to my life.

To my husband who were patient and supportive during the period of study.

And to all my friends and colleagues.

With respect,

Heba Al-ghalayini

Declaration

I hereby declare that this thesis submitted for the degree of master in community mental health is my own work and effort, and it has not been submitted anywhere for a higher degree in any university or institution.

Signature:

Heba Riyadh Al-ghalayini

Date:

Acknowledgment

All praise to God, the one to whom all dignity, honor, and glory are due, my lord and creator for the blessing and reconcile in my scientific and practical life.

My gratitude to my supervisor Pro.Abdelaziz Thabet for his guidance, supervision, and patience. I would like to thank him for useful comments, remarks and engagement throughout working on the thesis.

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All respect and appreciation to the Ministry of Education and kindergartens principals for facilitating my study implementation process.

Special thanks to all the mothers who participated in the study for their commitment and efforts.

Special thanks to Mr. Saed Al-tawil who assisted me in collecting the data from the southern area kindergartens.

Abstract

Aim of the study: the study aims at exploring the effects of recurrent wars trauma on developing PTSD and anxiety disorders among preschool children in Gaza strip, and it's relation with some other socio-demographic factors such as the number of siblings, sex and family income. Descriptive analytic, cross sectional design was used.

Methods: the researcher used Gaza traumatic events checklist, UCLA PTSD reactions index parents form, and Spence anxiety scales for parents of preschool children as well as a socio-demographic status form.

Sample consisted of: 399 mothers of preschool children who are attending kindergartens in the five governorates of Gaza Strip aged from 3-6 years old.

Results: the researcher found that 26.6% of preschool children were exposed to severe traumatic events, 46.6% to moderate traumatic events and 26.8% to mild traumatic events. The prevalence of PTSD after more than 6 months of being exposed to war traumatic events was 6%.

The study found that PTSD scores were higher among children whose age was 5 than among the two other age groups.

The mean of anxiety disorders among preschool children was 49.8 %, this result is not only related to exposure to war traumatic events, as other factors could play a role in developing anxiety disorders such as the different parenting styles, abuse, culture, and parents mental health problems.

Specific phobia constituted the highest prevalence followed by generalized anxiety and separation anxiety. The results showed that there was significant correlation between trauma and total PTSD and anxiety results, As well a significant correlation between PTSD results and anxiety results, meaning that the more the preschooler was exposed to war traumatic events, the more likely that he will suffer from PTSD and anxiety symptoms, In addition children suffering from PTSD are more likely to suffer from anxiety disorders.

The study did not find any differences in males and females results in relation to trauma, PTSD or anxiety.

Recommendations: further researches should involve the psychiatric assessment of primary care givers in parallel with that of children in order to understand the impacts of family and social support on developing PTSD and anxiety problems in preschool children in Gaza strip, in addition more in-depth studies measuring the effect of the number of traumatic events, as well as the severity of exposure to different types of war related trauma should be conducted instead of only depending on the counting of the traumatic events that preschool children experienced for determining the severity of traumatic events.

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List of Abbreviations

ADHD	Attention Deficit and Hyper Activity Disorder
ASD	Acute Stress Disorder
CBT	Cognitive Behavioral Therapy
CR	Conditional Response
CS	Conditioned Stimulus
D.F	Degree of Confidence
DSM	The Diagnostic and Statistical Manual Of Mental Disorders.
EMDR	Eye Movement Desensitization and Reprocessing.
GAD	Generalized Anxiety Disorder
MOE	Ministry Of Education
NGO	Non-Governmental Organizations
OCD	Obsessive Compulsive Disorder
P	Level of Statistical Significance
PAPA	Preschool Age Psychiatric Assessment
PCPS	Palestinian Central Bureau of Statistics
PTRTS	Papa Test–Retest Study.
PTS	Post-Traumatic Stress.
PTSD	Post-Traumatic Stress Disorder
SCAS	Spence Children Anxiety Scale
SD	Standard Deviation
UCLA scale	University of California Los-Angelos Scale
UNRWA	United Nation Relief and Work Agency
US	Unconditional Stimulus
X	Chi- square

Chapter 1

1. Introduction

1.1 Overview and Background

Since 1948, Palestinians have suffered from the repeated episodes of war and conflict which have occurred approximately every seven to ten years. So Palestinians live under severe conditions with the sense that every nine years there is a war or an Intifada (uprising), compounded with a continued sense of oppression caused by the occupation (Altawil, et al. 2008).

In the last seven years people living in Gaza were exposed to three recurrent wars; the first one was on December 2008 which lasted 23 days, the second one started on November 2012 and lasted for 8 days, and the last one started on July 2014 and lasted for 51 days.

On 7 July 2014, a humanitarian emergency was declared in the Gaza Strip, involving intense Israeli aerial and navy bombardment and. Israeli aggression de-escalated following an open-ended ceasefire which entered into force on 26 August. The scale of destruction, devastation and displacement during the 51 days of conflict was unprecedented in Gaza, since at least the start of the Israeli occupation in 1967. The humanitarian impact of this aggression comes against a backdrop of heightened vulnerability and instability in Gaza (OCHA, 2014).

There is no doubt that these offenses have too many devastating effects causing physical, emotional and psychological problems on people living in Gaza Strip including children. War traumatic events affected Palestinians normal daily life and it has a negative impact on Palestinians wellbeing in all ages especially children. Those traumatic events lead to mental health problems such as anxiety, depression, post-traumatic stress disorder, and attention deficit disorder (Thabet et al., 2004).

Trauma overwhelms the person's ego capacities to understand what has happened (Herman, 1992). Fundamental assumptions about the safety of the world and trust in the relationships are undermined as the individual struggles to assimilate this experience (Herman, 1992).

Children who experience severe early trauma often develop a foreshortened sense of the future. They come to expect that life will be dangerous, that they may not survive, and as a result, they give up hope and expectations for themselves that reach into the future (Terr, 1992).

Exposure to trauma in early childhood may cause disruptive and disorganizing effects on early physical, cognitive, social, and emotional development. Traumatized preschoolers often present with regulatory and social difficulties including frequent tantrums, aggression, and noncompliance. Some young children exposed to trauma develop symptoms consistent with a diagnosis of posttraumatic stress disorder (PTSD; American Psychiatric Association [APA], 1994). Children may suffer from posttraumatic stress disorder (PTSD) as well as other types of psychopathology, which are not specific to the experience of trauma, such as general anxiety and depression (Barenbaum, Ruchkin, & Schwab-Stone, 2004). Symptoms of post trauma include re-experiencing the traumatic event, avoidance of reminders of the event, and arousal (Moin et al., 2007). Responses to violence and trauma may be categorized as either self-directed or directed toward others and can include nightmares and sleep disturbances, regression and clinginess to caregivers, loss of concentration and learning difficulties, fearfulness and anxiety, and aggressive behavior (Sagi-Schwartz, 2008).

Previous studies have proved that there is a strong relationship between traumatic experiences and PTSD symptoms among pre-school children, but just a few children have met the full diagnostic criteria of PTSD due to the old diagnostic criteria that they relied on in diagnosing PTSD for pre-school children. Previous studies had reported high levels of internalizing and externalizing symptoms as well as PTSD symptoms of re-experiencing, avoidance, and hyper-arousal in toddlers who experienced traumatic life events (Mongillo, Briggs-Gowan, Ford, & Carter, 2009; Scheeringa, et al., 2003), though they may not meet the full criteria for this diagnosis (Scheeringa, Zeanah, Myers, & Putnam, 2003).

Early childhood trauma contributes to adverse adult outcomes as well, including depression, posttraumatic-stress disorder, substance abuse, health problems (likely related to increased stress and wear and tear on the immune system) and decreased occupational attainment (Harris, Putnam & Fairbank, 2004).

The studies conducted on Palestinian children during the first Intifada showed that they suffered from depression, anxiety, and PTSD symptoms (Thabet & Vostanis, 2000; Khamis, 1993; Gabarino & Kostelny, 1996).

This study will focus on preschool children's PTSD and anxiety symptoms resulted from trauma caused by the 2014 war on Gaza and will help us know its psychological impacts on preschool children mental health by measuring PTSD and anxiety symptoms that have been developed after being exposed to war traumatic events.

This study is conducted after more than 6 months of the ending of the 2014 war on Gaza on 399 children recruited from kindergartens in all Gaza Strip areas and it examines the types of traumatic events that they have been exposed to during the war and PTSD and anxiety reactions they developed after it.

1.2 Study Problem

Due to the recurrent aggressions on Gaza strip especially the 2014 Israeli aggression on Gaza strip, children had been exposed to a large number of war related traumatic events. This study attempts to identify the effects of war traumatic experiences on developing PTSD and anxiety symptoms among a very young age group of population like preschool children aged 3 to 5 years old, as well as to explore the likelihood of this age group to develop PTSD and anxiety disorders after exposure to these war traumatic events as same as older children and adults.

1.3 Justification of the Study

The Gaza Strip population lives in exceptionally severe circumstances with a unique situation around the world. This comes after being exposed to three Israeli aggressions in 2008, 2012 and the 2014 offense on Gaza and its related traumatic events, which may have severe and serious effects especially on little children as they are considered to be a more vulnerable group. Few local studies have taken the relationship between trauma and the mental health of children; especially pre-school children into consideration. Most studies on the effect of political conflict involved older children and adolescents (Zivcik, 1993; Goldstein et al, 1997; Thabet et al, 2002).

There has been limited research with pre-school children, with emerging evidence that young children are also affected by trauma, albeit expressing their distress differently (Pfefferbaum, 1997; Gurwitsch et al, 1998), particularly when exposed to political conflict (Laor et al, 1996; Zahr, 1996).

I found that very few studies have examined the effect of war trauma on this particular age group compared to the studies that were implemented on school children and adolescents. Despite the potentially profound impact of war-related violence on young lives, the psychosocial impact of violent warlike conditions on children remains understudied in Palestine. Research focused solely on the effect of exposure to traumatic events on PTSD in the West Bank and Gaza (Abu-Hein, Qouta, Thabet, & El Sarraj, 1993; Baker, 1990; Baker, El-Husseini, Arafat, & Ayyoush, 1991; Barber, 1999, 2001; Garbarino & Kostelny, 1996; Haj-Yahia, 2004; Herberg & Övensen, 1993; Punamäki, Qouta, & El Sarraj, 1997, 2001; Khamis, 1993, 1995, 2000; Qouta, Punamäki, & El Sarraj, 1995, 1998, 2003, 2005; Thabet & Vostanis, 1999; Thabet, Abed, & Vostanis, 2002).

Most previous studies on anxiety showed that too many anxiety disorders have a very early age of onset; anxiety disorders showed a steady increase over development, starting before 5 years of age and building across the childhood and early adolescent years (Roza et al. 2003). And from here comes the importance of highlighting the anxiety problems of preschoolers in Gaza especially after being exposed to these catastrophic war events.

The DSM-IV-TR field trials for PTSD clearly demonstrated that the younger the age at which the trauma occurred, and the longer its duration, the more likely people were to have long term problems with the regulation of anger, anxiety and sexual impulses (Van der Kolk et al, 1993).

Using Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) criteria, it has been estimated that about 9% to 10% of preschool children have an anxiety disorder.

1.4 Study Objectives

1.4.1 General Objective:

To investigate the effect of war traumatic experiences on developing Post traumatic stress and anxiety disorders among preschool children in Gaza Strip.

1.4.2 Specific Objectives:

1. To recognize the types of war traumatic events and its severity on pre-school children in Gaza Strip.
2. To investigate the prevalence of PTSD and anxiety problems among pre-school children in Gaza strip.
3. To identify the relationship between trauma and developing PTSD and anxiety symptoms among preschool children in Gaza strip.
4. To explore the relationship between socio-demographic variables such as (sex, age and the place of residence) and the PTSD among preschoolers in Gaza Strip.
5. To determine the relationship between socio-demographic variables and anxiety problems among pre-school children in Gaza Strip.

1.5 Research questions:

1. What are the types of war traumatic events and its severity on pre-school children in Gaza Strip?
2. What is the prevalence of PTSD and anxiety problems among pre-school children in Gaza Strip?
3. What is the relationship between war trauma and the development PTSD symptoms among preschool children in Gaza Strip?
4. What is the most prevalent PTSD symptom among preschool children in Gaza Strip?
5. What is the relationship between exposure to war trauma and developing anxiety problems among pre-school children in Gaza Strip?
6. What is the most prevalent anxiety disorder among preschool children in Gaza Strip?
7. What is the relationship between PTSD and the socio-demographic variables (sex, age and number of siblings) of preschoolers in Gaza Strip?

8. What is the relationship between anxiety and the socio-demographic variables (sex, age and number of siblings) of preschoolers in Gaza Strip?
9. What is the relationship between exposure to trauma, and developing PTSD and anxiety disorder among pre-school children in Gaza Strip?

1.6 Definitions of variables:

Trauma

Psychological trauma is the unique individual experience of an event or enduring conditions, in which the individual's ability to integrate his/her emotional experience is overwhelmed or the individual experiences (subjectively) a threat to life, bodily integrity, or sanity (Pearlman & Saakvitne, 1995).

Post-traumatic stress disorder (PTSD)

Post-traumatic stress disorder is a psychiatric disorder that can occur following a major traumatic event. Characteristic symptoms include re-experiencing phenomena such as nightmares and recurrent distressing thoughts of the event, avoidance and numbing of general responsiveness such as trying not to talk about or be reminded of the traumatic event, experiencing detachment and estrangement from other people and hyperarousal symptoms including sleep disturbance, increased irritability and hypervigilance (Bisson & Andrew, 2009).

Anxiety

Anxiety is a generalized mood condition that can occur without an identifiable triggering stimulus (Ohman 2000).

Anxiety is a future-oriented mood state in which one is ready or prepared to attempt to cope with upcoming negative events (Barlow, 2002).

Pre-school children

Preschool children means children who are below the age and grade level at which the free public education is provided; and of the age or grade level at which they can benefit from an organized educational program provided in a school or instructional setting, provided that such children shall not be younger than three years of age.

1.7 Context of the study

1.7.1 Gaza Strip

This study was conducted in Gaza Strip, which is a part of Palestine. Therefore, here is some information about the demographic, socioeconomic, and environmental context. The entire area of historical Palestine is about 27,000 Km², Palestine stretches from Ras Al- Nakoura in the north to Rafah in the south. Palestine is boarded by Lebanon in the north, the Gulf of Aqaba in the south, Syria and Jordan in the east and by Egypt and Mediterranean Sea in the west. Palestine was placed under British mandate, finished by Israel establishment in 1948 in implementing the Balfour Declaration in 1917 to providing a homeland for Jews, the result was uprooted most of Palestinian from their cities, towns, and Villages and migrate to West bank, Gaza strip, Jordan, Lebanon, Syria, and others countries. Now Palestine is limited to two geographically separated area, Gaza Strip (GS), and West Bank (WB), total both areas is 6020 km², Which represents 22% of historical Palestine area (MOH, 2006).

According to Palestinian Central Bureau of statistics (2014), the estimated number of population in Palestinian territories is 4.6 million: 2.8 million in the West Bank and 1.8 million in Gaza Strip, 909,439 males and 880,571 females. Population density in Gaza Strip is very high compared with the density in West Bank and the neighboring countries. Density rate is about 4,904 inhabitants per one square kilometer in Gaza Strip, and about 500 inhabitants per one square kilometer in West Bank (PCBS, 2014).

1.7.2 Socio-economic context

Gaza is an urban economy, heavily reliant on intensive trade, communication and movement of people. The area has been essentially isolated since 2005, meaning that, in the longer term, its economy is fundamentally unviable under present circumstances. People of Gaza remain worse off than they were in the 1990s, despite increases in real gross domestic product (GDP) per capita over the past three years (United Nations Special Coordinator Office, 2012).

People in Gaza are complaining of a high unemployment rate, socio-economic deprivation.

According to the latest World Bank economic update (2015), Gaza's unemployment rate - at 43.9 per cent - is now the highest in the world. Even more alarming is the situation of youth unemployment which soared to more than 60 percent by the end of 2014.

According to the report, Gaza's GDP would have been about four times higher than it currently is if it weren't for the conflicts and multiple restrictions. It also considers that the Israeli imposed blockade, in place since 2007, has resulted in a 50 per cent decrease of Gaza's GDP. The report further states that in 2014 the average monthly salary in Gaza amounted to US\$ 174; with a poverty rate of 39 per cent, an 11 per cent increase from 2013.

1.7.3 Environmental context

Gaza Strip has been under an Israeli blockade for over seven years, with access and movement of goods and people in and out of Gaza severely restricted and at times forced to a complete halt. Since 2006, Palestinians in Gaza face regular power cuts as provision of electricity remains well below demand. The cuts affect private business and homes, health services, waste water treatment plants, and schools. They are suffering as well from overcrowding, short life expectancy, increasing infringements of their economic, social, civil, political, security and human rights and on their freedom of movement. Gaza's health system suffers from chronic shortages in medicine, medical supplies and equipment; also the water and wastewater situation in Gaza is critical (OCHA, 2014).

1.7.4 Preschool children in Gaza Strip

In Gaza Strip, education is offered to preschool children in kindergartens where children are divided into two groups; children with ages between 4-6 years and children with ages less than 4 years. According to Ministry of Education (2014) there are 477 kindergartens are distributed in all of Gaza Strip regions (north Gaza, East Gaza, West Gaza, Middle Zone, Khan-Younis, and Rafah) (MOE, 2014).

Distribution of study population according to place of residence and gender,

Table (1-1)

Regions	Number of Kindergartens	Number of Males	Number of Females	Number of Teachers
North Gaza	85	6037	5690	439
East Gaza	70	3150	3229	319
West Gaza	66	4254	4421	337
Middle zone	67	3623	3538	282
Khan-Younis	60	4662	3389	250
East Khan-Younis	50	2249	2375	196
Rafah	79	5234	4988	463
Total	477	29209	27630	2286

Chapter 2

2. Theoretical and conceptual framework and the literature review

2.1 Introduction

In this chapter the researcher will talk about theoretical framework and literature review. The first part will present a review about the concepts of trauma, PTSD, and anxiety, by examining the early use of these terms in research and theories that interpreted these concepts, and factors associated with them. The second part will present the previous studies about the three concepts trauma, PTSD, and anxiety in preschool children, and the effects of trauma on developing PTSD and anxiety symptoms.

2.1.2 Conceptual frame work

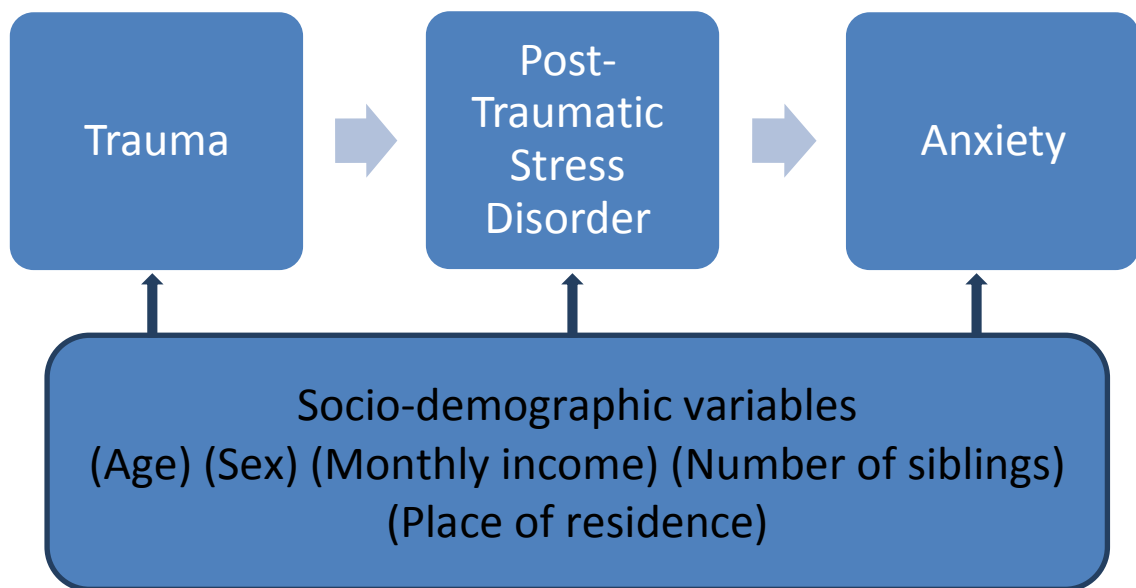


Figure (2-1) Conceptual frame work diagram.

2.2 Definition of Trauma

DSM-IV- Trauma definition:

direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate (Criterion A1). The person's response to the event must involve intense fear, helplessness, or horror (or in children, the response must involve disorganized or agitated behavior) (Criterion A2).

Trauma is often the result of an overwhelming amount of stress that exceeds one's ability to cope or integrate the emotions involved with that sudden unexpected experience.

Children may experience Trauma as a result of a number of different circumstances, such as: Abuse, including sexual, physical, emotional, Exposure to domestic violence, Severe natural disaster, such as a flood, fire, earthquake or tornado, War or other military actions, Abandonment, Witness to violence in the neighborhood or school setting, including fights, drive by, shootings, and law enforcement actions, Personal attack by another person or an animal, Kidnapping, Severe bullying, Medical procedure, surgery, accident or serious illness.

2.2.1History of trauma

The study of psychological trauma has its roots in the later part of the nineteenth century with the work of the French neurologist Jean Martin-Charcot. Charcot was the first person to attempt to study and define a disease known as “hysteria”. Before Charcot’s research, hysteria had been considered a disease with incoherent and incomprehensible symptoms (Herman, 1992).

Charcot was able to document, in great detail, the development and characteristics of the disease. Charcot was able to demonstrate the disease was psychological in nature. He demonstrated his theory by artificially producing the disease’s symptoms in patients by using hypnosis. Charcot was unable to produce the nature of the disease and did not offer a reasonable intervention for treatment. It was the goal of his students, including Sigmund Freud, William James, and Pierre Janet, to research the nature and possible cure for hysteria. Both Janet and Freud deduced the symptoms of hysteria were the result of psychological trauma.

They believed the symptoms were the result of an altered state of consciousness produced by the unbearable emotional reactions to the traumatic events. Janet called the reaction “dissociation: and Freud called it “double consciousness” (Herman, 1992). Janet and Freud discovered symptoms could be alleviated if the patient was able to verbalize the traumatic event stored in unconscious memory. Janet would call this treatment “psychological analysis” and Freud would eventually call it “psychoanalysis”. The work by Janet, Freud and, Freud’s counterpart Joseph Brueur gave birth to modern psychotherapy. This method of treatment would allow a person to discuss the hysteria in a manner that would be conducive to the alleviation of the symptoms.

Psychoanalytic theory dominated the research into trauma for the later part of the nineteenth century and the early twentieth century. Psychoanalysis became “a study of the internal vicissitudes of fantasy and desire, dissociated from the reality of experience” (Herman, 1992). Freud based most of his research on the exploration of women’s sexual lives. Freud found a correlation between sexually abuse women and hysterical behavior. Freud later recanted his study of hysterics in women reporting the women were not sexually abused. He reported the patients “made up” the fantasies of sexual abuse. This recantation was the turning point away from the study of hysteria and trauma as associated with the unconscious. After the death of Charcot and the recantation of Freud’s work, the study of psychological trauma resurfaced during World War I. Charles Myers, a British psychologist, was one of the first to examine soldiers who

suffered from what he termed “shell shock” (Herman, 1992).

This nervous disorder was thought to be the result of the concussive effects of exploding shells. It was later discovered that soldiers, who did not see combat, would suffer the same nervous condition, as did the soldiers in combat. The prolonged exposure to war and the aftermath produced hysterical symptoms in men similar to the symptoms reported in women by Charcot and Freud. The diagnosis of combat neurosis was not viewed as being “honorable”.

Traditionalists questioned the moral integrity of the soldier and questioned whether to treat a soldier with this disorder. Traditionalists viewed the soldier afflicted with combat neurosis as a coward and an inferior human being (Herman, 1992). Lewis Yealland, a British Psychiatrist, held on to the beliefs of the Traditionalists. Yealland used a method, which included threats, punishment, and shame. If a soldier presented with mutism due to the effects of the psychological trauma, Yealland would apply electric shocks to the soldier’s throat until the soldier spoke. Yealland would apply the shocks after tying the soldier to a chair while yelling patriotic jargon for hours. The Traditionalist view continued its form of treatment until W.H.R Rivers, a physician, offered a more humane treatment based on psychoanalytic principles. His work with a young officer, Siegfried Sassoon, demonstrated the humane approach to treatment could help the soldier return combat without the hysterical symptoms. Rivers’ approach proved to be a success, but a few years after World War I, the interest in combat neurosis faded. Abram Kardiner, an American psychiatrist schooled in Vienna, began his research of combat neurosis in the 1920’s. Kardiner first attempted to develop a theory from the Psychoanalytic point of view on combat neurosis. He eventually abandoned the theory and replaced it with a framework based on the research of Janet. In 1941, Kardiner published his second book, *The Traumatic Neuroses of War*, which eventually gave way to his development of the modern framework of traumatic syndromes (Herman, 1992). During World War II, Kardiner joined another American Psychiatrist, Herbert Spiegel, to revise his text and begin treatment based on the work of Rivers. Kardiner and Spiegel found soldiers to be suffering from the loss of attachment to their fighting unit. The treatment would then have to be relatively close to the battlefield and include recreation of the traumatic event through hypnosis. This form of treatment proved effective, but Kardiner and Spiegel warned military psychiatrist the effects of treatment would not be permanent due to the lasting effects of trauma on the mind. This treatment style stayed in practice until the end of World War I when, once again, the study of trauma would fade (Herman, 1992).

The Vietnam War would be the next reappearance in the interest of combat neurosis by two American psychiatrists, Robert Lifton and Chaim Shatan developed “rap groups” for combat veterans suffering from the psychological trauma of war and antiwar sentiment. These “rap groups” offered the soldier a place to discuss their experiences and raise awareness about the effects of war (Herman, 1992). By the 1970’s, the “rap groups” spread across the nation forcing the Veterans Administration to begin research into the effects of combat exposure to soldiers. It was also during this time, the feminist movement began to raise awareness about the everyday violence in the sexual and domestic lives of women. Women suffered the same effects of combat neurosis in their civilian lives. The effects of rape, sexual abuse, and sexual violence were more prevalent in women than the trauma of war on men. Freud touched on this sexual issue before his recantation several decades prior to the feminist movement.

In 1980, the American Psychiatric Association developed the category of posttraumatic stress disorders. This category was based on the work of Kardiner. It included the traumatic symptoms suffered by all effected by trauma. This category of disorders gave rise to the challenge of treating such disorders. The theories of crisis and crisis intervention began to take form amidst the newly found appreciation for traumatic stress.

2.2.2Early childhood trauma

Early childhood trauma generally refers to the traumatic experiences that occur to children aged 0–6. Because infants’ and young children’s reactions may be different from older children’s, and because they may not be able to verbalize their reactions to threatening or dangerous events, many people assume that young age protects children from the impact of traumatic experiences. Young children are affected by traumatic events, even though they may not understand what happened.

A growing body of research has established that young children even infants may be affected by events that threaten their safety or the safety of their parents/caregivers, and their symptoms have been well documented. These traumas can be the result of intentional violence such as child physical or sexual abuse, or domestic violence or the result of natural disaster, accidents, or war. Young children also may experience traumatic stress in response to painful medical procedures or the sudden loss of a parent/caregiver (National Child Traumatic Stress Network, 2010).

2.2.3The biology of early trauma

Trauma is an external factor that clearly appears to change brain chemistry and probably structure. For example, Perry and colleagues (1995) have considered how traumatic “states” become “traits.” Perry has described how infants and older individuals respond to a threat along two pathways. One is the well-known “fight or flight” response, which Perry calls the arousal continuum, whereby a progression of biochemical reactions result in increased cortisol (as well as other more poorly understood phenomena). The other pathway Perry describes is the dissociative continuum, whereby there are gaps in the stream of consciousness. Endogenous opiates and activation of the parasympathetic nervous system lead to the “freeze or surrender” response, with decreased movement and decreased attention. With repeated activation, the arousal pathways can make a child with anxiety or trauma appear to have attention deficit hyperactivity disorder (ADHD), while older children with the more dissociative aspects may appear to have not only attention problems but also learning disabilities, memory problems, and behavior problems.(Perry et al,1995). Children with PTSD can certainly manifest a combination of arousal and dissociation, and any given child may demonstrate different types of reactions to a given trauma. Physical pain, along with the nature of the trauma, may also modify these manifestations of PTSD. It should be noted that dissociation and dissociative disorders per se are closely related to psychic trauma and can be looked at as both a neurobiological reaction and a psychological defense.

2.2.4 Theories of trauma

2.2.4.1 Evolution's legacy

It is impossible to fully understand human behavior and the human response to trauma without grasping key insights about the way our evolution has affected us. The fight-or-flight response described below is a part of our mammalian heritage, and continues to profoundly impact, at a physiological level, our response to all stresses, even those caused by our sophisticated social environments. We are born with a number of innate emotions that are also part of our mammalian heritage and that produce patterned and predictable responses in all of our organs, including our brain. This means that overwhelming emotions can do damage to our bodies as well as our psyches. As a species we survived largely because we developed as social animals for mutual protection and this social nature of human beings is grounded in our need to attach to other human beings from cradle to grave. Children who suffer disrupted attachments may suffer from damage to all of their developmental systems, including their brains and we are particularly ill-suited to having the people we are attached to also be the people who are violating us. Our very complex brains and powerful memories distinguish us as the most intelligent of all animals, and yet as we will see, it is this very intelligence that leaves us vulnerable to the effects of trauma such as flashbacks, body memories, post-traumatic nightmares and behavioral reenactments.

Human brains function best when they are adequately stimulated but simultaneously protected from overwhelming stress. This explains our need for order, for safety, for adequate protection (Terr, 1992).

2.2.4.2 The fight-or-flight response

We are animals and like other animals, we are biologically equipped to protect ourselves from harm as best we can. The basic internal protective mechanism is called the fight-or-flight reaction. Whenever we perceive that we are in danger our bodies make a massive response that affects all of our organ systems. This change in every area of basic function is so dramatic that in many ways, we are not the same people when we are terrified as when we are calm.

Each episode of danger connects to every other episode of danger in our minds, so that the more danger we are exposed to, the more sensitive we are to danger. With each experience of fight-or-flight, our mind forms a network of connections that get triggered

with every new threatening experience. If children are exposed to danger repeatedly, their bodies become unusually sensitive so that even minor threats can trigger off this sequence of physical, emotional, and cognitive responses. They can do nothing to control this reaction - it is a biological, built-in response, a protective device that only goes wrong if we are exposed to too much danger and too little protection in childhood or as adults. The real nature of the fight-or-flight response means that if we hope to help traumatized people, then we must create safe environments to help counteract the long-term effects of chronic stress (Seligman, 1992).

2.2.4.3 Learned helplessness

If a person is able to master the situation of danger by successfully running away, winning the fight or getting help, the risk of long-term physical changes are lessened. But in many situations considered to be traumatic, the victim is helpless and it is this helplessness that is such a problem for human beings. As a species, we cannot tolerate helplessness - it goes against our instinct for survival. We know from animal experiments, that helplessness can cause changes in the animals' ability to recognize and escape from danger so that once the animal becomes accustomed to trauma, it fails to try and escape from danger. This has been called "learned helplessness".

Apparently, there are detrimental changes in the basic neurochemistry that allows the animal to self-motivate out of dangerous situations. Change only occurs when the experimenter actively intervenes and pulls the animal out of the cage. At first, the animal runs back in, but after sufficient trials, it finally catches on and learns how to escape from the terror once again. The animals' behavior improves significantly, but they remain vulnerable to stress. As in human experience, animals show individual variation in their responses. Some animals are very resistant to developing "learned helplessness" and others are very vulnerable (Seligman, 1992). We know that people can learn to be helpless too, that if a person is subjected to a sufficient number of experiences teaching him or her that nothing they do will affect the outcome, people give up trying. This means that interventions designed to help people overcome traumatizing experiences must focus on mastery and empowerment while avoiding further experiences of helplessness (Seligman, 1992).

2.2.4.4 Loss of “volume control”

The experience of overwhelming terror destabilizes our internal system of arousal - the internal “volume control” dial that we normally have over all our emotions, especially fear. Usually, we respond to a stimulus based on the level of threat that the stimulus represents. People who have been traumatized lose this capacity to “modulate arousal”. They tend to stay irritable, jumpy, and on edge. Instead of being able to adjust their “volume control”, the person is reduced to only an “on-or-off” switch, losing all control over the amount of arousal they experience to any stimulus, even one as unthreatening as a crying child.

Children are born with only an on-or-off switch. Gradually, over the course of development and with the responsive and protective care of adults, the child’s brain develops the ability to modulate the level of arousal based on the importance or relevance of the stimulus. This is part of the reason why the capacity of adults to soothe frightened children is so essential to their development. They cannot soothe themselves until they have been soothed by adults. Children who are exposed to repeated experiences of overwhelming arousal do not have the kind of safety and protection that they need for normal brain development. They may never develop normal modulation of arousal. As a result they are chronically irritable, angry, unable to manage aggression, impulsive, and anxious. Children – and the adults they become – who experience this level of anxiety will understandably do anything they can to establish some level of self-soothing and self-control. Under such circumstances, people frequently turn to substances, like drugs or alcohol, or behaviors like sex or eating or even engagement in violence, all of which help them to calm down, at least temporarily. Blaming and punishment is thus counterproductive to the goals that we hope to achieve – they just tend to make things worse (Alford et al., 1988).

2.2.4.5 Summary of theories

Traumatization occurs when both internal and external resources are inadequate to cope with external threat. The way we think, the way we learn, the way we remember things, the way we feel about ourselves, the way we feel about other people, and the way we make sense of the world are all profoundly altered by traumatic experience.

-Fight or flight response: biological mechanism to protect from harm Happens whenever the person perceives that he is in danger. Each episode of danger connects to every other episode in the mind, the more danger the person exposed to the more sensitive he will be to danger.

-Learned helplessness: in traumatic situations, the victim is helpless. Repeated helplessness changes the basic neurochemistry that allows the person to self-motivate out of dangerous situations. Intervention must focus on empowerment while avoiding future experiences of helplessness.

-Loss of volume control: people respond to stimulus based on the threat that stimulus presents. Trauma destabilizes the internal system of arousal – i.e. the “volume control” that people normally have over their emotions, especially fear. Instead, traumatized people have only an “on/off” switch. Substance use (drugs, alcohol, sex, eating, and self-harm) to calm and control internal states, blaming and punishment for destructive coping mechanisms is counterproductive.

2.3 Post-Traumatic Stress Disorder

The essential features of Posttraumatic Stress Disorder is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate (Criterion A1). The person's response to the event must involve intense fear, helplessness, or horror (or in children, the response must involve disorganized or agitated behavior) (Criterion A2). The characteristic symptoms resulting from the exposure to the extreme trauma include persistent re-experiencing of the traumatic event (Criterion B), persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (Criterion C), and persistent symptoms of increased arousal (Criterion D). The full symptom picture must be present for more than 1 month (Criterion E), and the disturbance must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion F)(American Psychiatric Association,1994).

2.3.1 Simple versus complex post-traumatic stress disorder

Experiencing traumatic events can lead to a person developing simple or complex post-traumatic stress disorder (PTSD). Recent acute traumatic events or past single traumatic events are most likely to lead to simple PTSD. Long-term chronic abuse including sexual abuse can lead to complex PTSD. Complex PTSD is more difficult to treat and can involve more complex, psychosocial factors that affect a person's ability to form healthy, trusting relationships (Herman, 1992).

2.3.2 Brief History and Prevalence of PTSD in Children

The origin of PTSD has a rather long history dating back to the 1800s (Drell, Siegel, & Gaensbauer, 1993; Terr, 1991); however, most of the literature concentrated on adults' responses to traumatic events, not children's.

PTSD was first described as "shell shock" in war veterans, a diagnosis that frequently resulted in a dishonorable discharge from the army. In terms of children, early groundwork was laid by Anna Freud, who looked at traumatized war orphans; Rene Spitz, who described "hospitalism" in children who were severely neglected in institutions; and David Levy, who published a landmark study in 1945 on psychic traumas connected with childhood surgeries. More recently, Lenore Terr has produced a strong body of work, including a study of 26 youngsters who were kidnapped and buried in California. She also looked at what happened to memories of early trauma in 20 youngsters who had suffered psychic traumas before age 5. This latter study was noteworthy in that these children had forensic evidence supporting the specific trauma histories. In 1993, the first book chapter about posttraumatic reactions in children from birth to age 3 was published.

Early literature on children's responses to traumatic events concluded that a child would be unaffected by the trauma if the caretaker remained calm and unaffected by the events (Drell et al., 1993). This belief continued until researchers shifted their attention to studying how children responded to traumatic events in the 1970s. Terr (1991) previously summarized several of these studies with each demonstrating that children respond to traumatic events in a predictable manner that is independent of the responses of their caretakers.

Since this time, numerous clinical studies have been conducted examining the effects of various types of trauma on children, including natural disasters (Bradburn, 1991; Earls, Smith, Reich, & Jung, 1988; Pynoos et al., 1993); war (Nader, Pynoos, Fairbanks, Al-Ajeel, & Al-Asfour, 1993); sexual abuse (DeBellis, Leter, Trickett, & Putnam, 1994; Wolfe, Gentile, & Wolfe, 1989); witnessing violent behavior on another person (Pynoos & Nader, 1988); serious life-threatening illness (Stuber, Nader, Yasuda, Pynoos, & Cohen, 1991); and community violence (Nader, Pynoos, Fairbanks, & Frederick, 1990; Pynoos et al., 1987). Controversial evidence has been presented in these studies in relationship to the prevalence of PTSD in children who experience trauma. One study reported a prevalence rate as high as 94% (Pynoos et al., 1987), whereas another specified a considerably lower prevalence rate of 16% (Stuber et al., 1991). Earls et al.

(1988) cited the 253 lifetime prevalence of PTSD occurring in children as 62.5%. To date, however, there are no true epidemiological data concerning PTSD in children (Perry, 1994; Terr, 1991).

One reason for extreme differences in the reported prevalence rates may be the type of trauma being reported. Those studies involving violence tended to have higher prevalence rates of over 90% (Pynoos et al., 1987; Pynoos & Nader, 1988); the lower prevalence rate was reported in the study of life-threatening illnesses (Stuber et al., 1991). Another reason for different prevalence rates may be due to the diagnostic criteria being used. The DSM-III, for example, has been shown to be more liberal in its diagnosing of PTSD than the DSM-III-R. Schwarz and Kowalski (1991b) looked at the prevalence rate of PTSD after a school shooting using both the DSM-III criteria and the DSM-III-R criteria. Under the DSM-III criteria, 91 % of students experienced PTSD, whereas the DSM-III-R criteria only classified 50% of the students with PTSD. Many of the earlier studies that indicated higher prevalence rates used the DSM-III criteria.

DSM-IV Diagnostic criteria for PTSD included a history of exposure to a traumatic event and symptoms from each of three symptom clusters: intrusive recollections, avoidant/numbing symptoms, and hyper-arousal symptoms. A fifth criterion concerned duration of symptoms; and, a sixth criterion stipulated that PTSD symptoms must cause significant distress or functional impairment.

2.3.3 Diagnostic criteria for defining PTSD in children

PTSD made its first appearance in the DSM-III, depicting characteristic symptoms following a psychologically traumatic event that is generally outside the range of human experience. The characteristic symptoms involve re-experiencing the traumatic event; numbing of responsiveness to, or reduced involvement with, the external world; and a variety of autonomic, dysphoric, or cognitive symptoms (American Psychiatric Association, 1980). The DSM-III stated that the disorder can occur at any age, including during childhood (American Psychiatric Association, 1980). Since that time, attention has been given to developing interview protocols that can make accurate diagnostic assessments of PTSD in both adults and children using the DSM criteria (e.g., Earls et al., 1988, cited in McNally, 1996). The measures covered in this article are based on definitions from the DSM, as well as empirical studies.

Although the DSM-III criteria has been demonstrated to be adequate for diagnosing children with PTSD in clinical studies (Nader et al., 1990; Pynoos et al., 1987; Saigh,

1989), this criteria received much criticism for being too general and for its lack of detail for how children respond to traumatic events (Schwarz & Kowalski, 1991a, 1991b). The DSM-III-R provides clinical descriptions of symptoms that children with PTSD may display.

Some of the symptoms include the following: (a) reliving the traumatic event through repetitive play representing the theme of the trauma; (b) losing interest in activities may be expressed in the loss of recently learned developmental skills; (c) acquiring a belief that future life goals will not be attainable; (d) developing omen formation the skill to predict future ill-fated events; and (e) exhibiting psychological and physical symptoms, such as separation anxiety and stomachaches (American Psychiatric Association, 1987; Brett, Spitzer, & Williams, 1988; Schwarz & Kowalski, 1991a).

The DSM-IV (American Psychiatric Association, 1994) diagnostic criteria for PTSD have relatively few significant changes from the DSM-III-R. Appendix A presents a summary of the DSM-IV diagnostic criteria for PTSD. One of the more significant changes was revising the definition of the stressor to include how one may respond with intense fear, helplessness, or horror (American Psychiatric Association, 1994, p. 428). Instead of helplessness, children may display disorganized or agitated behavior. In terms of children's behavior, the DSM-IV no longer highlights loss of newly learned skills under diminished activities in the avoidance criterion.

Although the DSM-IV provides symptoms characteristic of children, one group of professionals believed this nosological system has not fully addressed the symptoms of children from birth to age 3, and thus created the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (Diagnostic Classification: 0-3) (National Center for Clinical Infant Programs, 1994). Appendix B provides the diagnostic criteria for PTSD according to the Diagnostic Classification: 0-3. The unique aspect of this classification system is that each symptom is specifically related to the ages from birth to 3 (e.g., difficulty going to sleep, evidenced by strong bedtime protest or trouble falling asleep). No formal empirical studies have been conducted of this nosological system; however, some preliminary work has been completed about the usefulness of the symptomatology (Gaensbauer, 1996; Zeanah & Scheeringa, 1996). As a result, this system should complement the DSM-IV and other classification systems when working with young children.

2.3.4 Theories of PTSD

2.3.4.1 Psychological processes and PTSD

2.3.4.1.1 Memory and PTSD

In PTSD, a number of changes in memory functioning has been identified that are comparable with studies of depressed patients: There tends to be a bias toward enhanced recall of trauma-related material and difficulties in retrieving autobiographical memories of specific incidents (Buckley, Blanchard, & Neill, 2000). More specific to PTSD is a contradictory pattern of recall related to the traumatic material itself, similar to that found in studies of emotion and memory in nonclinical samples: In some studies, high levels of emotion are associated with more vivid and long-lasting memories (e.g., Brown & Kulik, 1977; Conway et al., 1994; Pillemer, 1998; Rubin & Kozin, 1984), while in others, they are associated with memories that are vague, lacking in detail, and error prone (e.g., Koss, Figueredo, Bell, Tharan, & Tromp, 1996; Kuehn, 1974; Loftus & Burns, 1982). The DSM-IV (American Psychiatric Association, 1994) describes PTSD as characterized both by high-frequency, distressing, and intrusive memories and by amnesia for the details of the event. Consistent with this are clinical studies and observations reporting that confusion and forgetting are as typical of trauma memories as is vivid, lasting recall (Herman, 1992; Terr, 1990; van der Kolk & Fisler, 1995). More systematic studies of patients' memories of personally experienced traumatic events confirm that recall tends to improve over the first few weeks (Mechanic, Resick, & Griffin, 1998), that their content may change (Schwarz, Kowalski, & McNally, 1993; Southwick, Morgan, Nicolaou, & Charney, 1997), and that they tend to be disorganized and contain gaps (Foa, Molnar, & Cashman, 1995; Harvey & Bryant, 1999a, b). The other notable feature of memory in PTSD is the reliving experiences or "flashbacks" to the trauma. Compared to normal autobiographical memory, flashbacks are dominated by sensory detail such as vivid visual images and may include sounds and other sensations. However, these images and sensations are typically disjointed and fragmentary. "Reliving" of these memories is reflected in a distortion in the sense of time such that the traumatic events seem to be happening in the present rather than (as in the case of ordinary memories) belonging to the past. Reliving episodes also do not seem to occur as a result of a deliberate search of memory, but are triggered involuntarily by specific reminders that relate in some way to the circumstances of the trauma, such as the sound of a police siren or the smell of smoke, or particular thoughts or images relating to the

event. Although flashbacks are routinely described by clinicians and researchers working with traumatized victims (e.g., Bremner, Krystal, Southwick, & Charney, 1995; Ehlers & Clark, 2000; Janet, 1904), there has been relatively little research to back up the many informal observations about their nature. In one of the first systematic studies, Reynolds and Brewin (1998) interviewed matched groups of patients suffering from PTSD or depression, as well as nonclinical controls, and asked them to describe the image or thought related to a stressful event that was most frequently coming to mind. Flashbacks, either on their own or in combination with other images and thoughts, were reported as the most frequent intrusive cognition by 43% of the PTSD patients, 9% of the depressed patients, and none of the non-patients. This supports the claim that flashbacks are a distinctive feature of PTSD. More recent research has started to look at other memory processes that are relevant to PTSD. For example, individual differences in working memory capacity (i.e., the ability to hold and manipulate material in focal attention) appear to be related to the ability to prevent unwanted material from intruding and negatively affecting task performance. Healthy individuals with greater working memory capacity are better at suppressing unwanted thoughts when instructed to do so under experimental conditions, whether these thoughts are neutral (Brewin & Beaton, 2002) or obsessional (Brewin & Smart, 2002) in nature. These findings may help to explain why low intelligence, which is strongly related to working memory capacity, is a risk factor for PTSD (Brewin, Andrews, & Valentine, 2000). Given the demands of psychological therapy, low levels of working memory capacity may also predict a less successful outcome in therapy.

2.3.4.1.2 Comorbidity, ADHD and PTSD

Studies of attention in PTSD have recently been reviewed by Buckley et al. (2000), who divided the literature into studies of automatic and strategic processing. Two studies have suggested that there is an attentional bias operating very early in processing, as shown by slowed color naming following subliminal presentation of trauma words on a Stroop test (Harvey, Bryant, & Rapee, 1996) and speeded reaction time to trauma words in a dot probe paradigm (Bryant & Harvey, 1997). However, comparable results were not obtained using an auditory recognition task with Vietnam veterans (Trandel & McNally, 1987). Thus, strong conclusions cannot be drawn, and further evidence is needed concerning automatic processing. In contrast, Buckley et al. argued that the evidence for attentional bias is clearer in studies targeting post-recognition processes, for example using Stroop tasks with supraliminal presentation times (Bryant & Harvey, 1995; Foa, Feske, Murdock, Kozak, & McCarthy, 1991; McNally, Kaspi, Riemann, & Zeitlin, 1996). While attentional bias is clearly important in PTSD, the research does not provide evidence that the effects are unique to PTSD. Rather than using the above paradigms, tasks which look at sustained attention and repeated exposure to threat stimuli may be more relevant to cognitive and exposure treatments which require patients to attend and process their trauma memories for an extended period of time. They may also be more ecologically valid in terms of patients' daily experience of vigilance in environments rich in threat cues. However, the available evidence on whether PTSD is associated with deficits in sustained attention is inconsistent (Vasterling et al., 2002; Yehuda et al., 1995).

2.3.4.1.3 Dissociation and PTSD

“Dissociation” has sometimes been defined as any kind of temporary breakdown in what we think of as the relatively continuous, interrelated processes of perceiving the world around us, remembering the past, or having a single identity that links our past with our future (Spiegel & Carden˜a, 1991). Mild dissociative reactions are common under stress, for example, being reported by 96% of soldiers undergoing survival training (Morgan et al., 2001). Dissociative symptoms most commonly encountered in trauma include emotional numbing, derealization, depersonalization, and ‘out-of-body’ experiences. They are related to the severity of the trauma, fear of death, and feeling helpless (Holman & Silver, 1998; Morris, Kaysen, & Resick, 2000; Reynolds & Brewin, 1999). It has been suggested that such reactions reflect a defensive response related to immobilization (“freezing”) in animals (Nijenhuis, Vanderlinden, & Spinhoven, 1998). In contrast to fight–flight reactions, in which heart rate normally increases, dissociation has been linked to a decrease in heart rate (Griffin, Resick, & Mechanic, 1997). When these symptoms occur in the course of a traumatic experience, they are referred to as ‘peri-traumatic dissociation.’ At least seven prospective studies have assessed peri-traumatic dissociation shortly after a trauma and found it to be a good predictor of later PTSD (Ehlers, Mayou, & Bryant, 1998; Engelhard, van den Hout, Kindt, Arntz, & Schouten, 2003; Holeva & Tarrier, 2001; Koopman, Classen, & Spiegel, 1994; Murray, Ehlers, & Mayou, 2002; Shalev, Peri, Canetti, & Schreiber, 1996; Ursano et al., 1999). Laboratory studies with healthy participants have confirmed that dissociation during exposure to a trauma film is associated with an increase in subsequent intrusive memories of the film (Holmes, Brewin, & Hennessy, 2002). In contrast, the presence of dissociative symptoms occurring after rather than during the trauma is not so consistently associated with risk for later PTSD (Brewin, Andrews, Rose, & Kirk, 1999; Harvey & Bryant, 1998, 1999b).

2.3.4.1.4 Cognitive–affective reactions and PTSD

A requirement of the PTSD diagnosis according to DSM-IV (American Psychiatric Association, 1994) is to experience intense fear, helplessness, or horror at the time of the trauma. Consistent with this, there is a strong relationship between each of these specific reactions in victims of violent crime and the risk of PTSD 6 months later (Brewin, Andrews, & Rose, 2000). Of those victims who did not go on to develop PTSD, 44% reported at least one of these reactions at an intense level, compared to 89% of those who did go on to develop PTSD. However, consistent with other studies, a small number of victims who would have met previous diagnostic criteria for PTSD did not report experiencing any of these reactions intensely. Instead, they reported high levels of anger or shame. Other investigators have identified a variety of emotions including shame and anger as sometimes being present during the most intense moments of the traumatic event (Grey, Holmes, & Brewin, 2001; Holmes, Grey, & Young, 2003). Closely related to helplessness is the idea of ‘mental defeat,’ defined as “the perceived loss of all autonomy, a state of giving up in one’s own mind all efforts to retain one’s identity as a human being with a will of one’s own” (Ehlers, Maercker, & Boos, 2000, p. 45). It is a profound state that, like helplessness, defies categorization as either an emotion or a belief, having some characteristics of both. Trauma victims who experience mental defeat may describe themselves as like an object or as being destroyed, or as ceasing to care whether they lived or died. Mental defeat, then, goes beyond mere helplessness in attacking the person’s very identity. Ehlers et al. (2000) studied former political prisoners in East Germany and found that even allowing for the degree of torture experienced, those who still had PTSD years after their imprisonment were characterized by having reacted during the trauma with mental defeat. Whereas some emotions are the direct result of outcomes, others depend on an element of cognitive appraisal (e.g., Weiner, 1986). Traumatic events vary considerably in the time that is available to the victim to appraise what is happening and to generate corresponding emotions. Post trauma, however, cognitive appraisal of the cause of, responsibility for, and future implications of the trauma will provide numerous opportunities to generate negative emotions (see also Beliefs and PTSD below). There is abundant evidence that feelings of guilt, shame, sadness, betrayal, humiliation, and anger frequently accompany PTSD (Freyd, 1996; Resick & Schnicke, 1992; Reynolds & Brewin, 1999). Longitudinal studies show that high levels of anger (Ehlers et al., 1998), and more specifically anger with others (Andrews, Brewin, Rose, & Kirk, 2000),

predict a slower recovery from PTSD. In victims of violent crime, shame is a powerful predictor of how PTSD symptoms develop over time (Andrews et al., 2000). This study provided the first evidence of a mechanism that linked a pre-trauma vulnerability factor, childhood abuse, with a failure to recover from adult traumas. Both the victims who had been abused as children and the victims who felt more shame after being assaulted as adults tended to recover more slowly. In addition, being abused as a child made victims more likely to report experiencing shame. The effect of childhood abuse on recovery was almost wholly mediated by the experience of shame. Recent innovations in the treatment of PTSD have also focused on modifying shame and guilt in addition to fear (Lee, Scragg, & Turner, 2001).

2.3.4.1.5 Beliefs and PTSD

The significance of beliefs is illustrated by the fact that although threat to life consistently emerges as a powerful predictor in studies of populations as diverse as combat veterans, political prisoners, assault victims, and motor vehicle accident victims (e.g., Dunmore, Clark, & Ehlers, 2001; Kilpatrick & Resnick, 1993), the subjective perception of threat is often a more influential predictor of distress and even of failure to respond to treatment than more 'objective' indicators (Alvarez-Conrad, Zoellner, & Foa, 2001; Bernat, Ronfeldt, Calhoun, & Arias, 1998; Girelli, Resick, Marhoefer-Dvorak, & Hutter, 1986). However, in PTSD the beliefs that are believed to be important include much more than threat. A central idea is that traumatic events shatter people's basic beliefs and assumptions (Bolton & Hill, 1996; Horowitz, 1976, 1986; Janoff-Bulman, 1992). Consistent with this, a general increase in negative beliefs about the self, others, and the world has been found in trauma victims with PTSD compared to victims not suffering from PTSD (Dunmore, Clark, & Ehlers, 1999; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). A number of authors have emphasized the potential for trauma to destroy trust and lead to the belief in victims that they have been let down or betrayed, for example by caregivers (Freyd, 1996; Herman, 1992) or superior officers (Shay, 1995). High levels of anger with others reported by PTSD patients are also consistent with a loss of belief in the good intentions of other people (Andrews et al., 2000). Work on torture victims indicates that political activists are not as traumatized by the experience as are non-activists, even though they may be more severely tortured (Basog˘lu et al., 1997). Whereas torture is consonant with the expectations of activists, for nonactivists,

it is a violation of implicit beliefs that torture is either not employed or is reserved for enemies of the state. Other research has confirmed the importance of beliefs about the self. PTSD is associated with the belief that trauma has brought about a negative and permanent change in the self and in the likelihood of achieving life goals (Dunmore et al., 1999; Ehlers et al., 2000). In shipping disasters, passengers who attributed the bad things that happened during the sinking to themselves and their actions had more symptoms of PTSD (Joseph, Brewin, Yule, & Williams, 1991; Joseph, Brewin, Yule, & Williams, 1993). A series of studies has found that negative interpretations of the event itself and of why the victim is subsequently experiencing symptoms are more frequent in people who develop PTSD after an assault or a motor vehicle accident, and particularly in those whose symptoms persist (Dunmore et al., 1999; Ehlers et al., 2000; Steil & Ehlers, 2000). In prospective studies, Dunmore et al. (2001) and Ehlers et al. (1998) additionally showed that negative interpretations of symptoms predicted a slower recovery from PTSD. As noted above, negative beliefs do not have to occur during the trauma itself but may represent the outcome of a separate appraisal process that only begins after the danger is past. Were beliefs to have occurred peri-traumatically, however, they could form part of the re-experienced trauma memory and thus be triggered by reminders of the trauma (Grey, Young, & Holmes, 2002).

2.3.4.1.6 Cognitive coping strategies and PTSD

There is now extensive evidence that attempts to suppress unwanted thoughts are usually doomed to failure and that afterwards, the thoughts return even more strongly (Wenzlaff & Wegner, 2000), and it has been suggested that the deliberate avoidance of intrusive thoughts and memories will similarly be unhelpful for the majority of trauma victims. The theoretical link between greater avoidance and higher symptom levels has been confirmed in a number of retrospective studies of assault and motor vehicle accident victims (Dunmore et al., 1999; Steil & Ehlers, 2000).

Prospective studies have shown that avoidance and thought suppression are related to a slower recovery from PTSD (Dunmore et al., 2001; Ehlers et al., 1998). Other coping strategies that are associated with a greater risk of PTSD include rumination (Ehlers et al., 1998; Murray et al., 2002) and increased use of safety behaviors (Dunmore et al., 2001).

2.3.4.1.7 Social support and PTSD

Of 14 separate risk factors for PTSD investigated in a recent meta-analysis, including trauma severity and gender, social support was shown to have the strongest effect size (Brewin et al., 2000). Although most studies have only considered positive elements such as the perception of emotional and practical support, several recent investigations have also considered negative aspects of support such as indifference or criticism. When both positive and negative support elements are investigated, a negative social environment is a better indicator of PTSD symptomatology than lack of positive support (Ullman & Filipas, 2001; Zoellner, Foa, & Bartholomew, 1999). Moreover, negative appraisal of others' support attempts at initial assessment predicted PTSD symptoms 6 and 9 months later (Dunmore et al., 2001). Negative social support, at least in the case of violent crime, appears to be more prevalent for women than for men victims, and in addition, the relationship between negative social support and later PTSD symptoms is stronger for women than for men (Andrews, Brewin, & Rose, in press). Negative social support by partners has also been found to predict a poorer response to treatment for PTSD (Tarrier, Sommerfield, & Pilgrim, 1999).

2.3.4.1.8 Summary of Psychological processes and PTSD

PTSD is associated with disturbances in a wide range of psychological processes including memory, attention, cognitive–affective reactions, beliefs, coping strategies, and social support. At present, it appears that what is most likely unique to PTSD, compared to other psychological disorders, are the unusual and inconsistent memory phenomena centered on the event itself and the recruiting of a variety of dissociative responses. In contrast, the findings concerning other processes have much in common with the results of research on depression and other anxiety disorders, with which PTSD is frequently comorbid. It is clear that the emotions involved in PTSD are not by any means restricted to fear, helplessness, and horror, or to what was actually experienced at the time of the trauma. Beliefs, too, are not restricted to those concerning the event itself but may involve much more general aspects of the person, the social world, and the future. Theories of PTSD, therefore, need to incorporate explanations of processes that are both specific to PTSD and more general, as well as processes that are relatively automatic (such as helplessness and dissociation) or relatively strategic (such as individual appraisals and choice of coping strategy).

2.3.4.2 Recent theories of PTSD

It is interesting that not all recent attempts to develop a theory of PTSD based on traditional assumptions about fear and memory have been successful. For example, Tryon (1999) proposed a theory of PTSD based on a connectionist neural network. This involved making several assumptions, for example, that there would be an association between enhanced memory for the trauma and greater PTSD and between enhanced peri-traumatic dissociation and reduced PTSD. As we have seen, both of these are inconsistent with current empirical evidence. In contrast, there are now several theories with a relatively broad scope developed by clinical researchers actively involved in the treatment of PTSD.

2.3.4.2.1. Emotional processing theory

The earlier network theory of Foa et al. (1989) has been elaborated by Foa and Riggs (1993) and Foa and Rothbaum (1998) in several ways in order to take account of accumulating knowledge, particularly with respect to assault and rape victims. One development was to elaborate the relationship between PTSD and knowledge available prior to the trauma, during the trauma, and after the trauma. They proposed that individuals with more rigid pre-trauma views would be more vulnerable to PTSD. These could be rigid positive views about the self as being extremely competent and the world as extremely safe, which would be contradicted by the event, or rigid negative views about the self as being extremely incompetent and the world as being extremely dangerous, which would be confirmed by the event (see also Dalgleish, 1999). Another development was an increased emphasis on negative appraisals of responses and behaviors which could exacerbate perceptions of incompetence. Foa et al. outlined how these appraisals might relate to events that took place at the time of the trauma, to symptoms that developed afterwards, to disruption in daily activities, and to the responses of others. Beliefs that were present before, during, and after the trauma could interact to reinforce the critical negative schemas involving incompetence and danger that they hypothesized underlie chronic PTSD.

Foa & Rothbaum (1998) also elaborated a number of mechanisms thought to be involved in exposure treatment. First, repeated reliving should promote the habituation of fear, reducing the level of fear associated with other elements in the trauma memory as well as countering the belief that such anxiety is permanent. Second, it prevents

avoidance of the trauma memory being negatively reinforced. Third, rehearsing the trauma memory in a therapeutic environment incorporates safety information into the trauma memory. Fourth, the trauma can be better discriminated from other potentially threatening events and seen as a specific case rather than as one among many examples of a dangerous world or an incompetent self. Fifth, exposure offers the possibility to experience the self as showing mastery and courage in the face of challenge. Sixth, by reflecting on events in detail, patients may reject previous negative evaluations as being inconsistent with the evidence. Seventh, the severity of the event frequently disrupts the cognitive processes of attention and memory at the time of the trauma and produces dissociative states such as out-of-body experiences. This disruption leads to the formation of a disjointed and fragmented fear structure that is resistant to modification and to trauma narratives that are relatively brief, simplistic, and poorly articulated. Repeated reliving generates a more organized memory record that is easier to integrate with the rest of the memory system. In summary, exposure is thought to have a number of separate effects, some relatively automatic such as reduction in anxiety and change in memory structures, and others more strategic such as positive reappraisals of actions and events.

2.3.4.2.2 Summary of emotional processing theory

Emotional processing theory has a great deal of explanatory power and is extremely comprehensive. It draws attention to many of the important aspects of PTSD that are likely to be encountered within therapy and offers many valuable suggestions to clinicians about how to conceptualize these. For example, the observation that the rigidity of beliefs may be problematic, regardless of whether the content of the beliefs is positive or negative, is potentially very important and helps to resolve some difficulties with the theory of shattered assumptions. The theory is associated with a highly effective treatment and also offers an extremely sophisticated account of the various mechanisms that may underlie the success of treatment using prolonged exposure. The increased emphasis on pre-trauma risk factors and on appraisal processes has been strongly supported by recent research reviewed earlier. The status of other aspects of the theory is less well established, particularly the hypothesized mechanisms of change. Although problems in recalling the trauma are consistently related to peri-traumatic dissociation, as the theory predicts, there is as yet no consistent evidence that

improvement in therapy is related to changes in the structure of trauma memories, to the initial activation of fear, or to habituation. Interesting questions remain about the relative importance of the automatic changes in trauma memories brought about by exposure and changes resulting from conscious reappraisal of beliefs and about whether these reflect the operation of different kinds of mechanism. As previously noted, trauma memories may not in fact be altered by the incorporation of new information, but may remain unchanged and be blocked or inhibited by new memories created through therapy. It also remains unclear that an associative network model provides a sufficiently flexible architecture to account for the sometimes contradictory phenomena. The idea of a fear network as described by Foa and her colleagues involves different aspects of information about the event being strongly associated. By implication, in response to reminders, the entire fear memory (stimulus information, response information, and meaning) will be retrieved. This is difficult to reconcile with observations that for many patients, their trauma memory might contain gaps, parts might be clear and parts vague, and initial amnesia might begin to diminish posttrauma (Mechanic et al., 1998).

2.3.4.2.3 Dual representation theory

In contrast to the proposal of fear network theories that a traumatic memory is an ordinary memory that has a particular structure (more response elements, stronger inter-element associations, etc.) is the idea that trauma memories are represented in a fundamentally distinct way (Janet, 1904; van der Hart & Horst, 1989; van der Kolk & van der Hart, 1991). These authors suggested that pathological responses (for example, vivid and uncontrollable re-experiencing in the present) arise when trauma memories become dissociated from the ordinary memory system and that recovery involves transforming them into ordinary or narrative memories. However, they have not made clear whether ordinary memories of the traumatic event can exist alongside dissociated memories, and exactly how one form of memory is transformed into another. One way of understanding this notion of a dissociated memory is to posit that there are two (or more) memory systems and that trauma information is better represented in one system than in the other. Several cognitive psychologists have proposed that there is a separate perceptual memory system that records information that has received little, if any, conscious attention. For example, even under ordinary conditions of attentional

diversion, people frequently fail to see highly visible but unexpected objects before their eyes, a phenomenon known as “in-attention blindness” (Mack & Rock, 1998). These unattended objects or items that are not consciously seen in their experiments are nevertheless encoded and analyzed in considerable detail and can unconsciously affect participants’ responses on tests of indirect memory. The findings appear to be very relevant to trauma victims, whose attention tends to be captured by the immediate source of threat and who may report that they simply failed to hear words that were shouted or shots that were fired in close proximity to them. Whereas in some models, the perceptual memory system is unable to support conscious experience (e.g., Tulving & Schacter, 1990), in others, it supports sensory images such as visual scenes (e.g., Brown & Kulik, 1977; Johnson & Multhaup, 1992; Pillemer, 1998).

2.3.4.2.4 Neuropsychology and dual representation theory

Relating the theory to findings in cognitive neuroscience, Brewin (2001, in press) highlighted the importance of the amygdala in activating fear responses and the different pathways that could convey trauma information to the amygdala. Pathways involving processing by the hippocampus would result in the laying down of integrated, coherent representations of conscious experience, located in the appropriate temporal and spatial context. Memories formed as a result of activity in these alternative pathways would not be open to deliberate recall, or locatable in a broader temporal or spatial context, but could be accessed automatically by reminders, particularly perceptual features, similar to those recorded in the trauma memory. Stress has very different effects on the hippocampus and the amygdala. Declarative memory is initially enhanced by release of the adrenal hormones adrenaline and corticosterone, and the sympathetic nervous system and amygdaloid complex together constitute a powerful mechanism for ensuring that emotional events are preferentially retained in memory (Cahill & McGaugh, 1998). Equally, there is evidence that prolonged, intense stress associated with high levels of corticosterone (cortisol in humans) tends to impair the functioning of the hippocampus. This then tends to reverse the improvement in declarative memory (Bremner et al., 1995; Metcalfe & Jacobs, 1998). In contrast, the functioning of the amygdala appears generally to be enhanced as stress increases. These anatomically distinct memory systems, and the effects of stress upon them, provide a plausible neural basis for verbally accessible and situationally accessible memories, and for the symptoms of PTSD.

2.3.4.2.5 Summary of neuropsychology and dual representation theory

Dual representation theory addresses a number of specific observations about PTSD that are hard to explain under the assumption of a single memory system. It attempts to include observations made by both social-cognitive and information-processing perspectives within an overarching framework that explicitly differentiates cognitive processes happening during the trauma from the more extensive appraisals that occur afterwards. Among the implications are that images, appraisals, and emotions occurring peri-traumatically are processed in a way that is more automatic, more influenced by previous associations, and less consciously accessible than when these same mental contents occur post-trauma. According to this approach, the new representations do not have to be more accurate or contain corrective information; they only have to be more memorable. In this way, the theory is able to account for the effectiveness of imagery rescripting and other procedures that are not concerned with veridicality but aim to block intrusive images by creating more benign alternatives.

2.3.4.2.6 Ehlers and Clark's cognitive model

Ehlers and Clark (2000) drew attention to the paradox in PTSD whereby patients feel anxious about the future, even though the trauma lies in the past. Pathological responses to trauma arise when individuals process the traumatic information in a way that produces a sense of current threat, either an external threat to safety or an internal threat to the self and the future. The two major mechanisms that produce this effect involve negative appraisals of the trauma or its sequel and the nature of the trauma memory itself. Expanding on the work of Foa and Rothbaum (1998) and Jones and Barlow (1990), Ehlers and Clark identified a wide range of relevant negative appraisals. Some of these are focused on the traumatic event and signal overgeneralization of danger (e.g., “others can see I am a victim”) or negative appraisal of own actions (e.g., “I deserve that bad things happen to me”). Other appraisals focus on sequel, such as the PTSD symptom of numbing (“I’ll never be able to relate to people again”), other people’s reactions (“they think I am too weak to cope on my own”), and life prospects (“my body is ruined”). The different types of appraisal, variously involving danger and violation of standards by self or others, or by loss, explain the variety of emotions reported by patients with PTSD. Among the factors that increase the likelihood of negative appraisals are thought processes during the trauma and prior beliefs and

experiences. Ehlers and Clark identified a specific frame of mind they termed ‘mental defeat,’ discussed previously in Cognitive–affective reactions and PTSD. This reaction, emphasizing the inability of the person to influence their fate, is a risk factor for such self-appraisals as being weak, ineffective, or unable to protect one-self.

2.3.4.2.7 Summary of Ehlers and Clark’s cognitive model

It is suggested that PTSD becomes persistent when individuals process the trauma in a way that leads to a sense of serious, current threat. The sense of threat arises as a consequence of: excessively negative appraisals of the trauma and/or its sequel and a disturbance of autobiographical memory characterized by poor elaboration and contextualization, strong associative memory and strong perceptual priming. Change in the negative appraisals and the trauma memory are prevented by a series of problematic behavioral and cognitive strategies. The model is consistent with the main clinical features of PTSD, helps explain several apparently puzzling phenomena and provides a framework for treatment by identifying three key targets for change.

2.4 Anxiety Disorders

Anxiety disorders include disorders that share features of excessive fear and anxiety and related behavioral disturbances. Fear is the emotional response to real or perceived imminent threat, whereas anxiety is anticipation of future threat. Obviously, these two states overlap, but they also differ, with fear more often associated with surges of autonomic arousal necessary for fight or flight, thoughts of immediate danger, and escape behaviors, and anxiety more often associated with muscle tension and vigilance in preparation for future danger and cautious or avoidant behaviors. Some times the level of fear or anxiety is reduced by pervasive avoidance behavior. Panic attacks feature prominently within the anxiety disorders as particular type of fear response. Panic attacks are not limited to anxiety disorders but rather can be seen in other mental disorders as well.

The anxiety disorders differ from one another in the types of objectives or situations that induce fear, anxiety or avoidance behavior, and the associated cognitive ideation. Thus, while the anxiety disorders tend to be highly comorbid with each other, they can be differentiated by close examination of the types of situations that are feared or avoided and the content of the associated thoughts or beliefs.

2.4.1 DSM-IV-TR Anxiety Disorders types

Anxiety disorders include generalized anxiety disorder (GAD), social anxiety disorder (also known as social phobia), specific phobia, panic disorder with and without agoraphobia, obsessive-compulsive disorder (OCD), posttraumatic stress disorder (PTSD), anxiety secondary to medical condition, acute stress disorder (ASD), and substance-induced anxiety disorder.

2.4.2 Defining fear and anxiety

The definition of fear and anxiety varies greatly. According to Barlow's concepts anxiety is a futureoriented mood state associated with preparation for possible, upcoming negative events; and fear is an alarm response to present or imminent danger (real or perceived). This view of human fear and anxiety is comparable to the animal predatory imminence continuum. That is, anxiety corresponds to an animal's state during a potential predatory attack and fear corresponds to an animal's state during predator contact or imminent contact.

2.4.3 History of anxiety disorders

Anxiety disorders have likely plagued human kind throughout time. References to anxiety as a medical condition date back to Greece in the fourth century B.C., with the writings of Hippocrates, the “father of medicine,” who prescribed herbs for “nervous unrest.” The ancient Greeks also coined the word “agoraphobia” to designate the condition in which otherwise normal people were afraid to leave their houses.

The names by which anxiety disorders have been known over the centuries include nervous illnesses, nerves, hysteria (in women; hypochondria was considered the equivalent in men), “the vapors,” nervous unrest, nervousness, neurasthenia, and anxiety neurosis.

In the late 1800s and early 1900s, the German physician Emil Kraepelin studied and documented mental illnesses, providing the foundation for modern psychiatry. Its focus on diagnosis and classification comes from Dr. Kraepelin. The belief that psychological factors were the cause of anxiety arose from the work of Sigmund Freud, however, who in the late 1800s described what he termed “anxiety neurosis.” This belief gained cachet in the American medical establishment in the early part of the twentieth century and held sway until the advent of the pharmaceutical age in the latter part of the century.

The various treatments for anxiety conditions through the ages have included herbal medicines, cold-water immersion, hydropathy (heat therapy), bloodletting, the “rest cure,” and “nervous clinics.” The first manufactured sedative was chloral hydrate, which came into use in 1832. The barbiturate Veronal, introduced in 1904, quickly took hold as the “drug of choice” in private clinics treating nervous conditions. Librium (chlordiazepoxide) was the first antianxiety drug and the first benzodiazepine (a class of tranquilizer) used in psychiatric treatment.⁵⁵ From these pharmaceutical beginnings came a virtual drug explosion, which continues today with the search for new and better anxiolytics (antianxiety drugs) and antidepressants.

Psychotherapy was not neglected entirely in this boom. Cognitive therapy, behavioral therapy, and cognitive-behavioral therapy (CBT) were used to good effect with anxiety disorders. The cognitive approach seeks to change the thinking patterns that contribute to anxiety, while the behavioral approach does the same with patterns of behavior and uses behavioral methods such as exposure therapy to desensitize the individual to the objects or situations that bring on fear.

Today, it is widely accepted, due to much research evidence, that these forms of “talk” therapy are particularly beneficial in the treatment of anxiety disorders.

2.4.4 Theories of anxiety disorders

2.4.4.1 Psychoanalytic theory

While much has been written about the development of, and changes in, the psychoanalytic concept of anxiety, the major position, even after several decades, remains Sigmund Freud's own set of statements. Nothing attests better to the complexity of the problem of anxiety than Freud's concern with an adequate theory of anxiety. In no other area did he change his point of view as dramatically as he did toward the origins and mechanisms of anxiety, in fact presenting two theories on the topic.

Freud's early theory of anxiety, generally stated in 1917 was relatively straightforward and part of the general energy system of psychoanalytic theory. Anxiety was defined as transformed libido. The transformation occurs as a result of repression, which distorts, displaces, or generally dams up the libido associated with instinctual impulses. This transformation-of-libido or "damming-up" theory of anxiety suggests that whenever the organism is prevented from carrying out an instinctually motivated act, whether through repression or through some prevention of gratification, anxiety will ensue. Such anxiety may, of course, serve as a motive for a symptom that in turn functions to terminate or completely prevent the subsequent occurrence of anxiety (Freud, 1916–1917). This theory was amended in 1926 when Freud published *Inhibitions, Symptoms and Anxiety*. The new position was restated in the *New Introductory Lectures on Psychoanalysis* in 1933 and in general remained his final statement on anxiety.

The second theory reversed the relationship between repression and anxiety. Although Freud tended to maintain the possibility of both kinds of relationships, the second theory added the possibility that repression occurs because of the experience of anxiety. To Freud, this was the more important possibility. In this context, anxiety becomes a signal from the ego. Whenever real or potential danger is detected by the ego, this perception gives rise to anxiety and in turn mobilizes the defensive apparatus, including, of course, repression. Thus, because of the impending danger from unacceptable or dangerous impulses, the unpleasantness of anxiety produces the repression of the impulses, which in turn leads the organism out of danger.

2.4.4.1.1 Avoidance of overstimulation

It should be noted that a central concept in both of Freud's theories of anxiety is the notion of the avoidance of overstimulation. Whether libido is dammed up by not executing some instinctual act or whether the ego signals impending stimulation that cannot be adequately handled, in both cases the anxiety anticipates an impending situation for which no adequate coping mechanism is available to the organism. The ultimate unpleasantness is overstimulation, including pain, and the anxiety in both theories signals or anticipates this prototypical state. Thus, Freud derives the origin of anxiety from the prototype of overstimulation. Such a derivation is necessary at least for the second theory, which presupposes cognitive, perceptual actions on the part of the ego. Here anxiety is learned; it is acquired as a function of past experience. It is in this sense that the psychoanalytic theory of anxiety, including its several revisions, has never abandoned the first theory, which describes the development of "automatic" anxiety. In the second theory, anxiety is derived from "automatic" anxiety; in the first theory, all anxiety is "automatic."

2.4.4.1.2 Antecedent and organismic conditions

The origin of "automatic" anxiety is traced by Freud into the very earliest period of life, the birth trauma and the immediate period thereafter. Emphasis on the helpless infant, as well as on the birth trauma as the origin of the anxiety, state places him apart from Rank (1924), who relies solely on the birth trauma as the source of anxiety.

For Freud (1926), the experience of anxiety as distinct from its antecedents or consequences or as a theoretical state has three aspects: a specific feeling of unpleasantness, efferent or discharge phenomena, and the organism's perception of these discharge phenomena. In other words, the perception of autonomic arousal is associated with a specific feeling of unpleasantness. As to the primitive occasions for this anxiety experience, Freud is frequently hazy. While, on the one hand, he considers the predisposition toward anxiety as a genetic mechanism (Freud, 1952) at other times he considers anxiety as arising from separation from the mother, castration fears, and other early experiences. He considers the specific unpleasant experience of the anxiety state as derived from the first experience of overstimulation at the time of birth. He says that the birth experience "involves just such a concatenation of painful feelings, of discharges and excitation, and of bodily sensations, as to have become a prototype for

all occasions on which life is endangered, ever after to be reproduced again in us as the dread or ‘anxiety’ condition” (Freud, 1952). Thus, it is possible that some of the discussions that have arisen out of several interpretations of Freud’s theory of anxiety have confused the specific experience of anxiety derived from the physiological make-up of the organism and the birth trauma with the conditions that produce or threaten unmanageable discharge. The conditions that produce such an anxiety state are, in addition to the birth trauma, separation or loss of the mother, with the attendant threat of overstimulation due to uncontrollable impulses and threats, and castration fears with similar consequences. Thus, where Rank places both the affect and the prototypic antecedent conditions at the period of birth, Freud lets the organism inherit or learn the affect at birth, but also adds other specific conditions that elicit it later on in early life. On this basis it is reasonable to claim, as Kubie (1941) does, “that all anxiety has as its core what Freud has called ‘free floating anxiety.’” In other words, given the initial effect of anxiety that a child either genetically or experientially brings into the world, specific anxieties and fears are then situationally developed out of this basic predisposition.

In this context, the various types of fears or anxieties that Freud discusses are not different in their initial source of the affect but, rather, differ in the specific conditions that give rise to them. They are fear, where anxiety is directly related to a specific object; objective anxiety, which is the reaction to an external danger and which is considered to be not only a useful but also a necessary function of the system; and neurotic anxiety, in which the anxiety is out of proportion to the real danger and frequently is related to unacceptable instinctual impulses and unconscious conflicts.

Freud’s notion that anxiety is brought about when the ego receives those external or internal cues that signal helplessness or inability to cope with environmental or intrapsychic threats is mirrored in Karen Horney’s position that basic anxiety is “the feeling a child has of being isolated and helpless in a potentially hostile world” (Horney 1945). For Horney, primary anxiety is related eventually to disturbances of interpersonal relations, initially those between the child and significant adults. A similar position is taken by Harry Stack Sullivan, who relates both parental disapproval to the development of anxiety and the inadequacies, irrationalities, and confusions of the cultural pattern to its elicitation.

2.4.4.1.3 Summary of psychoanalytic theories

The psychoanalytic position not only treats anxiety as an important tool for the adequate handling of a realistically threatening environment, but it also relates anxiety to the development of neurotic behavior. The “cultural” psychoanalysts then go on to stress the social environment at large, while Freud sees the basic anxiety mechanisms in the very early mother separation and castration fears. In all cases, however, anxiety is related to the inability of the organism to cope with a situation that threatens to overwhelm him, the absence of adequate acts to deal with environmental or intrapsychic events. As Freud phrased it in one of his later formulations; “anxiety seems to be a reaction to the perception of the absence of the object [e.g., goal]” (Freud, 1936).

2.4.4.2 Learning theory

The theoretical position taken by most representatives of modern learning or behavior theory is derived generally from the work of I. P. Pavlov and J. B. Watson. The two major positions are those of C. L. Hull and B. F. Skinner, although neither of these two men themselves have worked extensively on the problem of anxiety. Most of the work on anxiety, within the framework of learning theory, has been carried out by representatives of the Hullian school. While most of their experimental work has involved lower animals, the “conditioning” concept of anxiety has been extensively applied to complex human behavior (cf. Dollard & Miller 1950).

As Mowrer (1960) has shown, the role of anxiety for learning theory is derived mainly from the attempts to explain the nature and consequences of punishment. In the case of punishment, the application of some painful or noxious event following the performance of a response inhibits or interferes with the performance of that response on some subsequent occasion. Similarly, when an organism avoids a situation, it is, through the operation of some mediating mechanism, precluding the occurrence of a noxious or painful event. The nature of this mediating mechanism, learning theorists contend, is what is commonly called fear or anxiety.

2.4.4.2.1 Anxiety as an acquired drive

The conditioning model states that a previously neutral event or stimulus (the conditioned stimulus, or CS), when paired with an unconditioned stimulus (US), which produces a noxious state such as pain, will elicit a conditioned response (CR) after a suitable number of pairings. This conditioned response is what is commonly called fear. In a typical experimental situation, an animal might be placed in a white box with a door leading to a black box. The floor of the white box is electrified, and the animal receives a shock (US) that becomes associated with the white box (CS). If the animal is then permitted to escape from the shock through the door to the black box, he will eventually run from the white to the black box prior to the application of shock. Learning theorists assert that the fear (CR) conditioned to the white box (CS) motivates subsequent activity. The reductions of the fear by escape from the (CS); thus produces avoidance of the original noxious unconditioned stimulus. Fear or anxiety is viewed as a secondary or acquired drive established by classical conditioning. While this basic paradigm has been extensively elaborated, it represents the basic notions about anxiety in modern learning theory. The Skinnerian point of view has been described by Schoenfeld (1950), who argues against the notion that the organism “avoids” the unconditioned stimulus. He suggests that the organism in fact escapes from a stimulus array that consists of the conditioned stimulus as well as the proprioceptive and tactile stimuli, which precede the unconditioned stimulus.

2.4.4.2.2 Antecedent conditions

Whether avoidance learning is achieved by the mediating effect of the conditioned fear or ascribed to conditioned aversive stimuli, the question still remains open as to the necessary characteristics of the original, unconditioned, noxious, or aversive stimulus. In one of the early statements on conditioned fear, Mowrer (1939) suggested that fear was the conditioned form of the pain response. However, it has been demonstrated that pain cannot be a necessary condition for the establishment of anxiety since individuals who are congenitally incapable of experiencing pain also show anxiety reactions. (For a summary of this argument (Kessen& Mandler 1961.) In a more general statement about the nature of acquired drives such as fear, Miller (1951) has extended the class of unconditioned stimuli adequate for fear conditioning to essentially all noxious stimuli, and Mowrer (1960) comes close to a psychoanalytic position when he expresses

essential agreement with the position that fear is a psychological warning of impending discomfort. However, work with experimental animals has failed to establish unequivocally that fear can be conditioned upon the onset of discomforting primary drives or USs other than those associated with painful stimuli. This failure hampers the generality of the conditioning model.

2.4.4.2.3 Organismic conditions

The above evidence becomes important when one considers not only the antecedent conditions for the establishment of fear, which the learning theorists relate to the conditioning paradigm, but also the nature of the mediating response (the CR). A variety of data (for example, Wynne & Solomon 1955) has shown that the development of the anxiety or fear state in animals depends upon an adequately functioning autonomic nervous system. Thus, within the confines of the conditioning model, those writers who have speculated upon the nature of the mediating fear or anxiety state have suggested that it presupposes some sympathetic arousal. It follows from this that fear or anxiety can be conditioned only if the unconditional stimulus also is one that produces such sympathetic or general autonomic effects. To the extent then that a learning theory position assumes emotional, autonomic responses correlated with the fear state, it also suggests that fear necessarily derives only from those primary conditions that in turn are autonomically arousing. Thus, at least as far as such writers as Mowrer are concerned, the threat of discomfort, or rise in primary drives, or overstimulation in general, can only be prototypes for anxiety if, and only if, these states in turn have autonomic components. However, this does not seem to be the case for such divergent states as hunger, thirst, and so forth.

2.4.4.2.4 Consequent conditions

As far as the consequences of conditioned fear are concerned, there seems to be general agreement, both theoretical and empirical, that they fall into two general classes. In the first class, fear and anxiety operate as secondary drives and exhibit all the usual properties of drives, serving as motives for the establishment of new behavior. When fear acts as a drive, new responses are reinforced by the reduction of that drive. This response-produced drive is the major emphasis that learning theory has placed on fear or anxiety. In the second class, it has also been recognized that the conditioned fear

response or the CER (conditioned emotional response) may in a variety of situations interfere with or suppress ongoing behavior. In this sense, it is of course no different from the general anxiety concept of the psychoanalysts in that behavioral anxiety or preoccupation with anxiety may be incompatible with other behavior or thoughts required from the organism in a particular situation.

2.4.4.3 Existentialist psychology

The emergence of existentialism from a purely philosophical school to an important influence on psychology has been a phenomenon of the mid-twentieth century. What existentialist thinking has done for psychology is not so much to present it with a new theory in the tradition of well-defined deductive positions that became popular in the early part of the century, but rather to provide it with a wealth of ideas and challenges to conventional wisdom. While a variety of different positions and schools can be discerned within the movement, the problem of anxiety has remained essentially unchanged from Kierkegaard's path breaking formulation, published more than a hundred years ago (1844). For example, Jean-Paul Sartre's position about the problem of anxiety is, for present purposes, not noticeably at variance with it (1943). Kierkegaard's central concept of human development and human maturity was the notion of freedom. Freedom is related to man's ability to become aware of the wide range of possibility facing him in life possibility in that sense is not statically present in his environment but created and developed by man. Freedom implies the existence and awareness of possibility.

Anxiety is intimately tied up with this existence of possibility and potential freedom. The very consideration of possibility brings with it the experience of anxiety. Whenever man considers possibilities and potential courses of action, he is faced with anxiety. Whenever the individual attempts to carry any possibility into action, anxiety is a necessary accompaniment, and growth toward freedom means the ability to experience and tolerate the anxiety that necessarily comes with the consideration of possibility. In modern terms, any choice situation involves the experience of anxiety, and thus for the existentialist position the antecedents of anxiety are, in a sense, the very existence of man in a world in which choice exists.

Kierkegaard endows even the newborn child with an unavoidable and necessary prototypical state of anxiety. However, since the child is originally in what Kierkegaard calls a "state of innocence," a state in which he is not yet aware of the specific

possibilities facing him, his anxiety too is an anxiety that is general but without content. Possibility exists, but it is a possibility of action in general, not of specific choices. The peculiarly human problem of development faces the child as he becomes aware both of himself and of his environment. Possibility and actualization become specific, and anxiety appears at each point where development and individuation of the child progresses; at each point a new choice of possibilities must be faced, and anxiety must be confronted anew.

The consequences of this notion of anxiety are that as the individual develops he is continuously confronted with the unpleasant experience of anxiety and with the problem of mature development in the face of it. It is not only unavoidable as a condition of man; it is, Kierkegaard maintains, actually sought out. "Anxiety is an alien power which lays hold of an individual, and yet one cannot tear oneself away, nor has the will to do so; for one fears, but what one fears one desires. Anxiety then makes the individual impotent" (Kierkegaard 1957). Since anxiety is unavoidable and since it must be encountered if one is to grow as a human being, all attempts at avoiding the experience of anxiety are either futile, or they result in a constricted, uncreative, and unrealistic mode of life. Only by facing the experience of anxiety can one truly become an actualized human being and face the reality of human existence.

Kierkegaard also makes a clear distinction between fear and anxiety. Fear involves a specific object that is feared and avoided, whereas anxiety is independent of the object and furthermore is a necessary attribute of all choice and possibility.

The importance of Kierkegaard, and the existentialist development in general, is not the emergence of testable scientific propositions, but rather the emphasis—found *inter alia* in some psychoanalytic writings that anxiety may not be primarily a learned experience derived from past encounters with painful environmental events, but may be a naturally occurring initial state of the organism. Man may in fact be born with anxiety, rather than learn it through experience. While existentialism has not produced any clear definitions of anxiety, apart from appealing to an assumed common phenomenology, it has raised important questions both about the general problem of anxiety and, in the field of psychotherapy, about the proper treatment for those conditions that show pathological effects of anxiety.

2.4.4.3.1 Summary of existentialist psychology

Existential anxiety refers to a sense of worry, dread or panic that may arise from the contemplation of life's biggest questions, such as "Who am I?" or "Why am I here?" Existential perspectives contend that this contemplation leads inevitably to the realization that everyone has the freedom and responsibility to find meaning in life. Although this realization is inherently distressing, many existential thinkers view this form of anxiety as healthy and productive.

Existential anxiety arises when people deeply contemplate their existence. This contemplation leads to thoughts and feelings of freedom and responsibility, which burden the individual to find a purpose in life--and to live genuinely according to this purpose. It also may lead to a sense of alienation and isolation in the world and a heightened awareness of mortality.

2.4.5 Age of onset of anxiety disorders

Given the stability of anxiety disorders, the age of onset has proven to be a very difficult issue to address. Most common beliefs about the age of onset of various anxiety disorders have come from retrospective reports from adults. These reports have led to suggestions that a large proportion of specific phobias begin in early to middle childhood, social phobia in early to mid-adolescence, obsessive-compulsive disorder in mid to later adolescence, and panic disorder in early adulthood (Kessler et al. 2005, Ost 1987). Data on the onset of generalized anxiety disorder tend to be less consistent, varying from "lifelong" (Rapee 1991) to adulthood (Kessler et al. 2005).

2.4.6 Risk and maintaining factors

2.4.6.1 Family transmission

Anxiety runs in families. First degree relatives of people with anxiety disorders are at significantly increased risk to also have anxiety as well as mood disorders. The same is true more specifically for anxiety in children and adolescents.

Anxious children are considerably more likely to have parents with anxiety disorders and adults with anxiety disorders are more likely to have anxious children (Rapee et al, 2009).

Adults with anxiety disorders are more likely to have children who are highly inhibited and inhibited children are more likely to have parents with anxiety and mood disorders (Rosenbaum et al, 1993).

2.4.6.2 Genetic factors

There is little doubt that anxiety disorders are heritable. Best estimates suggest that around 40% of the variance in anxiety symptoms and in diagnoses of anxiety disorder is mediated by genetic factors. This estimate is even higher if one looks at stability of anxiety over time. Slightly less research, but with similar findings, has been done on anxiety specifically during the childhood years. Twin studies of anxiety in children indicate that around 30% to 40% of the variance in symptoms and disorders can be attributed to heritability (Gregory & Eley, 2007). There is some evidence (albeit with limitations) that heritability estimates for temperamental risk for anxiety (e.g., inhibition) is slightly higher (Rapee & Coplan, 2010). As mentioned above, genetic risk across anxiety disorders appears to be largely general and seems to primarily load on a very broad factor such as general neuroticism (Gregory & Eley, 2007).

2.4.6.3 Temperamental factors

Temperamental risk for anxiety is probably the best studied and most clearly established risk factor (Fox et al, 2005; Rapee et al, 2009). A variety of similar temperaments have been associated with child anxiety including: behavioural inhibition, withdrawal, shyness and fearfulness. I will refer to these various temperaments in this section under the general term inhibition. Extensive research has shown that very young children who are identified as high on inhibition are at greater risk for later anxiety disorders. As described above, research has also linked inhibition with anxiety disorders in first degree relatives. The most common assessment of inhibition occurs in children from around 2-5 years of age. This may be done via questionnaires or direct observation. Common features of inhibition include: Withdrawal in the face of novelty, Slowness to warm up to strangers or peers, Lack of smiling, close proximity to an attachment figure, Lack of talk, Limited eye contact or "coy" eye gaze, and unwillingness to explore new situations. Children who show these characteristics during preschool age are 2-4 times more likely to meet criteria for anxiety disorders by middle childhood and this increased risk has been shown to continue at least into adolescence (Fox et al, 2005). Some evidence has also indicated that infants (aged 3-6 months) who show high levels of arousal and emotionality are at greater risk to show high inhibition by 2-5 years. Therefore, it seems to be possible to identify increased risk for anxiety from a few months of age (Kagan & Snidman, 1991).

2.4.6.4 Parent and family factors

Given the evidence for the transmission of anxiety within families described above, it has commonly been assumed that parents and the family environment must contribute to the development of anxiety disorders. However, evidence has been difficult to obtain and data have not been entirely consistent. The most extensive research has focused on parenting and parent-child interactions. There is now little doubt that the parenting of anxious children is characterized by overprotection, intrusiveness and, to a lesser extent, negativity (McLeod et al, 2007). Whether this relationship is causal is much harder to determine and, to date, there has been very little examination of this issue. It seems that fear of strangers can be increased through an interaction between the infant's temperament and the mother's overt indicators of fear argue that the parent-child relationship is likely to reflect cyclical interactions. That is, inhibited children are likely to elicit overprotection from their parents and, in turn, overprotective parenting is likely to lead to further anxiety (Hudson & Rapee, 2004; Rubin et al, 2009). Few longitudinal studies have addressed this relationship, but at least some evidence is consistent with this theory (Edwards et al, 2010). There is also some evidence that an interaction between the serotonin transporter gene and parenting predicts later anxiety in young children (Fox et al, 2005).

2.4.6.5 Life events

Although there has been a large body of research examining the role of negative life events in the onset of adult anxiety disorders (mostly agoraphobia), there has been very little work looking at life events in childhood anxiety. This may be because child anxiety often develops in a background of inhibited temperament and a clear and sudden onset to the disorder is relatively rare. What research has been conducted suggests that anxious children do report a greater number and impact of negative life events than do children without anxiety disorders. While it is possible that this difference reflects cognitive and reporting biases, at least some work has demonstrated this difference using interviews with parents and identifying corroborating evidence (Allen et al, 2008). Nevertheless, demonstrating that anxious children have more negative life events than non-anxious children does not mean that these events necessarily cause or trigger their anxiety. Indeed the data suggest that the greatest difference is found on so-called "dependent" life events. Dependent events are ones that might be the result of the child's

behavior (e.g., doing badly in a test might be a result of the child not studying). Thus it is very possible that child anxiety leads to more negative life events, perhaps due to the worry and avoidance associated with the anxiety. Of course it is also possible that this increased stress, in turn, helps to maintain and even increase the anxiety. One specific form of life event that has received particular attention is bullying and teasing. There is considerable evidence that anxious children are more likely to be teased and bullied than non-anxious children and that they are often neglected or even rejected by their peers (Grills & Ollendick, 2002). Once again the direction of causation is unknown but it is very likely that anxious children elicit teasing from others due to their behaviours; in turn, it is likely that teasing will further enhance their anxiety.

2.4.6.6 Cognitive biases

Anxious children report heightened threat beliefs and expectations. To some extent this is a reflection of the diagnosis, but it is also argued to represent a core maintaining feature. Although there is considerable overlap, to some extent the threat expectancies are specific. That is, socially phobic children are more likely to have increased expectancies for social threat (e.g., “other kids won't like me”), children with separation anxiety will have increased expectancies for physical threat (e.g., “my parents will get hurt”), and so on. Evidence suggests that these threat beliefs are greater among anxious children than among children with other psychopathology and that they decrease with successful treatment (Schniering & Lyneham, 2007). Whether they are causally related to the onset of anxiety or simply reflect the anxiousness is not clear.

More recent research has also begun to focus extensively on the ways in which anxious children process threatening information (Hadwin et al, 2006). As has been shown in adults, anxious children have both a bias in attention toward threat and a bias to interpret ambiguous information in a threat-consistent manner. Some research has shown that these biases decrease with successful treatment.

Part II:

2.5 Literature review of Trauma, Post-Traumatic Stress Disorder and Anxiety

In this part, the researcher represents previous researches which studied trauma, PTSD, and anxiety.

2.5.1 Preschool children and trauma

In a study for Jensen and Shaw about Early childhood: Infancy, toddlerhood, and preschool age. They argued that Children's perception of war at an early age tends to be primarily based on their perception of the attitudes of adults in their social environment, as well as on messages communicated through mass media (Jensen & Shaw, 1993).

Another study in 2007 argued that young children were assumed to be more vulnerable than adolescents due to their less developed cognitive capacities (Alkhatib et al., 2007).

This is similar to the findings of other studies which agreed that the limited cognitive, social, and emotional capabilities of young children make them particularly vulnerable to experiencing confusion (Joshi & O'Donnell, 2003) and disorganization (Williams, 2007) following exposure to war and terrorism. For example, lack of perspective taking ability may lead young children to misinterpret the event, perceiving it as being their own fault (Joshi & O'Donnell, 2003). On the other hand, some scholars believe that young children are somewhat protected from the trauma because they do not understand the full extent of its negative consequences (Punamaki, 2002).

A study about Trauma exposure in pre-school children in a war zone aimed at investigating the relationship between exposure to war trauma and behavioural and emotional problems among pre-school children in Gaza Strip. It was found that exposure to day raids and shelling of the children's houses by tanks were significantly associated with total behavioral and emotional problems scores. Direct and non-direct exposure to war trauma increases the risk of behavioral and emotional problems among pre-school children, which may present as non-specific psychopathology (Thabet et al, 2006).

Another study for Abdel Aziz Thabet about the effects of trauma on Palestinian children's mental health in Gaza strip and the west bank found that the most common traumatic events for children in Gaza were watching of pictures of mutilated bodies on TV and the bombardment of the houses by helicopters and tanks. These results were consistent with other previous researches on Gaza children (Thabet et al., 2001, 2002, 2004, 2006).

2.5.2 Trauma and socio-demographic variables

A study on preschool children for Thabet and colleagues (2006) found that there was no gender difference for the number of traumatic events the children were exposed to. The Gaza Traumatic Checklist scores were significantly higher among children from urban kindergartens. This possibly reflected the repeated incursions by military forces into the city during the period of the study.

Another study for Hussain and others (1998) found that the impact of trauma has been found to be mediated by loss of relatives and support networks, lack of basic health needs, internal displacement or immigration, parental psychopathology, and socioeconomic adversity.

Adverse socio-demographic conditions may have additive effects, increasing risk for poor outcomes beyond that associated with trauma exposure (Briggs-Gowan et al., 2012; Holt et al., 2008). Socio-demographic status may also act as a moderator, with trauma exposure having more damaging effects in children living with greater adversity. Trauma exposure may also mediate links between socio-demographic risk and mental health: Associations between mental health difficulties and socio-demographic factors may be attributable, at least in part, to increased trauma exposure among disadvantaged populations (Shonkoff, Boyce, & McEwen, 2009).

2.5.3 Trauma and PTSD

There is evidence that exposure to traumatic events, can lead to post traumatic stress disorder. In addition, proximity to the trauma and symptomatology are often associated in the form of a linear-dose response relationship between the trauma and the post-traumatic stress disorder symptoms in adults and children (Qouta & El Sarraj, 2003; Thabet et al, 2004; Thabet et al, 2005; Thabet et al, 2006b, 2006c; Thabet et al, 2007a, 2007b in Press).

In a study about Posttraumatic Stress Disorder in Infants and Young Children Exposed to War-Related Trauma 2011 conducted on 232 children 1.5 to 5 years of age, 148 living near the Gaza Strip and exposed to daily war-related trauma and 84 controls. Children's symptoms were diagnosed, PTSD was diagnosed in 37.8% of war-exposed children (n = 56). Children with PTSD exhibited multiple posttraumatic symptoms and substantial developmental regression. Symptoms observed in more than 60% of diagnosed children included nonverbal representation of trauma in play; frequent crying, night waking, and mood shifts; and social withdrawal and object focus. Mothers of children with PTSD reported the highest depression, anxiety, and posttraumatic symptoms and the lowest social support, and displayed the least sensitivity during trauma evocation. (Feldman, 2011)

2.5.4 PTSD prevalence in preschoolchildren

A recent study about the diagnosis of Posttraumatic Stress Disorder in Preschool Children investigated the existing diagnostic algorithms for posttraumatic stress disorder (PTSD) to determine the most developmentally sensitive and valid approach for diagnosing this disorder in preschoolers. Participants were 130 parents of unintentionally burned children (1–6 years). Diagnostic interviews were conducted with parents to assess for PTSD in their child at 1 and 6 months post injury and the Child Behavior Checklist for 1.5–5 was also completed. The Diagnostic and Statistical Manual of Mental Disorders (5th ed.) provided the most developmentally sensitive and valid measure of PTSD in preschool children. The rate of PTSD diagnosis was 25% at 1 month and 10% at 6 months. The predictive utility of Criterion A was not demonstrated. These findings provide support for the inclusion of the proposed algorithm for PTSD in preschool children. (De-young et al., 2011)

In another study conducted on refugee children in Sweden about Post-Traumatic Stress Disorder in Iranian preschool children exposed to organized violence 1996.

Fifty preschool children from 47 Iranian families living as refugees in Sweden were assessed individually, simultaneously with parental interviews focusing on exposure to organized violence and post-traumatic stress symptomatology in the children. Information given by the children increased the prevalence of a Post-Traumatic Stress Disorder (PTSD) diagnosis (DSM-III-R) from 2% to 21% in the 42 children with traumatic exposure through war and political persecution. The amount of traumatic exposure was strongly related to the prevalence of PTSD. The stability of prevalence was high in a follow-up and 2 years later; 23% of the children with traumatic exposure still met the full criteria of PTSD according to DSM-III-R (Almqvist and Brandell-Forsberg, 1997).

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In a study on preschool children for Scheeringa, The rate of PTSD diagnosis 2 to 52 months following exposure to a variety of accidental and interpersonal traumatic events was 26% (Scheeringa et al., 2003) and 23% at 1- and 2-year follow-up (Scheeringa, Zeanah, Myers, & Putnam, 2005). In comparison, DSM–IV rates ranged from 0 to 11% A study about trauma in Rafah area showed that Twenty one (6.6%) of the children reported no post-traumatic stress reactions, (21.8%) reported mild post-traumatic stress reactions, (46.4%) reported moderate post-traumatic stress reactions, and 80 (25.2%) reported severe to very severe post-traumatic stress reactions.(Thabet and Thabet 2008).

2.5.5 PTSD and socio-demographic variables

A study on diagnosis of PTSD in preschool children found no significant differences for child gender, parent age, and parent employment status. (De-young et al., 2011).

Whereby, another study conducted on preschool children and their mothers in Gaza strip found that Socio-demographic characteristics were not associated with PTSD among mothers or children. Among children, the only significant risk factor was having a mother with PTSD (Kaufman-shriqui et al., 2013).

2.5.6 Trauma and Anxiety

Last et al (1992) have suggested that the age-of-onset data of childhood anxiety disorders points to a developmental progression (simple phobia followed by separation anxiety, overanxious or general anxiety disorder, obsessive-compulsive disorder, social phobia, and panic, with or without agoraphobia), which others have mapped against a normative progression in fears and anxieties, age-related repetitive behaviors, and play and mental activities (Carter et al 1995; Craske 1997).

For many children with anxiety disorders, the relationship between disorder and impairment is a reciprocal one, with impairment leading to continued exacerbation of anxiety symptoms, which in turn results in worse impairment. As an example, social phobia is often triggered by a traumatic or stressful event (Ost 1987) that can then lead to phobic avoidance and deterioration in the child's level of social activity. Decreased peer performance may foster increased social discomfort, leading to further withdrawal and worsening impairment (Beidel and Morris 1994). A developmental psychopathology model suggests the mutual importance of lessening psychopathology and rehabilitating developmental competencies, especially in childhood, where lost developmental opportunities and impaired acquisition of skills carry significant independent risks for adverse life-trajectory outcomes.

2.5.7 Studies about prevalence of anxiety disorders among preschool children

A study about the relation-ship between mothers mental health and the prevalence of depression and anxiety in preschool children in Gaza strip showed that means of total anxiety was 27.46, generalized anxiety 3.42, social anxiety 3.94, obsessive compulsive disorder 4.92, physical injury fear 10.47, separation anxiety 4.94. (Thabet et al., 2014)

In a study about the prevalence and comorbidity of Preschool Anxiety Disorders in Pediatric Primary Care, a total of 917 parents of preschool children (aged 2–5 years) completed the Preschool Age Psychiatric Assessment; it was found that generalized anxiety disorder, separation anxiety disorder, and social phobia are common in preschool-aged children attending pediatric primary care. Three-fourths of preschoolers with an anxiety disorder only had a single anxiety disorder. Generalized anxiety disorder displayed the greatest degree of comorbidity. (Franz et al, 2013).

Another study found that the prevalence of anxiety disorders in a community sample of preschool-aged children (2–5 years) has been reported as 9.5% (Edwards, Rapee, Kennedy, & Spence, 2010).

2.5.8 Anxiety and socio-demographic variables

Some population studies have failed to demonstrate significant sex differences in prevalence of anxiety disorders (Canino et al. 2004, Ford et al. 2003).

The results of a study about The Relationship between mothers' mental health and the prevalence of depression and anxiety of preschool children after the 2012 war on Gaza strip showed that there were no significant gender differences in total anxiety problems and other subscales. Means of total anxiety problems were less in children from families with high family income than the other groups. However, there were no significant differences between the means of preschoolers' anxiety problems according to type of residence or number of siblings. (Thabet et al., 2014)

Some researches mentioned that In addition to acute life events, some evidence suggests that chronic adversities are associated with the onset of anxiety disorders (Allen et al.

2008) and that predisposing adversities may occur relatively early in life (Phillips et al. 2005). These data are supported by a few epidemiological studies that indicate an association between childhood anxiety disorders and low family socioeconomic status (Cronk et al. 2004, Lewinsohn et al. 1997, Xue et al. 2005).

A study conducted on Preschool Anxiety Disorders in Pediatric Primary Care found that Preschoolers who lived with a greater number of siblings were more likely to meet criteria for generalized anxiety disorder, social phobia, and any anxiety disorder. (Franz et al, 2013). In a study of Palestinian children in the Gaza Strip, it was found that low socio-economic status (father unemployed or unskilled worker) was the strongest predictor of general mental health problems. Living in inner-city areas or camps, both common among refugees, was strongly associated with anxiety problems (Thabet & Vostanis, 1998).

2.5.9 Relationship between Trauma, PTSD and Anxiety

The limited data on the role of traumatic life events in the development of childhood anxiety suggest a similar interaction between external events and internal processes. Evidence from the literature on posttraumatic experiences in children points to a central role for intrapersonal factors such as a history of previous disorder in the development of PTSD (Pine & Cohen 2002, Pynoos et al. 1999).

In a similar fashion, some longitudinal research with a community sample of preschool-aged children showed that it was the impact of negative life events rather than the number of events that predicted anxious symptoms a year later and that the impact of life events was in turn predicted by the child's level of inhibition (Edwards et al. 2009).

Studies have shown a greater number and impact of negative life events experienced by children with anxiety disorders compared with nonclinical controls (Goodyer et al. 1990, Rapee & Szollos 2003, Tiet et al. 2001).

Few studies have distinguished events that are independent of the child's behavior from those that may be a result of the behavior or symptoms of the child. Nevertheless, at least some research has demonstrated a greater incidence of independent life events experienced by anxious children, thus indicating that the experience of events is not

purely a result of being anxious (Allen et al. 2008, Eley & Stevenson 2000).

Of course, establishing the occurrence of life events prior to onset of an anxiety disorder is extremely difficult because of the chronic nature of anxiety and the almost impossible task of determining precise onset. Therefore, research to date does not indicate the causal status of negative or traumatic life events. However, at least one study has indicated a greater number of traumatic events in the year preceding reported onset of the current episode of disorder among anxious children compared with an equivalent period among nonclinical controls (Allen et al. 2008)

Research in childhood anxiety disorders is paralleling that of childhood traumatic stress in addressing the interplay among traumatic experiences, psychopathology, child-parent interactions, and developmental disturbance. For many children with anxiety disorders, including PTSD, the relationship between disorder and impairment is a reciprocal one, with impairment leading to continued exacerbation of anxiety symptoms, which in turn results in worse impairment. As an example, social phobia is often triggered by a traumatic or stressful event that can then lead to phobic avoidance and deterioration in the child's level of social activity (Ost, 1987).

2.5.10 Comments on previous studies

Through reviewing previous studies, the researcher noticed that the studies addressed the issue of trauma and preschool children PTSD and anxiety used different ways and different variables, so the results may vary according to the type of trauma the children were exposed to, the diagnostic criteria used to diagnose the symptoms, and the scales used for assessment as well as the time in which the study took place after being exposed to the traumatic events.

In most of the studies the relation between being exposed to traumatic events and developing PTSD was well established, however some studies argued that preschool children are protected from developing PTSD because their cognitive abilities are not very well developed to understand and perceive the context of the trauma.

Other studies discussed that in contrast with older children, who often present with post-traumatic stress and depressive disorders, pre-school children may respond through increased nonspecific behavioral problems and symptoms of underlying anxiety. (Thabet et al,2006).

The most common traumatic events for children in Gaza were watching pictures of mutilated bodies on TV and the bombardment of the houses by helicopters and tanks (Thabet et al., 2001, 2002, 2004, 2006).

Previous Studies showed that being exposed to more war related traumatic events was correlated with reporting more PTSD reactions.

Moreover, socio-demographic variables such as low family income, and big number of siblings were correlated with more severe traumatic events, PTSD and anxiety results.

The researcher found that most of previous studies assessing different types of psychopathologies found no significant age or sex differences in preschool children, this may be because they are very close in their age as well as their cognitive abilities and they didn't form concepts about gender roles and cultural expectations according to their sex yet.

In addition, the researcher noticed that studies on Preschool children found that children who were exposed to many traumatic events as well as preschoolers who reported many PTSD reactions showed higher levels of anxiety.

Generalized anxiety disorder, separation anxiety, specific phobia and social phobia found to be the most common types of anxiety disorders among preschool children.

The researcher of the current study has not found any study on the effects of war trauma in relation to PTSD and anxiety of preschool children in particular. As well as, most of the studies were performed in different western countries and only very few studies about preschool children mental health were performed in Gaza strip. So the researcher of the current study thinks that this study is important as to contribute in this field.

Chapter 3

3. Methodology

3.1 Introduction

In this chapter, the researcher presents a description of the study design, population, sample, instrument used in data collection, eligibility criteria, ethical consideration and the limitations of the study.

3.2 Study Design

This study is a descriptive analytical study that tries to answer the study questions about the effects of war on preschool children anxiety and PTSD in Gaza Strip.

It has been selected because this method is useful for the description and analysis of study variables. This type of study measures the level and prevalence of the phenomena which is applied on the sample in a particular time and place.

3.3 Place of the study

This study was conducted in kindergartens of Gaza strip where most of preschool children are found. The kindergartens are distributed in all areas of Gaza strip.

3.4 Study Population

According to the Ministry of Education statistics, the number of pre-school children attending kindergartens is 56,839 and the total number of kindergartens in Gaza Strip is 477. See table (3-1), (MOE, 2014).

Using EPI info software, the sample size showed up was 400 plus 20 more in case of any missing; after data collection the actual sample collected was 399 mothers of preschool children aged from 3-6 years old. They were assessed by parental reports in regard to their exposure to war trauma, PTSD, and anxiety.

Distribution of the study population according to place of resident and gender,

Table (3-1)

Regions	Number of Kindergartens	Number of males	Number of females	Total
North Gaza	85	6037	5690	11727
East Gaza	70	3150	3229	6379
West Gaza	66	4254	4421	8675
Middle zone	67	3623	3538	7161
Khan-Younis	60	4662	3389	8051
East khan-	50	2249	2375	4624
Rafah	79	5234	4988	10222
Total	477	29209	27630	56839

Population (MOE, 2014)

3.5 Study sample

The researcher used a cluster random sample. Using EPI info program, the total number of respondent preschool children were 399 from 420 as a total selected sample. The age ranged from 3-6 years. Males were 165 (41.35%); and female were 234 (58.65%) as shown in figure 3-2.

Figure 3-1: distribution of the study sample according to place of residence.

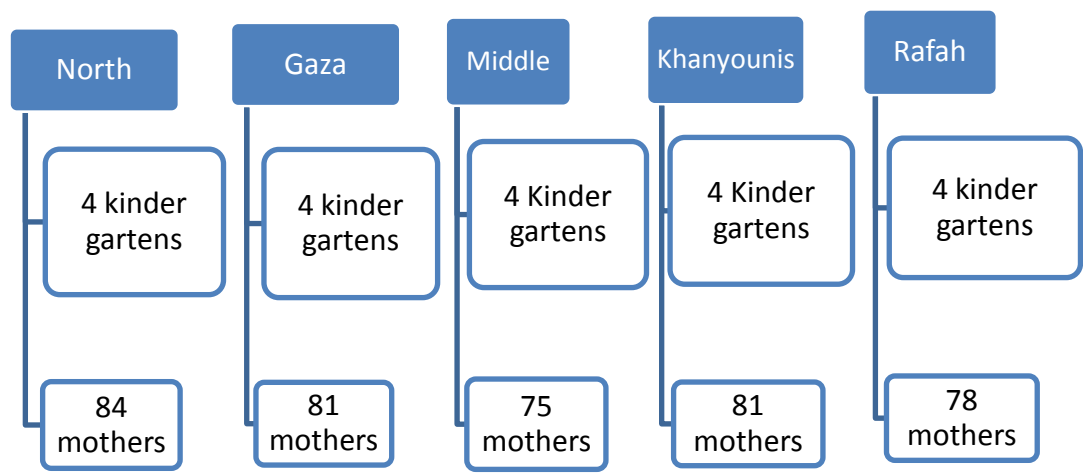
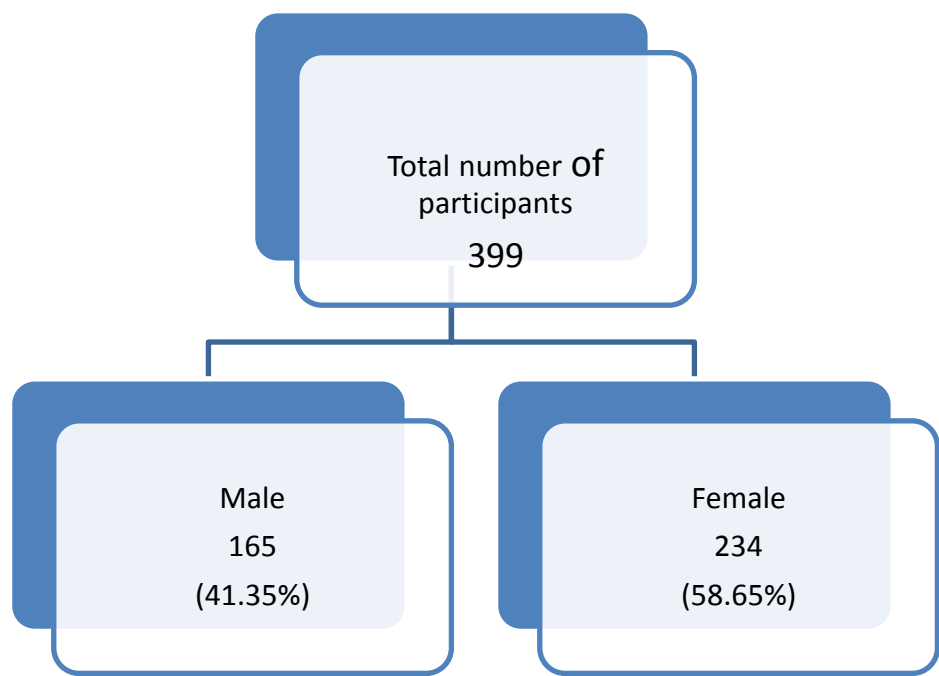


Figure 3-2: distribution of the study sample according to gender



3.6 Period of the study

The study was carried out in the second semester of the scholastic year 2014/2015. The duration of the study was approximately 4 months.

3.7 Data collection

The data was collected from four kindergartens in each area of Gaza strip (South-middle - Gaza city - North area) after getting an official approval from the Ministry of Education. The data was collected by the researcher and 3 assistants; the researcher collected data through meeting the principal of each of the 20 kindergartens which were chosen randomly in Gaza Strip to explain the purpose of the study. Additionally, the researcher coordinated for an appointment to meet and gather the mothers of preschool children and interview them directly to fill the questionnaire. The principal of each kindergarten called the mothers and set an appointment for the researcher and her team to meet with mothers and fill the questionnaires. Data collection took almost 50 days.

3.8 Data entry and analysis

The collected data was processed and analyzed under the supervision of the academic supervisor. The researcher used Statistical Package of Social Science (SPSS) -version 20- program for data entry and analysis. Data coding and recording was done before analysis. Frequency tables that show sample characteristics and plot differences between various variables were done. Descriptive statistics were used to present the characteristics of the sample.

T-independent tests were used to test the sex differences related to children trauma, PTSD, and anxiety. One-way ANOVA test was used to study the differences among the 'means' of preschoolers' trauma, PTSD and anxiety according to age, family income, and type of residence. Person correlation was used to explain and clarify the data and to demonstrate the relationship between preschool children trauma and anxiety, the relationship between preschool children trauma and PTSD, and the relationship between preschool children anxiety and PTSD.

3.9 Study instruments

The researcher used four instruments to implement his study:

1.Socio- demographic questionnaires.

This will include; name, gender, date of birth, number of siblings, place of residence, family income, mother and father educational level.

2.Gaza traumatic events check list for children

Purpose: to identify the type of traumatic event the child was exposed to during the 2014 war on Gaza.

This checklist describing the most common traumatic experiences families could have faced in the Gaza Strip during the Gaza War one year ago. The checklist was revised from a version used in earlier research (Thabet et al, 2008, 2009, 2014), and adapted for the nature of traumatic events occurring during the Gaza war. The scale consisted of 25 items with Yes and No answer. The scale was recorded into mild traumatic events (less than 5 traumatic events), moderate traumatic events (6-10) and severe traumatic events (11 and more traumatic events).

The Cronbach's alpha equation for Gaza traumatic events checklist is (0.82) and split half is (0.75).

3.UCLA PTSD Reaction Index for DSM-IV.

Target population and age group: Children ages 7 to 12, adolescents ages 13 and older, and parents can be used for children in preschool age.

The purpose is to screen for the presence of any type of traumatic event and the frequency of DSM-IV (APA, 1994) PTSD symptoms.

Description: This is a client self-report measure; although, it can also be administered in an interview format or in a school classroom (group) setting. Three versions of this brief screening instrument exist: child, adolescent, and parent. The UCLA PTSD Reaction Index (Pynoos et al., 1998) is a revised version of the widely used and researched Child PTSD Reaction Index (CPTSD-RI; Nader et al., 1990).

The first section lists 12 "very scary, dangerous or violent things that sometimes happen to people." For each one, the respondent may answer yes or no. Items include "Being in a bad accident, like a very serious car accident," "Being beaten up, shot at or threatened to be hurt badly in your town," and "Hearing about the violent death or serious injury of

a loved one.” A second section asks for the respondent’s feelings “during or right after the bad thing that happened.”

Respondents answer yes or no to 12 questions, such as “Were you scared you would die?” “Was someone else hurt badly?” and “Did you run around or act like you were very upset?” The third section asks the respondent to rate 20 statements on a 5-point Likert-type scale (0 = none of the time and 4 = most of the time), such as “How much of the time during the past month . . . I watch out for danger or things I am afraid of . . . I feel grouchy, angry or mad . . . I feel alone inside and not close to people . . . I think that I will not live a long life.”

The structure of the measure facilitates scoring. The measure was forward and back translated by experienced psychologists for use in Armenia, Bosnia, and Hercegovina (Stuvland, Durakovic-Belko, & Kutlaca, 2001).

Psychometric properties: Psychometric properties are under investigation for the UCLA PTSD Reaction Index (Rodriguez, Steinberg, & Pynoos, 1999). It is reported here because of the strong psychometric properties associated with the CPTSD-RI, on which the measure is based.

Analysis: Strengths of the measure include the age-specific design, the accompanying parent report form, its ability to capture both a history of traumatic exposure and symptoms consistent with PTSD, and its usage across cultures.

The Cronbach’s alpha equation for UCLA PTSD reaction index is (0.91) and split half is (0.87).

4. The Revised Preschool Anxiety Scale. (Spence, 2001).

The modifications made to the original PAS for the revised version consisted of seven items being removed based on very low response rates in the original study, three items were adapted to provide a clearer meaning, and nine items were added to further the breadth of symptom coverage. In particular, items added to the GA scale were designed to reflect behavioral manifestations of worry. This construct is difficult to assess in young children, with their limited vocabularies for describing inner states (Warren et al., 2006). For example, for two items on the original measure, “tension and irritability due to worrying” and “trouble sleeping due to worrying,” it would be difficult for parents to ascertain whether such symptoms were a direct result of worrying. Also, as worry is essentially an internal cognitive experience, it was expected

that parents would have difficulty estimating how much of the day their child spent worrying. Thus, these items were excluded and four new items were added with a more behavioral focus (e.g., “gets upset if something unexpected happens”). It was anticipated that these changes would result in a clearer distinction between the GA and SEP scales. The revised version consisted of 28 items rated from 0 (not at all true) to 4 (very often true), intended to assess the same five factors as the original PAS (Spence et al., 2001): social anxiety (SOC), SEP, GA, specific fears (SPC). The questionnaire was designed to be completed by parents, as very young children are generally not considered reliable informants of their own anxiety symptoms (Edelbrock, Costello, Dulcan, Kalas, & Conover, 1985; although see Muris et al., 2003). The Cronbach’s alpha equation for Spence anxiety scale is (0.90) and split half is (0.79).

3.10 Scientific Rigor

3.10.1 Validity

The questionnaires are revised and modified by experts and were applied before on Gaza population.

3.10.2 Reliability: The reliability of traumatic experiences scale has been estimated as followed: value of Alfa is (0.82) and the value of split half is (0.75).

The reliability of UCLA PTSD reaction index scale has been estimated as followed: value of Alfa is (0.91) and the value of split half is (0.87), and reliability of the revised pre-school anxiety scale has been estimated as followed: value of Alfa is (0.90) and the value of split half is (0.79).

3.11 Eligibility criteria

Inclusion criteria

All preschool children aged from 3-6 years old and their mothers who reside in Gaza strip at the same time of the study.

Exclusion criteria

- Mothers of children whose age are less than 3 and more than 6.
- Mothers of children with mental disabilities.
- Mothers of children already suffering from mental disorders

3.12 Ethical considerations

- An official approval from School of Public Health at AL Quds University.
- An official permission from the Ministry of Education that gives the researcher the opportunity to enter the kindergartens to implement the study.
- An official approval from administer of education of each region in Gaza strip.
- Informed consents approval from each parent (mother).
- An official approval from Helsinki committee.
- Participants felt free to volunteer; no coercion.
- Participants in the research study recognize their rights and responsibilities.
- A privacy of the information and anonymity was maintained.
- Truthfulness of data has been maintained.
- A cover describing the study aim and its purpose and a guarantee that the study was for scientific research and that it would not bring any threat or harm to the children and their mothers were attached with the questionnaires.

-3.13 Limitations

- There is a shortage of literature and resources regarding the study topic.
- Reliance on mothers' reports is not very sufficient for accurately assessing preschool children psychological disorders.
- Studies with pre-school children may be subject to the effect of parental recall and parental mental health on their reporting of children's problems; reports from other informants (predominantly teachers) and observational assessments could have corroborated information obtained from parents.

Chapter 4

4. Results

This chapter shows the main results concerning trauma, anxiety and PTSD of preschool children. Results of the study are presented as the follow:

The first section consists of the description for main socio-demographic variables of the whole sample in two parts (Socio-demographic characteristics of the preschool children and socio-demographic characteristics of the parents). The second section shows the results of trauma of preschool which consists of frequency of preschool traumatic events items, means of preschool traumatic events scale, preschoolers trauma and sex., preschoolers trauma and age, preschoolers trauma and family income, and preschoolers trauma and place of residence, While the third section shows the results of preschool PTSD which consists of frequency of preschool PTSD items, means of preschool PTSD scales, preschoolers PTSD and sex, preschoolers PTSD and age, preschoolers PTSD and family income, preschoolers PTSD and place of residence. While the fourth section shows the results of preschool anxiety which consists of frequency of preschool anxiety items, means of preschool anxiety scale , preschoolers anxiety and sex, preschoolers anxiety and age, preschoolers anxiety and family income, preschoolers anxiety and place of residence. And the last section will show the relationship between trauma, anxiety and PTSD in preschool children.

4.1. Socio-demographic characteristics of the study sample

4.1.1. Socio-demographic characteristics of the preschool children

As presented in the following table (4-1), the total number of mothers of preschool children was 399 from 420 as a total selected sample. The age ranged from 3-6 years with mean age 4.48 (SD =0.67). Males were 165 (41.35%); and females were 234 (58.65%). Children who have siblings less than 4 were 262 (65.6); from 5-7 siblings were 89 (22.3%); and children who have siblings more than 8 were 48 (12.03%). According to place of residence, 21.02% were from North Gaza, 20.30% from Gaza, 18.8% from Middle area, 20.3% from Khan-Younis, and 19.55% from Rafah.

Socio-demographic characteristics of the children (N=399)

Table (4-1)

Sex	No.	%
Male	165	41.35
Female	234	58.65
Total	399	100
Age: mean age 4.48 (SD =0.67).		
3 y	37	9.3
4 y	134	33.58
5 y	225	56.39
6 y	3	0.75
Number of siblings		
Less than 4	262	65.66
5-7 siblings	89	22.31
More than 8	48	12.03
Place of residence		
North Gaza	84	21.05
Gaza	81	20.30
Middle zone	75	18.80
Khan-Younis	81	20.30
Rafah	78	19.55

4.1.2 Socio-demographic characteristics of the parents

The following table (4-2) shows that (63.16%) had family income less than 1200 NIS; 19.05% had family income ranged between 1201-2500 NIS; 8.27% had family income ranged between 2501-3000 NIS; and 9.52% had income 3001 NIS and more. Furthermore, the table shows that 1% of mothers were Illiterate; 4% of them had primary education; 10.08% had preparatory education; 37% had secondary education; 12.5% had diploma; 33.1% had university degree; and 1.5% had post graduate education.

For mothers' job; 82.71% were housewives; 3.76% were ordinary workers; 10.53% were working and receiving a salary; 1.50% were without work but receiving a salary; and 1.50% were working other jobs.

According to father education 2.01% were Illiterate; 6.77% had primary education; 15.59% finished Preparatory education; 31.58% finished secondary education; 12.58% had diploma; 26.32% finished university education; and 5.76% had post graduate education.

For fathers' job, 32.58% were without work; 16.79% were simple workers; 2.76% were skilled workers; 30.33% were working and receiving a salary; 13.03% were without work but receiving a salary, and 4.51% were farmers.

Socio-demographic characteristics of the parents

Table (4-2)

Family income	No.	%
Less than 1200 NIS	252	63.16
1201 - 2500 NIS	76	19.05
2501 - 3000 NIS	33	8.27
3001 NIS and more	38	9.52
Mother education		
Illiterate	4	1.00
Primary	16	4.00
Preparatory	43	10.08
Secondary	148	37
Diploma	50	12.5
University	132	33.1

Post graduate	6	1.5
Mother work		
Housewife	330	82.71
Ordinary worker	15	3.76
Working and receiving a salary	42	10.53
Not working but receiving a salary	6	1.50
Others	6	1.50
Father education		
Illiterate	8	2.01
Primary	27	6.77
Preparatory	61	15.29
Secondary	126	31.58
Diploma	49	12.28
University	105	26.32
Post graduate	23	5.76
Father work		
Without work	130	32.58
Ordinary worker	67	16.79
Skilled worker	11	2.76
Working and receiving a salary	121	30.33
Not working but receiving a salary	52	13.03
Farmer	18	4.51

4.2 Types and severity of traumatic events due to 51 days of war on Gaza Strip

The most common traumatic experiences reported by mothers on behalf of their children were: hearing shelling of the area by artillery (95.5%), hearing the loud voice of drones (89.2%), watching mutilated bodies in TV (81.2%), forced to leave you home with family members due to shelling (64.4%), and inhalation of bad smells due to bombardment (62.2%). While, the least common traumatic experiences were: Threaten of being killed (6.5%), threaten of killing of your closed relative in front of him (7.8%), and threatened with death by being used as human shield by the army to move from one home to home (8%).

Types of traumatic events due to 51 days of war on Gaza in preschool childrenTable (4-3)

Type of traumatic event	Yes		No	
	No.	%	No.	%
Hearing shelling of the area by artillery	381	95.5	18	4.5
Hearing the loud voice of Drones	356	89.2	43	10.8
Watchingmutilated bodies and dead people in TV	324	81.2	75	18.8
Forced to leave you home with family members due to shelling	257	64.4	142	35.6
Inhalation of bad smells due to bombardment	248	62.2	151	37.8
Hearing killing of a friend	235	58.9	164	41.1
Witnessing firing by tanks or heavy artillery at neighbors' homes	182	45.6	217	54.4
Witnessing demolition of big buildings	168	42.1	231	57.9
Hearing killing of a close relative	149	37.3	250	62.7
Deprivation from water or electricity during detention at home	141	35.3	258	64.7
Witnessing firing by tanks and heavy artillery at own home	100	25.1	299	74.9
Witnessing assassination of people by rockets	100	25.1	298	74.9
Threaten by shooting	92	23.1	307	76.9
Witnessing shooting of a friend	85	21.3	314	78.7

Witnessing shooting of a close relative	74	18.5	325	81.5
Witnessing killing of a close relative	73	18.3	326	81.7
Destroying of your personal belongings during incursion	63	15.8	336	84.2
Witnessing killing of a friend	56	14.0	343	86.0
Witnessing arrest of a friend	51	12.8	348	87.2
Exposure to physical injury as a result of the bombing of the house	44	11.0	355	89.0
Exposure to physical injury caused by shrapnel, bullet or missile	40	10.0	359	90.0
Witnessing arrest of a close relative by the army	38	9.5	361	90.5
Threatened with death by being used as human shield by the army to move from one home to home	32	8.0	367	92.0
Threaten of killing of your closed relative in front of you	31	7.8	368	92.2
Threaten of being killed	26	6.5	373	93.5

Severity of traumatic events due to 51 days war on Gaza

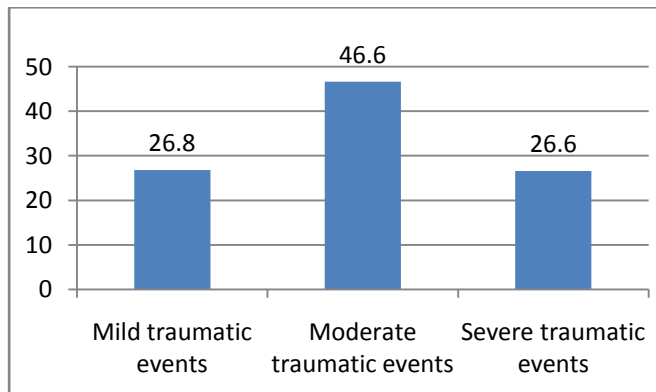
In order to find the severity of the traumatic experiences, total traumatic events were recorded in to mild trauma (0-5 events), moderate trauma (6-10 events) and severe trauma (above 11 events). The results showed that 26.8 % reported mild traumatic events, 45.6% reported moderate traumatic events, and 26.6% reported severe traumatic events.

Level of traumatic events due to 51 days war on Gaza

Table (4-4)

Traumatic events	No.	%
Mild traumatic events	107	26.8
Moderate traumatic events	186	46.6
Severe traumatic events	106	26.6

Figure 4-1: Level of traumatic events due to 51 days war on Gaza



Level of traumatic events due to 51 days of war on Gaza according to sex

Chi square test showed that 10% of boys reported severe, and 16.5% of girls reported severe traumatic events. No statistically significantly sex differences in reported traumatic events ($\chi^2 = 0.89$, $df = 1$, $p = 0.64$).

Level of traumatic events due to 51 days of war on Gaza according to sexTable (4-5)

			Trauma level			χ^2	P
			Mild	Moderate	Severe		
Sex	Male	No.	47	78	40	0.89	0.64
		%	28.4	47.2	24.2		
	Female	No.	60	108	66		
		%	25.6	46.1	28.2		

Differences in traumatic events according to socio-demographic variables

In order to find differences in types and severity of traumatic event and other socio-demographic variables such as sex, age, place of residence, education, and family monthly income. Independent t test and One Way ANOVA test were conducted.

4.2.1 Traumatic events and sex

The study showed that Palestinian preschool children in the Gaza Strip had experienced from 0-25 traumatic events with mean of 8.3 traumatic events (SD = 4.30). Independent T test was conducted. The results showed that mean traumatic event in boys were 7.99 (SD =4.07) and 8.67 for girls (SD = 4.45). There were no statistically significant differences in total traumatic events according to preschool children sex ($t = -1.55$, $p = 0.21$).

Independent t-test of traumatic events and sex, Table (4-6)

Trauma	Sex	N	Mean	SD	T	P
	Male	165	7.99	4.07	-1.55	0.12
	Female	234	8.67	4.45		

4.2.2 Traumatic events and children's age

One-way ANOVA was conducted in which total traumatic events was entered as dependent variable and other socio-demographic variables as independent variables.

The results showed no significant differences in age of children (3-6 years) and total traumatic events ($F = 1.54$, $p = 0.20$)

One-way ANOVA of traumatic events and age of children, Table (4-7)

Difference		Sum of Squares	DF	Mean Square	F	Sig.
Trauma	Between Groups	85.654	3	28.551	1.54	0.20
	Within Groups	7286.9	395	18.448		
	Total	7372.6	398			

4.2.3 Traumatic events and children's place of residence

The results showed that mean traumatic events for children's place of residence (north Gaza, Gaza, Middle area, Khan Younis, and Rafah) was (9.23, 6.3, 9.56, 7.7, and 9.23 respectively). There were statistically significant differences in traumatic events in favour of children living in the middle area ($F= 8.8$, $p = 0.001$).

One-way ANOVA of traumatic events and children's place of residence Table (4-8)

Difference	Sum of Squares	DF	Mean Square	F	Sig.
Between	609.755	4	152.439	8.881	.001
Within	6762.806	394	17.164		
Total	7372.561	398			

Means and SD of traumatic events according to place of residence, Table (4-9)

Trauma	Area	N	Mean	Std. Deviation
	North Gaza	84	9.23	4.40
	Gaza	81	6.30	2.79
	Middle zone	75	9.56	4.95
	Khan-Younis	81	7.70	3.85
	Rafah	78	9.23	4.47
	Total	399	8.39	4.30

4.2.4 Traumatic events and number of siblings

Results showed that children having more than 8 siblings had more traumatic events than the other two groups ($F = 17.29$, $p = 0.001$).

One-way ANOVA of traumatic events and number of siblings, Table (4-10)

Number of siblings	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	592.38	2	296.19	17.299	0.001
Within Groups	6780.2	396	17.122		
Total	7372.6	398			

Means and SD of traumatic events according number of siblings, Table (4-11)

Siblings	N	Mean	Std. Deviation	Maximum
4 and less	262	7.61	3.65	22
5-7	89	9.12	4.46	22
8 and more	48	11.22	5.7	25
Total	399	8.38 0	4.3	25

4.2.5 Traumatic events and family monthly income

Results showed that children having family monthly income less than 1200 NIS had more traumatic events than the other three groups ($F = 17.29$, $p = 0.001$).

One-way ANOVA of traumatic events and family monthly income Table (4-12)

Family monthly income	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	236.63	3	78.877	4.366	0.005
Within Groups	7135.9	395	18.066		
Total	7372.6	398			

Means and SD of traumatic events according to family monthly income

Table (4-13)

Monthly income	N	Mean	SD
Less than 1200 NIS	252	8.86	4.42
1201 - 2500 NIS	76	7.93	3.69
2501 - 3000 NIS	33	8.18	4.8
3000 NIS and more	38	6.32	3.56
Total	399	8.39	4.3

4.3 Post-traumatic stress symptoms

The most common post traumatic reactions in preschool children were: my child feels jumpy or startles easily, for example, when he/she hears a loud noise or when something surprises him/her (34.1%), my child feels grouchy, angry or mad (33.3%), when something reminds my child of what happened he/she gets very upset, scared or sad. (32.3%), my child has upsetting thoughts, pictures or sounds of what happened come into his/her mind when he/she does not want them to (26.8%).

Post-traumatic distress symptoms in children, Table (4-14)

PTSD Reaction	Never, Rarely	Some times	Much/ often
When something reminds my child of what happened he/she gets very upset, scared or sad.	36.6	31.1	32.3
My child has upsetting thoughts, pictures or sounds of what happened come into his/her mind when he/she does not want them to.	46.6	26.6	26.8
My child has dreams about what happened or other bad dreams	54.4	23.6	22.1
My child has flashbacks of what happened; he/she feels like he/she is back at the time when the bad thing happened living through it again.	52.4	28.1	19.5
When something reminds my child of what happened, he/she has strong feelings in his/her body like heart beating fast, headaches, or stomach aches.	72.9	14.8	12.3
My child feels like staying by him/her-self and not being with his/her friends.	79.2	13	7.8
My child feels alone inside and not close to other.	79.4	14.5	6
My child tries not to talk about, think about, or have feelings about what happened.	73.2	17.3	9.5
My child has trouble feeling sadness or anger.	68.9	20.6	10.5
My child has trouble remembering important parts of what happened.	74.7	15	10.3

My child tries to stay away from people, places, or things that make him/her remember what happened.	61.7	19.5	18.8
My child thinks that he/she will not live a long life.	77.7	12.3	10
My child watches out for danger or things that he/she is afraid of.	49.9	27.3	22.8
My child feels grouchy, angry or mad.	43.4	23.3	33.3
My child feels jumpy or startles easily, for example, when he/she hears a loud noise or when something surprises him/her.	41.1	24.8	34.1
My child has trouble going to sleep or wakes up often during the night.	54.1	24.1	21.8
My child has trouble concentrating or paying attention.	71.4	18.3	10.3

Means and standard deviations of PTSD

The results showed that the mean total scores of PTSD was 20.04 (SD =12.68), mean re-experiencing symptoms was 7.11 (SD =4.63) mean avoidance was 5.59 (SD= 5.30), and mean arousal was 7.26 (SD = 4.26).

Means and Standard deviations of PTSD, Table (4-15)

PTSD Scores	Minimum	Maximum	Mean	Std. Deviation
Total PTSD	.00	62	20.04	12.68
Re-experiencing	.00	19	7.11	4.63
Avoidance	.00	26	5.59	5.30
Arousal	.00	18	7.26	4.26

Prevalence of PTSD

According to DSM-IV-diagnostic criteria of PTSD of summing (one re-experiencing symptom, 3 avoidance symptoms , and 2 arousal symptoms), The results showed that 160 of children (40.1%) showed no PTSD, 116 of children (29.1%) showed at least one criterion of PTSD (B or C or D), 99 showed partial PTSD (24.8%), and 24of children showed full criteria of PTSD (6%).

Prevalence of PTSD (N = 399), Table (4-16)

PTSD	No.	%
No PTSD	160	40.1
One symptom	116	29.1
Partial PTSD	99	24.8
Full PTSD	24	6.0

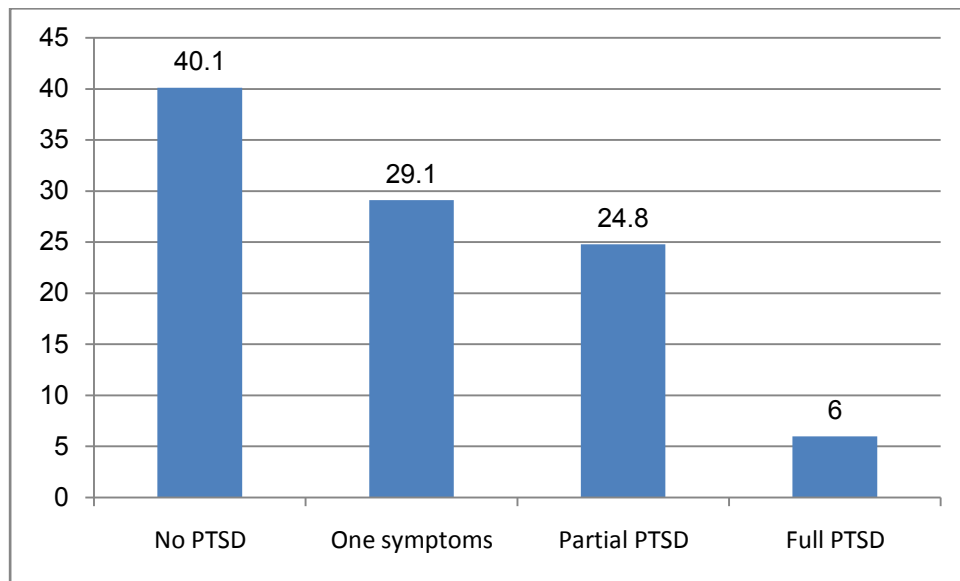


Figure 4-2: Prevalence of PTSD (N = 399)

Differences between different socio-demographic variables such as sex, family monthly income and PTSD

In order to find the differences between different socio-demographic variables such as sex, age , place of residence, family monthly income and PTSD reactions, T-independent test for two groups and One way ANOVA for 3 and more groups was done in which PTSD, re-experiencing, avoidance/numbing, and arousal were entered as dependent variables and socio-demographic variables as independent variables.

4.3.1PTSD and sex differences

T independent test was performed to find sex differences in PTSD and sub scales The results showed that there werenot statistically significant differences in total PTSD scores (Mean 12.99 girls vs. 12.24 boys) ($t = -.89$, $p = 0.38$), and also no significant differences for all subscales (re-experiencing symptoms , avoidance, and arousal).

Means and Standard deviations of the PTSD and sub scales and sex of children, Table (4-17)

Gender		Mean	SD	T	P
Total PTSD	Male	12.24	19.37	-0.89	0.38
	Female	12.99	20.51		
Re-experiencing	Male	4.58	6.78	-1.18	0.24
	Female	4.67	7.34		
Avoidance	Male	5.24	5.38	-0.66	0.51
	Female	5.36	5.74		
Arousal	Male	4.08	7.25	-0.02	0.98
	Female	4.4	7.26		

Differences in PTSD according to other socio-demographic variables

One way ANOVA was conducted in which total PTSD was entered as dependent variable and other socio-demographic variables as independent variables.

4.3.2 PTSD according to age

Results showed significant differences in PTSD results on the arousal subscale, group of children (5 years-old) had more PTSD than the other ages.

One-way ANOVA of traumatic events and age, Table (4-18)

PTSD according to age		Sum of Squares	DF	Mean Square	F	Sig.
Total PTSD	Between Groups	989.485	3	329.828	2.068	0.104
	Within Groups	63003.9	395	159.503		
	Total	63993.4	398			
Re-experiences	Between Groups	123.639	3	41.213	1.934	0.124
	Within Groups	8418.73	395	21.313		
	Total	8542.37	398			
Avoidance	Between Groups	55.099	3	18.366	0.651	0.582
	Within Groups	11137.3	395	28.196		
	Total	11192.4	398			
Arousal	Between Groups	177.906	3	59.302	3.321	0.02
	Within Groups	7052.99	395	17.856		
	Total	7230.89	398			

Means and Standard deviations of the arousal symptoms of PTSD and Age of children, Table (4-19)

	Age in years	N	Mean	Std. Deviation
Arousal	3	37	5.73	3.69
	4	134	6.87	4.11
	5	225	7.77	4.35
	6	3	5.33	5.77
		399	7.26	4.26

4.3.3 PTSD according to number of siblings

There were significant differences in total PTSD and subscales according to number of siblings. Total PTSD, re-experiences, avoidance, and arousal were more in children with 8 and more siblings.

One-way ANOVA of PTSD and number of siblings, Table (4-20)

PTSD and number of siblings		Sum of Squares	DF	Mean Square	F	Sig.
Total PTSD	Between Groups	3119.290	2	1559.645	10.14	.001
	Within Groups	60874.068	396	153.722		
	Total	63993.358	398			
Re-experiences	Between Groups	443.314	2	221.657	10.83	.001
	Within Groups	8099.052	396	20.452		
	Total	8542.366	398			
Avoidance	Between Groups	370.055	2	185.028	6.77	.001
	Within Groups	10822.356	396	27.329		
	Total	11192.411	398			
Arousal	Between Groups	216.404	2	108.202	6.10	.002
	Within Groups	7014.488	396	17.713		
	Total	7230.892	398			

Means and Standard deviations of the PTSD subscales and number of siblings, Table (4-21)

PTSD symptoms and number of siblings	Number of siblings	N	Mean	Std. Deviation
Total PTSD	4 and less	262	18.04	12.23
	5-7	89	23.33	13.37
	8 and more	48	24.85	11.41
Re-experiences	4 and less	262	6.35	4.51
	5-7	89	8.47	4.77
	8 and more	48	8.73	4.13

Avoidance	4 and less	262	4.91	5.07
	5-7	89	6.66	5.68
	8 and more	48	7.33	5.19
Arousal	4 and less	262	6.74	4.17
	5-7	89	8.02	4.39
	8 and more	48	8.67	4.10

4.3.4 PTSD and subscales according to family monthly income.

There were no significant differences in total PTSD and subscales according to family monthly income.

One-way ANOVA of PTSD and family monthly income, Table (4-22)

PTSD and family income		Sum of Squares	DF	Mean Square	F	Sig.
Total PTSD	Between Groups	403.068	3	134.356	0.80	0.50
	Within Groups	67994.64	404	168.304		
	Total	68397.7	407			
Re-experiences	Between Groups	58.785	3	19.595	0.88	0.45
	Within Groups	8953.134	404	22.161		
	Total	9011.919	407			
Avoidance	Between Groups	106.993	3	35.664	1.19	0.31
	Within Groups	12107.86	404	29.97		
	Total	12214.85	407			
Arousal	Between Groups	56.83	3	18.943	0.80	0.50
	Within Groups	9577.042	404	23.706		
	Total	9633.873	407			

4.4 Results of preschool anxiety

4.4.1. Frequency of Preschool anxiety items

The following table (4-23) demonstrates the frequency of preschool children's anxiety items as answered by their mothers. The most common anxiety symptoms reported by parents about their children were: Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening (66%), has nightmares about being apart from you (65.4%), Is afraid of the dark (62.2%), Is afraid of talking in front of the class (preschool group) e.g., show and tell (57.9%), and Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again (56.3%).

Frequency of Preschool anxiety items, Table (4-23)

No	Item	Not True at All/ Seldom	Sometimes True	Quite Often/ Very Often True
1	Has difficulty stopping him/herself from worrying	48.7	22.3	29.1
2	Worries that he/she will do something to look stupid in front of other people	71.7	15.8	12.6
3	Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap	71.7	14.8	13.5
4	Is tense, restless or irritable due to worrying	74.5	12	13.5
5	Is scared to ask an adult for help (e.g., a preschool or school teacher)	64.2	13.8	22
6	Is reluctant to go to sleep without you or to sleep away from home	80	9.8	10.3
7	Is scared of heights (high places)	60.1	16.8	23

8	Has trouble sleeping due to worrying	73.2	14.3	12.5
9	Washes his/her hands over and over many times each day	70.7	10.3	19.1
10	Is afraid of crowded or closed-in places	66.6	15	18.3
11	Is afraid of meeting or talking to unfamiliar people	58.6	14.5	26.8
12	Worries that something bad will happen to his/her parents	56.2	18.3	25.6
13	Is scared of thunder storms	36.4	20.6	43.1
14	Spends a large part of each day worrying about various things	40.9	22.3	36.9
15	Is afraid of talking in front of the class (preschool group) e.g., show and tell	28	14	57.9
16	Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again	29.6	14	56.3
17	Is nervous of going swimming	41.1	11.3	47.6
18	Has to have things in exactly the right order or position to stop bad things from happening	66.9	11	22.1
19	Worries that he/she will do something embarrassing in front of other people	67.4	10.5	22.1
20	Is afraid of insects and/or spiders	37.4	13.8	48.7
21	21. Has bad or silly thoughts or images that keep coming back over and over	42.9	15.5	41.6
22	Becomes distressed about your leaving him/her at preschool/school or with a babysitter	36.8	15.3	47.9
23	Is afraid to go up to group of children and join their activities	52.4	12.8	34.8

24	Is frightened of dogs	40.1	13.5	46.3
25	Has nightmares about being apart from you	21.8	12.8	65.4
26	Is afraid of the dark	23.1	14.8	62.2
27	Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening	21.5	12.5	66
28	Asks for reassurance when it doesn't seem necessary	32.8	15.3	51.8

4.4.2 Means of Preschool anxiety scales

The following table (4-24) shows the means of preschool anxiety scales, where the mean for total anxiety scale was (49.84); for generalized anxiety was (10.7); for social anxiety was (8.4); for specific phobia was (21.11); and separation anxiety was (9.65).

Means of Preschool anxiety scales, Table (4-24)

Preschool anxiety problems	N	Minimum	Maximum	Mean	Std. Deviation
Anxiety	399	3	104	49.84	20.80
Social Anxiety	399	0	28	8.41	6.07
Generalized Anxiety	399	0	28	10.71	6.15
Separation anxiety	399	0	20	9.65	5.07
Specific phobia	398	0	36	21.11	8.88

4.4.3 Preschoolers anxiety problems and sex

The following table (4-25) shows independent t-test comparing means of Preschoolers anxiety problems according to sex. The t-test shows that there are no significant differences between means of anxiety problems for males and females for anxiety and all subscales.

Independent t-test comparing means of Preschoolers anxiety problems according to sex, Table (4-25)

Anxiety and sex	Sex	N	Mean	Std. Deviation	T	P
Anxiety	Male	165	48.04	21.46	-1.45	0.15
	Female	234	51.11	20.28		
Social Anxiety	Male	165	8.13	6.45	-0.78	0.44
	Female	234	8.61	5.80		
Generalized Anxiety	Male	165	10.47	6.28	-0.66	0.51
	Female	234	10.88	6.07		
Separation anxiety	Male	165	9.45	5.06	-0.64	0.53
	Female	234	9.78	5.08		
Specific phobia	Male	164	20.06	9.00	-0.64	0.53
	Female	234	21.84	8.73		

4.4.4 Preschool children anxiety problems and age

One way ANOVA test was used to study the difference in means of children anxiety problems according to age "3,4, 5, and 6 years". As shown in the following table, there were no significant differences between the means of Preschoolers anxiety problems according to age.

One-way ANOVA comparing means of Preschoolers anxiety problems according to age (N=399), Table (4-26)

Preschool anxiety problems	Source of variance	Sum of Squares	DF	Mean Square	F	Sig.
Total anxiety scale	Between Groups	917.022	3	305.674	.705	.550
	Within Groups	171354.030	395	433.808		
	Total	172271.053	398			

Generalized anxiety	Between Groups	22.133	3	7.378	.199	.897
	Within Groups	14642.278	395	37.069		
	Total	14664.411	398			
Social anxiety	Between Groups	129.271	3	43.090	1.139	.333
	Within Groups	14940.158	395	37.823		
	Total	15069.429	398			
Obsessive compulsive disorder CD	Between Groups	45.229	3	15.076	.585	.625
	Within Groups	10183.944	395	25.782		
	Total	10229.173	398			
Physical injury fear	Between Groups	210.950	3	70.317	.892	.445
	Within Groups	31066.618	394	78.849		
	Total	31277.568	397			
Separation anxiety	Between Groups	917.022	3	305.674	.705	.550
	Within Groups	171354.030	395	433.808		
	Total	172271.053	398			

4.4.5 Preschool children anxiety problems and place of residence

The results showed that there were statistically significant differences in total anxiety in favour of children living in Rafah area ($F= 4.9$, $p = 0.001$), social phobia ($t 2.65$, $p = 0.03$), generalized anxiety ($F= 3.9$, $p = 0.004$), separation anxiety ($F= 5.1$, $p = 0.001$), and specific phobia ($F= 25$, $p = 0.03$).

One-way ANOVA of anxiety and children's place of residence, Table (4-27)

Anxiety and place of residence		Sum of Squares	DF	Mean Square	F	Sig.
Anxiety	Between Groups	8258.924	4	2064.731	4.960	.001
	Within Groups	164012.128	394	416.274		
	Total	172271.053	398			
Social Anxiety	Between Groups	384.771	4	96.193	2.654	.033
	Within Groups	14279.640	394	36.243		
	Total	14664.411	398			
Generalized Anxiety	Between Groups	583.879	4	145.970	3.970	.004
	Within Groups	14485.549	394	36.765		
	Total	15069.429	398			
Separation anxiety	Between Groups	503.673	4	125.918	5.101	.001
	Within Groups	9725.500	394	24.684		
	Total	10229.173	398			
Specific phobia	Between Groups	799.646	4	199.912	2.578	.037
	Within Groups	30477.921	393	77.552		
	Total	31277.568	397			

Means and SD of anxiety according to place of residence, Table (4-28)

Place of residence		N	Mean	Std. Deviation
Anxiety	North Gaza	84	47.08	21.91
	Gaza	81	42.58	18.83
	Middle area	75	51.41	20.57
	Khan-Younis	81	53.64	21.63
	Rafah	78	54.9	18.75
	Total	399	49.84	20.8
Social Anxiety	North Gaza	84	8.51	6.8
	Gaza	81	6.57	5.04
	Middle area	75	8.61	6.06
	Khan-Younis	81	8.98	5.94
	Rafah	78	9.42	6.11
	Total	399	8.41	6.07

Generalized Anxiety	North Gaza	84	10.06	6.26
	Gaza	81	8.81	5.34
	Middle area	75	10.83	5.88
	Khan-Younis	81	11.86	6.46
	Rafah	78	12.09	6.3
	Total	399	10.71	6.15
Separation anxiety	North Gaza	84	8.82	5.09
	Gaza	81	8.02	4.87
	Middle area	75	9.79	5.28
	Khan-Younis	81	10.68	5.03
	Rafah	78	11.01	4.55
	Total	399	9.65	5.07
Specific phobia	North Gaza	84	19.69	8.93
	Gaza	81	19.17	8.41
	Middle area	74	22.38	9.09
	Khan-Younis	81	22.12	8.69
	Rafah	78	22.37	8.92
	Total	398	21.11	8.88

4.4.6 Preschooler's Anxiety problems and number of siblings

Results showed that children having more than 8 siblings were more symptomatic than the other two groups in all anxiety and subscales.

One-way ANOVA of anxiety and number of siblings, Table (4-29)

Anxiety and number of siblings		Sum of Squares	DF	Mean Square	F	Sig.
Anxiety	Between	7462.403	2	3731.202	8.965	.001
	Within Groups	164808.649	396	416.183		
	Total	172271.053	398			
Social Anxiety	Between	449.731	2	224.866	6.264	.002
	Within Groups	14214.680	396	35.896		
	Total	14664.411	398			
Generalized Anxiety	Between	558.577	2	279.289	7.622	.001
	Within Groups	14510.851	396	36.644		
	Total	15069.429	398			

Separation anxiety	Between	281.562	2	140.781	5.604	.004
	Within Groups	9947.611	396	25.120		
	Total	10229.173	398			
Specific phobia	Between	655.310	2	327.655	4.226	.015
	Within Groups	30622.258	395	77.525		
	Total	31277.568	397			

Means and SD of anxiety and number of siblings, Table (4-30)

Anxiety and number of siblings		N	Mean
Anxiety	4 and less	262	46.79
	5-7	89	54.46
	8 and more	48	57.92
	Total	399	49.84
Social Anxiety	4 and less	262	7.68
	5-7	89	9.36
	8 and more	48	10.60
	Total	399	8.41
Generalized Anxiety	4 and less	262	9.86
	5-7	89	12.37
	8 and more	48	12.31
	Total	399	10.71
Separation anxiety	4 and less	262	9.05
	5-7	89	10.64
	8 and more	48	11.08
	Total	399	9.65
Specific phobia	4 and less	261	20.25
	5-7	89	22.09
	8 and more	48	23.92
	Total	398	21.11

4.4.7 Preschool children anxiety problems and family income

One way ANOVA test was used to study the difference in means of Preschoolers anxiety problems according to family income "Less than 1200 NIS, 1201 - 2500 NIS, 2501 - 3000 NIS, and 3001 NIS and more". Results showed that children having family monthly income less than 1200 NIS were more anxious than the other three groups ($F = 10.16$, $p = 0.001$)

One-way ANOVA of anxiety and family monthly income, Table (4-31)

Anxiety and family income		Sum of Squares	DF	Mean Square	F	Sig.
Anxiety	Between Groups	12341.816	3	4113.939	10.161	.001
	Within Groups	159929.236	395	404.884		
	Total	172271.053	398			
Social Anxiety	Between Groups	736.842	3	245.614	6.966	.001
	Within Groups	13927.569	395	35.260		
	Total	14664.411	398			
Generalized Anxiety	Between Groups	860.150	3	286.717	7.970	.001
	Within Groups	14209.279	395	35.973		
	Total	15069.429	398			
Separation anxiety	Between Groups	358.745	3	119.582	4.785	.003
	Within Groups	9870.428	395	24.988		
	Total	10229.173	398			
Specific phobia	Between Groups	1357.244	3	452.415	5.958	.001
	Within Groups	29920.324	394	75.940		
	Total	31277.568	397			

Means and SD of anxiety according to family monthly income, Table (4-32)

Anxiety and family income		N	Mean	S.D
Anxiety	Less than 1200 NIS	252	52.15	20.31
	1201 - 2500 NIS	76	52.11	21.85
	2501 - 3000 NIS	33	45.73	18.50
	3000 NIS and more	38	33.58	16.13
	Total	399	49.84	20.80
Social Anxiety	Less than 1200 NIS	252	8.96	6.07
	1201 - 2500 NIS	76	9.16	6.35
	2501 - 3000 NIS	33	6.70	6.04
	3000 NIS and more	38	4.71	3.67
	Total	399	8.41	6.07
Generalized Anxiety	Less than 1200 NIS	252	11.29	6.26
	1201 - 2500 NIS	76	11.42	6.37
	2501 - 3000 NIS	33	9.64	4.87
	3000 NIS and more	38	6.42	3.95
	Total	399	10.71	6.15
Separation anxiety	Less than 1200 NIS	252	10.10	4.97
	1201 - 2500 NIS	76	9.84	5.17
	2501 - 3000 NIS	33	8.85	4.73
	3000 NIS and more	38	6.92	5.04
	Total	399	9.65	5.07
Specific phobia	Less than 1200 NIS	251	21.85	8.66
	1201 - 2500 NIS	76	21.68	9.07
	2501 - 3000 NIS	33	20.55	9.10
	3000 NIS and more	38	15.53	7.94
	Total	398	21.11	8.88

4.5 Relationship between PTSD and total Trauma

Pearson correlation test was done to find the association between trauma, PTSD, and anxiety. The results showed that there was significant correlation between total traumatic events reported by children and total anxiety ($r = 0.30$, $p = 0.001$), generalized anxiety ($r=0.31$, $p = 0.001$), separation anxiety ($r=0.25$, $p = 0.001$), and specific phobia ($r=0.14$, $p = 0.01$). This means that experiences that are more traumatic lead to anxiety. Also trauma was correlated with total PTSD ($r = 0.32$, $p = 0.001$), re-experiencing ($r=0.32$, $p = 0.001$), avoidance ($r=0.28$, $p = 0.001$), and arousal ($r = 0.23$, $p = 0.001$).

Person Correlations between trauma PTSD, and Anxiety, Table (4-33)

Trauma, PTSD and anxiety	1	2	3	4	5	6	7	8	9
1. Trauma	0								
2.Total anxiety	.30**								
3.Social Anxiety	.29**	.76**							
4.Generalized Anxiety	.31**	.82**	.62**						
5.Separation anxiety	.25**	.77**	.42**	.60**					
6.Specific phobia	.14**	.82**	.42**	.47**	.52**				
7. Total PTSD	.32**	.64**	.46**	.60**	.48**	.48**			
8.Re- experiences	.32**	.59**	.39**	.58**	.47**	.44**	.90**		
9. Avoidance	.28**	.55**	.47**	.51**	.39**	.38**	.88**	.67**	
10. Arousal	.23**	.58**	.38**	.54**	.43**	.49**	.90**	.76**	.68**

Chapter -V-

5. Discussion and Recommendations

5.1 Introduction

This chapter presents a discussion of the results of the study as presented in chapter four; these findings are discussed in line with the literature review, which is important to clarify them in comparison with other studies conducted by other researchers.

The chapter also presents recommendations for kindergartens, teachers and parents regarding trauma, PTSD and anxiety in preschool children in Gaza strip, as well as it provides decision makers with recommendations to set plans for caring about this category.

5.2 Main Results

The most common traumatic experiences reported by children were hearing shelling of the area by artillery (95.5%), while the least common traumatic experiences were: threatened of being killed (6.5%). The results also showed that 26.8 % reported mild traumatic events, 10% of boys reported severe, and 16.5% of girls reported severe traumatic events which means that there was no statistically significantly sex differences in reported traumatic events and there was no statistically significant differences in total traumatic events according to preschool children sex .

The results showed no significant differences in age of children (3-6 years) and total traumatic events. There were statistically significant differences in traumatic events in favor of children living in the middle area and there were statistically significant Children having more than 8 siblings had more traumatic experiences than the other two groups as well as children having family monthly income less than 1200 NIS had more traumatic experiences than the other three groups.

For PTSD results, the most common post traumatic reactions in preschool children were: My child feels jumpy or startles easily, for example, when he/she hears a loud noise or when something surprises him/her (34.1%).

The results showed that the mean total scores of PTSD were 20.04, mean re-experiencing symptoms was 7.11, mean avoidance was 5.59, and the mean arousal was 7.26.

According to DSM-IV diagnosis of PTSD of summing of (one re-experiencing, 3 avoidance, and 2 arousal symptoms), The results showed that 160 of children (40.1%) showed no PTSD, 116 of children (29.1%) showed at least one criteria of PTSD (B or C or D), 99 showed partial PTSD (24.8%), and 24 of children showed full criteria of PTSD (6%).

The results showed that there were no statistically significant differences in the total PTSD scores for boys and girls, and also no significant for all subscales (re-experiencing symptoms, avoidance, and arousal).

Results showed significant differences in PTSD, and subscales according to age, group of 5 years-old children were found to have more PTSD arousal symptoms than the other ages.

The results of PTSD and subscales according to the number of siblings showed that total PTSD, re-experiences, avoidance, and intrusion were more in children with 8 and more siblings, and there were no significant differences in total PTSD and subscales according to family monthly income.

For anxiety results, the most common anxiety symptom reported by parents about their children was: Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening (66%).

The mean for total anxiety scale was (49.84); for generalized anxiety was (10.7); for social anxiety was (8.4); for specific phobia was (21.11); and for separation anxiety was (9.65).

No significant differences were shown between the 'means' of anxiety problems for males and females for anxiety and all subscales, as well as between the 'means' of preschoolers' anxiety problems according to age.

The results showed that there were statistically significant differences in total anxiety in favor of children living in the Rafah area.

Children having more than 8 siblings were more anxious than the other two groups in all anxiety and subscales, In addition Children having family monthly income less than 1200 NIS were more anxious than the other three groups.

The results showed that there was significant correlation between total traumatic events reported by children and total anxiety, generalized anxiety, separation anxiety and specific phobia. This means that experiences that are more traumatic lead to anxiety. Also trauma was correlated with total PTSD, re-experiencing, avoidance, and arousal.

5.3 Discussion

The current study investigates the effects of 2014 war trauma on preschool children anxiety and PTSD in Gaza strip.

Possible limitations of this study include using screening measures rather than extensive diagnostic and structured interviews.

Reliance on mothers' reports is not sufficient. Although this is difficult to avoid due to the limited communication abilities of preschool children, parent reports have the tendency to underestimate internalizing symptoms in children (Meiser-Stedman et al., 2008; Scheeringa et al., 2006) and can be biased by the parents' own traumatic experiences, level of guilt, or misconceptions that their child is "too young" to be affected.

Moreover, the number of girls in this study was higher than the number of boys; this is due to the lack of commitment from the principals of the selected kindergartens regarding the request of researcher to select 10 mothers of boys and 10 mothers of girls' preschoolers. In addition, the difficulty of gathering the specified number of mothers for the meetings from each kindergarten obliged the researcher to fulfill the questionnaires with the mothers who came for the appointed meetings regardless of the sex of their children.

In addition to that, the number of preschool children with the age group of 3 was lower than the other two age groups (4 and 5 years old children) because many of the randomly chosen kindergartens are not accepting this age group in their classes. Also, the number of children with this age group was lower in the kindergartens that already accept this age.

The researcher acknowledges that she used the Arabic version of Gaza traumatic events scale, PTSD scale, and Spence anxiety scale.

The most common traumatic experiences reported by children were hearing shelling of the area by artillery, hearing the loud voice of drones, watching mutilated bodies in TV, forced to leave home with family members due to shelling, and inhaling bad smells due to bombardment; while the least common traumatic experiences for children were the threat of being killed, threat of killing of having a close relative killed in front of them,

and the threat of dying as a human shield by the Israeli army while move from one home to another .

This result is coherent with the results of other studies conducted on Gaza children after being exposed to war-related traumatic events (Thabet et al., 2001, 2002, 2004, 2006).

The results showed that 26.8 % reported mild traumatic events, 45.6% reported moderate traumatic events, and 26.6% reported severe traumatic events, which is understandable because the war of 2014 on the Gaza strip areas, which lasted 51 days, was very destructive and resulted in a very large number of injuries and martyrs.

10% of boys and 16.5% of girls reported severe traumatic events. There was no statistical significant sex difference in reported traumatic events, which is also reasonable because all the children were affected by the war to the same degree regardless of their sex.

There were no significant differences in the age of children (3-6 years) and the total traumatic events. This is because all the children in this study are very close in age; this means they are almost from the same age group.

The results showed that the mean traumatic events for the children's place of residence (north Gaza, Gaza, Middle area, Khan-Younis, and Rafah) were (9.23, 6.3, 9.56, 7.7, and 9.23 respectively). There were statistically significant differences in traumatic events in favor of children living in the Middle Area.

The researcher believes this result showed up because some of the randomly chosen kindergartens from the Middle Area were found to be in highly affected slums during the war which may result in a greater number of traumatic events for people living there.

The results showed that children having more than 8 siblings experienced more traumatic events than the other two groups. In addition, children having family monthly income less than 1200 NIS were had more traumatic experiences than the other three groups, which is expected because more than 60% of children in this study were from families with income lower than 1200 NIS per month; that means that most of the children exposed to traumatic events had low family income. Moreover, the big number of siblings can cause children to be highly exposed to sever traumatic events and lead to a lesser ability for parent to protect, control and observe their children.

According to DSM-IV diagnosis of PTSD of summing of (one re-experiencing, 3 avoidance, and 2 arousal symptoms), The results showed that 160 of children showed no PTSD, 116 of children showed at least one criteria of PTSD (B or C or D), 99 showed partial PTSD, and 24 of children showed full criteria of PTSD.

The researcher finds that this result fairly agrees with the results of PTSD prevalence in some studies and differs from the results showed by other previous studies. The prevalence of PTSD can vary depending on the diagnostic criteria used to diagnose the symptoms and the timing when the study took place after the ending of the traumatic events. It is important to clarify that this study was conducted after more than six months of the ending of the war. The results agrees with one recent study using dsm5 diagnostic criteria that estimated the rate of PTSD diagnosis among unintentionally burned preschool children, after 6 months of their injury, to be 10% (De Young et al. 2012).

This result agrees with the previous results which found no differences between boys and girls regarding the severity of traumatic events and agrees with many previous studies conducted on preschool children and discussing different types of emotional, behavioral problems and many psychiatric disorders. Most of them found no differences in prevalence between boys and girls in this age group. This study agrees with a study - on diagnosis of PTSD in preschool children- which found no significant differences between child gender, parent age, and parent employment status(De Young et al. 2011).

Results showed no significant differences in PTSD and subscales according to age. The group of 5-year-old children had more PTSD than the other ages. This result is logical because the 5-year old children have better cognitive ability to understand the context of the trauma than the other children aged 3 and 4 years old have. This result agrees to some point with some research findings which suggest that very young children cannot conceptualize traumatic events. Their cognitive abilities to appraise the meaning of the traumatic events are not as developed as those of older children. Instead, they may present with non-specific behavioral or emotional disorders, rather than PTSD reactions. Older children are possibly more vulnerable to develop the full presentation of PTSD after exposure to a severe traumatic event (pynoos, 1990; el bedour, 1993; green et al, 1994).

For total PTSD and subscales according to the number of siblings; total PTSD, re-experiences, avoidance, and intrusion were more in children with siblings numbered 8 and up. This result is plausible because as the big number of siblings may expose children to more traumatic stress because of the limited ability of the parents to monitor and pay attention to all of their children during the Israeli offense in order to protect them, or to give sufficient care and assurance to all of them.

There were no significant differences in total PTSD and subscales according to family monthly income, which indicates that the financial situation has nothing to do with developing PTSD after the Israeli offense.

The total result of anxiety is higher than the results of other studies about the prevalence of preschool children anxiety, but the researcher thinks that it is logical in this study because it is conducted in a war affected country with too many life stressors and ongoing crisis.

No significant differences were found between means of anxiety problems for males and females for anxiety and all subscales, and no significant differences were found between the means of preschoolers' anxiety problems according to age.

These results match with some population studies that have not demonstrated significant sex differences in prevalence of anxiety disorders in preschool children (Canino et al. 2004, Ford et al. 2003). In addition, results of Thabet's study about depression and anxiety prevalence in preschool children (Thabet et al., 2014), showed no gender or age differences for all types of anxiety disorders in preschool children.

The results showed that there were statistically significant differences in total anxiety in favor of children living in the Rafah area.

This result can be acceptable and it is may be due to the great damages that Rafah area witnessed during the 2014 war. Also, it is may be due to the exposure of the area to shelling and bombing, ground invasion, and the destruction and demolishing of the underground tunnels. Additionally, some other unexplored risk factors may have played a role in the appearance of this result in Rafah area.

Children having 8 siblings or more had more anxiety symptoms than the other groups in all anxiety subscales.

This result agrees with the previously discussed results which found that trauma severity and PTSD are positively correlated with the increasing number of siblings. These results prove that the big number of sibling is a risk factor for developing PTSD and anxiety disorders. The large number of siblings can be stressful and may affect the mothers mental health and ability to show sufficient care for all of her children, which may in return affect negatively on the children's mental health. This result also agrees with a study conducted on preschool anxiety disorders in pediatric primary care which found that preschoolers who lived with a greater number of siblings were more likely to meet criteria for generalized anxiety disorder, social phobia, and any anxiety disorder (Franz, L et al., 2013).

Children having family monthly income less than 1200 NIS were more anxious than the other three groups.

This result is consistent with other researches about children anxiety and shows that low family income can create an anxious and stressful environment for the parents, as well as for their children in return. Parker et al (1999) reported that low income parents also report a higher level of frustration and aggravation with their children. This may result in an increase of anxiety and fear of preschool children.

The results showed that there was significant correlation between total traumatic events reported by children and total anxiety, generalized anxiety, separation anxiety, and specific phobia. This means that experiences that are more traumatic lead to anxiety. Also trauma was correlated with total PTSD, re-experiencing, avoidance, and arousal.

This result is consistent with most of the studies conducted on children as well as a study conducted in Gaza (Thabet et al., 2007), (Pine & Cohen 2002, Pynoos et al. 1999), (Edwards et al. 2009), (Goodyer et al. 1990, Rapee & Szollos 2003, Tiet et al. 2001), (Allen et al. 2008), (Ost 1987).

5.4 Conclusion

The current study contributes to the existing literature by revealing that the exposure to war traumatic events contributes to appearance of PTSD and anxiety problems among preschool children, as well as proving the possibility of developing PTSD among preschool children like other older children and adults, and it shows that there are correlations between preschool children exposure to trauma and having PTSD and anxiety problems.

Furthermore, it shows that preschool children both males and females are equally affected by the severity of exposure to traumatic events and that both sexes from this age group are almost the same in regard to the development of PTSD and anxiety disorders.

Moreover, the current study shows that low family income influences the appearance of anxiety problems among pre-school children. In addition, the high number of siblings has significant effects on prevalence of PTSD and anxiety problems among pre-school children.

5.5. Recommendations

In the light of the literature and the results of the current study, the following recommendations are made:

5.5.1 Kindergartens should:

- Maintain psychosocial connection among children and their mothers or caregivers by sharing them in kindergartens' activities. This is important to promote active participation between mothers and their children.
- Kindergartens should reinforce favorite recreational activities that children prefer for recreation and to improve their mental health such as leisure trips, educational trips, as well as play therapy.

5.5.2 Concerned societal institutions and NGO's:

-Societal institutions should organize activities for parents and caregivers of preschool children to improve their mental health and help children overcome war trauma, such as various training courses and educational programs.

-Low family income proved to have great influence on preschoolers' mental health problems and anxiety, so societal institutions and decision makers must care about poor families through providing various forms of aid.

-Societal institutions should promote public educational and awareness raising programs for parents regarding helping their children dealing as much as possible with war trauma and its effects.

-Outreach child mental health clinics with multidisciplinary staff need to be established at primary health centers to assess and treat children referred from community agencies and schools after exposure to traumatic events.

5.5.3 Recommendations for further studies

-Research should involve the psychiatric assessment of primary care givers in parallel with that of the children in order to understand the effects of family and social support on developing PTSD and anxiety problems in preschool children in Gaza Strip.

-More in-depth research should be conducted to measure the impact of both the number and severity of exposure to different types of trauma rather than exposure to the count of traumatic events that preschool children experienced after being exposed to wars.

-Researches should implement more studies on risk and protective factors influencing prevalence of PTSD and anxiety problems in preschool children after being exposed to war trauma.

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المجلس الفلسطيني للبحوث الصحية Palestinian Health Research Council

تعزيز نظام الصحة الفلسطيني من خلال مساعدة استخدام المعلومات البحثية في صنع القرار

Developing the Palestinian health system through facilitating the use of information in decision making
**Helsinki Committee
For Ethical Approval**

Date: 06/04/2015

Number: PHRC/HC/26/15 ✓

Heba El Ghalayini

الاسم:

We would like to inform you that the committee had discussed the proposal of your study about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم
حول:-

Effect of war trauma on preschool children anxiety and post-traumatic stress disorder in Gaza strip

The committee has decided to approve the above mentioned research.
Approval number PHRC/HC/26/15 in its meeting on 06/04/2015

و قد قررت الموافقة على البحث المذكور عاليه
بالرقم والتاريخ المذكوران عاليه

Member
Signature
Member
Chairman
Abed

General Conditions:-

1. Valid for 2 years from the date of approval.
2. It is necessary to notify the committee of any change in the approved study protocol.
3. The committee appreciates receiving a copy of your final research when completed.

Specific Conditions:-

The subject was approved following the World Medical Association Declaration of Helsinki-Ethical principles for medical research involving human subjects, adopted by the 18th World Medical Association General Assembly, Helsinki, Finland, June 1964 and amended by the 50th WMA General Assembly, Seoul, Korea, October 2006.

E-Mail: pal.phrc@gmail.com

Gaza - Palestine

غزة - فلسطين
شارع النصر - مفترق العيون



التاريخ : 2015/1/24

الرقم: ك ص ع - 9 / 2015

حضرة الدكتور / زياد ديب المحترم
وكيل مساعد وزارة التربية والتعليم العالي
تحية طيبة وبعد ...

الموضوع : تسهيل مهمة الطالبة عبد الطلمي

تقوم الطالبة المذكورة بأعمالها بالمرم بحث بعنوان :

Effect of war trauma on preschool children anxiety and post-traumatic stress disorder in Gaza strip

كمطلب للدخول على درجة الماجستير في الصحة النفسية المجتمعية وعليه نرجو التكرم والإيعاز لمن ترونه مناسب بتسهيل مهمة الطالبة وتزويدها بالإحصائيات والبيانات اللازمة من رياض الأطفال التابعة لوزارتكم المرفقة حيث أنه سيتم جمع البيانات من ثمعات الأطفال للسجلين بالروشات.
علما بأن المعلومات ستكون متوفرة لدى الجامعة والجامعة فقط وستقوم بالاعلاءكم على النتائج في حينها .

شاكرين لكم حسن دعمكم للمسيرة العلمية...

وتفضلوا بقبول وافر الاحترام والتقدير...

أ.د. عبد العزيز موسى ثابت
أستاذ الطب النفسي
مستشفى برنامج الصحة النفسية المجتمعية
جامعة القدس - غزة



تسليم

تاريخ



حفظهم الله،،

الأخوات/ مديرات رياض الأطفال

السلام عليكم ورحمة الله وبركاته ،،

الموضوع / تسهيل مهمة بحث

تهنئكم مديرية التربية والتعليم شرق خان يونس أطيب تحياتها وتتمني لكم موفور الصحة والعافية،

وبخصوص الموضوع أعلاه، يرجى تسهيل مهمة الباحثة/ هبة رياض العلمي والتي تجري بحثاً بعنوان:

Effect of war trauma on preschool children and post-traumatic stress

Disorder in Gaza strip

وأن استكمالاً لمتطلبات الحصول على درجة الماجستير في كلية الصحة العامة جامعة القدس تخصص الصحة النفسية

المختصة، في تمديد أدوات البحث على عينة من أولياء الأمور.

وقد ضلوا بقبول فائق (الاحتراف)،،

قسم "التخطيط والمعلومات"

أبو عبد محمد شحات





قسم التخطيط والمعلومات

التاريخ 23 / 2 / 2015 م

المحترمات

الأخوات / مديرات رياض الأطفال

السلام عليكم ورحمة الله وبركاته ،،،

الموضوع / تسهيل مهمة

نهنئكم أطيب التهاني، وبالإشارة إلى الموضوع أعلاه نرجو منكم تسهيل مهمة الباحثة: هبة رياض

العلمي، حيث تجري الباحثة بحثاً بعنوان: " **Effect of War trauma on Preschool**

children anxiety and post-traumatic stress disorder in Gaza strip " وذلك

استكمالاً لمتطلبات الحصول على درجة الماجستير في كلية الصحة العامة جامعة القدس تخصص

الصحة النفسية المجتمعية، في تطبيق أدوات البحث على عينة من أولياء أمور طلبة رياض الأطفال

وذلك حسب الأصول.

وتفضلوا فائق التقدير والاحترام،،،

/ مدير التربية والتعليم

د. سعيد إبراهيم حرب





قسم التخطيط والمعلومات
تاريخ: 2015/02/17 م
الرقم: 28 ربيع الآخر 1436 هـ

الأخوات /مديرات رياض الأطفال المحترمات
السلام عليكم ورحمة الله وبركاته ...

الموضوع: تسهيل مهمة بحث

تهديكم أطيب التحيات، وتتمنى لكم موفور الصحة والعافية، وبالإشارة للموضوع أعلاه، يرجى تسهيل مهمة الباحثة /**هبة رياض العلمي** والتي تجري بحثاً استكمالاً لمتطلبات الحصول على درجة الماجستير في الكلية الصحية العامة جامعة القدس تخصص الصحة النفسية المجتمعية، في تطبيق أدوات البحث علي عينة من أولياء أمور طلبة رياض الأطفال بروضتكم انوقرة

مع الاحترام والتقدير ،،،

أ. أشرف عبد العزيز عابدين
مدير التربية والتعليم

أ. عامر أحمد أبو طه
رئيس قسم التعليم العام

أ. حسن أحمد حجازي
رئيس قسم التخطيط والمعلومات



نسخة السيد مدير المادرة الفنية المعززة.
نسخة السيد مدير المادرة الإدارية المعززة.



قسم التخطيط والتطوير التربوي

الرقم: ١٥ / ٢٠١٥
التاريخ: 2015 / 5 / 5
المرجع: 6 / 6 / 6

المحترم

باسم / مدير مزرع الأطفال

السلام عليكم ورحمة الله وبركاته ...

الموضوع / تقديم شهادة باعثة

يهدىكم قسم التخطيط عامر تحياته العطرة، وبالإشارة للموضوع أعلاه يرجى تسهيل مهمة الباحث /
... صبة مزرع ... من جامعة ...
Effect of war trauma on preschool children
الذي يجري بحث بعنوان
anxiety and post-traumatic stress disorder in Gaza
في تطبيق أدوات الدراسة على عينة من ...
... مزرع ...
ذلك حسب الأصول و بما لا يؤثر على العناية التعليمية في مدرستكم.

وتفضلوا بقبول وافر الاحترام والتقدير،،،

أ. علي سعيد أبو حسان

مدير التربية والتعليم



الموافق

... سنة ...

السيدات الأمهات الفاضلات،

تحية طيبة وبعد...

أرجو من حضرتكن تعبئة الاستبيانات التالية و التي سيتم جمعها بهدف استكمال المتطلبات البحثية الخاصة برسالة الماجستير للطالبة هبة الغلاييني وهي بعنوان آثار الحرب على تطوير اضطراب كرب ما بعد الصدمة و القلق لدى أطفال ما قبل المدرسة.

ستأخذ تعبئة هذه الاستبيانات حوالي 20 دقيقة من وقتكن الثمين.

تعبئة هذه الاستبيانات تساعد على فهم أشمل وأعمق لمدى انتشار الصدمة النفسية و أثرها في تطوير اضطراب ما بعد الصدمة والقلق لدى أطفال ما قبل المدرسة.

ملاحظة: جميع المعلومات المعطاة سرية و لن يتم نشر المعلومات الخاصة بطفلك إلا بعد أخذ موافقتك.

أشركم على مشاركتكم و تعاونكم معي وأسأل الله أن يجعله في ميزان حسناتكم.....

الطالبة هبة الغلاييني

معلومات ديموغرافية للوالدين

رقم ت :

الجنس ☐ ولد ☐ بنت العمر _____

العنوان : ☐ شمال غزة ☐ غزة ☐ المنطقة الوسطى ☐ خانونس ☐ رفح

مكان السكن : ☐ مدينة ☐ معسكر ☐ قرية

نوع السكن : ☐ إيجار ☐ ملك ☐ مع العائلة ☐ أخرى حدد _____

عدد الأخوة : ☐ 4 و أقل ☐ من 5-7 ☐ 8 و أكثر

الدخل الشهري للأسرة :

☐ أقل من 1200 شيكل ☐ من 1200-2500 شيكل ☐ من 2500-3000 شيكل ☐ أكثر من 3000 شيكل

عمل الأب:

☐ لا يعمل ☐ عامل عادي ☐ عامل صناعي ☐ يعمل و يتقاضى مرتب ☐ لا يعمل ويتقاضى مرتب ☐ تاجر

عدد سنوات تعليم للأب _____

☐ لم يتعلم ☐ ابتدائي ☐ اعدادي ☐ ثانوي ☐ دبلوم ☐ جامعي ☐ دراسات عليا

عمل الأم : ☐ ربة بيت ☐ عاملة ☐ تعمل و تتقاضى راتب ☐ لاتعمل و تتقاضى راتب ☐ تاجرة ☐ أخرى

عدد سنوات تعليم الأم: _____

☐ لم تتعلم ☐ ابتدائي ☐ اعدادي ☐ ثانوي ☐ دبلوم ☐ جامعية ☐ دراسات عليا

هل تعالجت الأم نتيجة لإمراض نفسية في السابق نعم ☐ لا ☐

إذا كانت الإجابة بنعم فما هو المرض _____

و أين تعالجت _____

ما هي تبعية الروضة: الوكالة ☐ الحكومة ☐ خاصة ☐ جمعية خيرية ☐ أخرى حدد _____

الاسم: (اختياري) التوقيع التاريخ _____

مقياس الخبرات الصادمة الناتجة عن الحرب على قطاع غزة

اعداد أ. د. عبد العزيز ثابت

عمر الطفل _____ الجنس ☐ ذكر ☐ أنثى

عزيزي/تي:

أمامك مجموعة من البنود التي توضح أنواع الخبرات الصادمة (الأحداث المؤلمة) التي قد يتعرض لها أي إنسان في الظروف الصعبة مثل الحروب والتي قد تشمل بعض ما تعرض له طفلك خلال الحرب علي غزة. نرجو أن تضع علامة صح في الخانة الصحيحة.

الرقم	الحدث أو الخبرة الصادمة	نعم	لا
1	سماع طفلي/طفلاتي لاستشهاد صديق أو جار لك أثناء الحرب		
2	سماع طفلي/طفلاتي لاستشهاد أب أو أخ أو أخت أو قريب لك أثناء الحرب		
3	سماع طفلي/طفلاتي لأصوات القصف على المناطق المختلفة من قطاع غزة		
4	سماع طفلي/طفلاتي لصوت الزنانة باستمرار		
5	مشاهدة طفلي/طفلاتي لاستشهاد صديق لك أمامك		
6	مشاهدة طفلي/طفلاتي لاستشهاد أب أو أخ أو أخت أو قريب لك أمامك		
7	مشاهدة طفلي/طفلاتي لإصابة صديق لك أمامك بالشظايا أو الرصاص		
8	مشاهدة طفلي/طفلاتي لإصابة أب أو أخ أو أخت أو قريب لك أمامك بالشظايا أو الرصاص		
9	مشاهدة طفلي/طفلاتي لبيتنا و هو يهدم ، و يدمر من القصف أو الجرافات		
10	مشاهدة طفلي/طفلاتي لبيت جيراننا و هو يهدم ، و يدمر من القصف أو الجرافات		
11	مشاهدة طفلي/طفلاتي لأب/أخ/أخت/أم/قريب له و هو يعتقل أمامه		
12	مشاهدة طفلي/طفلاتي لصديق و هو يعتقل أمامه		
13	مشاهدة طفلي/طفلاتي لصور الجرحى و الأشلاء والشهداء في التلفزيون		
14	مشاهدة طفلي/طفلاتي للابراج السكنية العالية و هي تقصف امام عينه و تسوى بالأرض		
15	مشاهدة طفلي/طفلاتي لعمليات الاغتيالات من قبل الجيش		
16	تعرض طفلي/طفلاتي للإصابة الجسدية نتيجة لقصف منزلي		
17	تعرضه/تعرضها للإصابة بشظية قنبلة أو صاروخ أو الرصاص		
18	تعرضه/تعرضها للاحتجاز في البيت و للحرمان من الماء و الأكل و الكهرباء		
19	تعرضه/تعرضها لإطلاق النار بقصد التخويف		
20	تعرض أغراضه/أغراضها الشخصية في المنزل للتدمير و التكسير والنهب من الجيش		
21	تعرضه/تعرضها للتهديد شخصياً بالقتل		
22	تعرضه/تعرضها للتهديد بقتل أحد أفراد الأسرة		
23	تعرضه/تعرضها للخطر الشديد باستخدامه كدرع بشري للقبض على جار لكم		
24	تعرضه/تعرضها لترك المنزل مع عائلته وأقاربه و النزوح لمناطق أخرى		
25	تعرضه/تعرضها لاستشاق غازات كريبه ناتجة عن القصف		

مقياس سبنس للقلق لدى الأطفال ما قبل الروضة-المعدل

اعداد أ. د. عبد العزيز ثابت

عزيزتي: أمامك مجموعة من الأسئلة التي تقيس الاعراض النفسية التي قد يعاني منها الاطفال في سن رياض
الاطفال خلال الفترة الماضية. برجاء وضع دائرة حول الإجابة الصحيحة

لا	أحيانا	معظم الأحيان	كثيرا	كثيرا جدا	البنود
					1. يقلق من عمل أشياء تظهره غيباً أمام الآخرين
					2. يخاف من طلب مساعدة البالغين
					3. يخاف من الحديث و مقابلة الأشخاص الغرباء
					4. يخاف من الحديث أمام الآخرين في الفصل
					5. يقلق من أنه سوف يقوم بأفعال تخرجه أمام الآخرين
					6. يخاف من القيام بنشاطات مع الأطفال الآخرين
					7. يتصرف بخجل في وجود اشخاص جدد
					8. لديه صعوبة في التوقف عن القلق
					9. لديه كوابيس ليلية
					10. يقلق علي عمل الاشياء بالشكل الصحيح
					11. يطلب التطمين من الآخرين باستمرار مع أنه لا يلزم ذلك في مثل هذه المواقف
					12. يبدوا متوترا في المواقف الجديدة الغير متوقعة
					13. يتضايق عندما يعمل شيء غلط
					14. يتضايق عندما يحدث شيء غير متوقع
					15. يتضايق من النوم بعيداً عنك أو خارج البيت
					16. يقلق من أن أشياء سيئة سوف تحدث لو لديه
					17. يقلق من حدوث أشياء سيئة ممكن أن تحدث له (من أن يختطف أو يتوه) أو لا يرى والديه مرة أخرى
					18. يقلق عندما يترك الروضة مع آخرين غير والديه
					19. يشعر بالقلق عندما يتم تركه في الروضة لوحده
					20. يخاف من الاطباء و اطباء الاسنان
					21. يخاف من الأماكن العالية
					22. يخاف من أصوات الرعد
					23. يقلق عندما يذهب للسباحة
					24. يخاف من الحشرات و العناكب
					25. يخاف من الكلاب
					26. يخاف من الظلام
					27. يخاف من الحيوانات الضخمة
					28. يخاف من الاصوات العالية

مقياس كرب ما بعد الصدمة للأم

UCLA PTSD (Mothers form)

عزيزتي: أمامك مجموعة من الأسئلة التي تقيس ردود الفعل على الأحداث الصعبة في أوقات الحرب الأخيرة على غزة خلال الفترة الماضية التي قد يتعرض لها الأطفال. برجاء وضع دائرة حول الإجابة الصحيحة

الرقم	البنود	لا	قليلاً	أحياناً	كثيراً	غالباً
1	يتربقب دائماً شيء خطير أو أشياء أخرى يخاف منها ممكن تحدث له					
2	عندما يذكر طفلي أي أحد بالحدث الذي واجهته ، يصاب بالقلق ، و التوتر ، و الحزن .					
3	تنتاب أبني/ ابنتي أفكار ، أصوات ، صور ، لما حدث له بدون رغبة منه في استرجاعها					
4	يشعر بالغضب الشديد ، التهيج .					
5	يعاني من أحلام مزعجة تتعلق بما تعرض له .					
6	يشعر بأن ما حدث له سيحدث مرة أخرى الآن ، كما لو أنه يعيش في نفس الحدث مرة أخرى الآن .					
7	يحب أن يكون لوحده و ليس مع أصدقائه .					
8	يشعر طفلي بأنه وحيد و ليس قريباً من أحد					
9	يحاول ألا يتحدث ، يفكر ، يشعر بما حدث له .					
10	يعاني من صعوبات في أن يشعر بالسعادة ، أو حب الآخرين .					
11	يعاني من صعوبات في أن يشعر بالحزن و الغضب .					
12	يشعر بأنه يتهيج بسرعة ، أو ينفز لمجرد سماع صوت عالي ، أو أحد يفاجئه بسرعة .					
13	لديه صعوبة في الذهاب للنوم ، و يصحوا كثيراً في الليل.					
14	يشعر بان ما حدث له هو غلظه منه .					
15	لديه صعوبات في تذكر الأحداث التي تعرض لها .					
16	عنده صعوبة في التركيز و الانتباه .					
17	يتجنب الأشخاص ، الأماكن ، الأشياء التي تذكره بالحدث الصادم .					
18	عندما يذكره أحدهم بما حدث ، يشعر بقشعريرة في جسمه ، و سرعة في ضربات القلب ، وجع في المعدة ، صداع .					
19	يعتقد بأنه لن يعيش لفترة طويلة ، و سيكون عمره قصير .					
20	يخاف من أن أشياء سيئة سوف تحدث له .					

Socio-Demographic Status Form

- Gender ☐ Boy ☐ Girl
- Age _____
- Address: ☐ north Gaza ☐ Gaza Central ☐ Middle area ☐ khayounis ☐ Rafah
- Place of residence: ☐ City ☐ Refugee camp ☐ Village
- Accommodation type: ☐ Owned ☐ Rented ☐ Room in a family house ☐ Other _____
- Number of sibling _____
- Years of study of the father _____
- Father's job: ☐ He does not work ☐ Worker ☐ Craft man ☐ Employee ☐ Merchant
☐ Other _____
- Years of study of the mother _____
- Mother's job: ☐ Housewife ☐ Employee ☐ Farmer ☐ Worker ☐ Merchant ☐ Other _____
- Has the mother ever seek treatment as a result of psychological disorder in the past?
☐ Yes ☐ No
- If yes, what was the disorder, and where did she seek treatment

- Monthly family income: ☐ Less than 1,200 NIS ☐ From 1201-2500 NIS
From 2501-3000 NIS ☐ More than NIS 3001 NIS
- What is the subordination of kindergarten?
☐ UN ☐ Privet ☐ governmental ☐ charity other select _____

Gaza 2014 war traumatic events checklist

N#	Type of traumatic event	Yes	No
1	Hearing shelling of the area by artillery		
2	Hearing the loud voice of Drones		
3	Watching mutilated bodies and dead people in TV		
4	Forced to leave you home with family members due to shelling		
5	Inhalation of bad smells due to bombardment		
6	Hearing killing of a friend		
7	Witnessing firing by tanks and heavy artillery at neighbors' homes		
8	Witnessing demolition of big buildings		
9	Hearing killing of a close relative		
10	Deprivation from water or electricity during detention at home		
11	Witnessing firing by tanks or heavy artillery at own home		
12	Witnessing assassination of people by rockets		
13	Threaten by shooting		
14	Witnessing shooting of a friend		
15	Witnessing shooting of a close relative		
16	Witnessing killing of a close relative		
17	Destroying of your personal belongings during incursion		
18	Witnessing killing of a friend		
19	Witnessing arrest of a friend		
20	Exposure to physical injury as a result of the bombing of the house		
21	Exposure to physical injury caused by shrapnel, bullet or missile.		
22	Witnessing arrest of a close relative by the army		
23	Threatened with death by being used as human shield by the army to move from one home to home		
24	Threaten of killing of your closed relative in front of you		
25	Threaten of being killed		

UCLA PTSD reaction index (parents form)

	PTSD Reaction	Never	A little bit	Some times	Many times	Almost often
1	When something reminds my child of what happened he/she gets very upset, scared or sad.					
2	My child has upsetting thoughts, pictures or sounds of what happened come into his/her mind when he/she does not want them to.					
3	My child has dreams about what happened or other bad dreams					
4	My child has flashbacks of what happened; he/she feels like he/she is back at the time when the bad thing happened living through it again.					
5	When something reminds my child of what happened, he/she has strong feelings in his/her body like heart beating fast, headaches, or stomach aches.					
6	My child feels like staying by him/her-self and not being with his/her friends.					
7	My child feels alone inside and not close to other					
8	My child tries not to talk about, think about, or have feelings about what happened.					
9	My child has trouble feeling sadness or anger.					
10	My child has trouble remembering important parts of what happened.					
11	My child tries to stay away from people, places, or things that make him/her remember what happened.					
12	My child thinks that he/she will not live a long life.					
13	My child watches out for danger or things that he/she is afraid of.					
14	My child feels grouchy, angry or mad.					
15	My child feels jumpy or startles easily, for example, when he/she hears a loud noise or when something surprises him/her.					
16	My child has trouble going to sleep or wakes up often during the night.					
17	My child has trouble concentrating or paying attention.					
18	When someone reminds him of what happened he feel shiver in his body, fastening in his heart beats, stomach ache, or headache.					
19	He thinks he is not going to live for a long time and that his life is going to be short.					
20	My child always afraid that bad things might happen to him					

Spence anxiety scale (parents form)

No	Item	Almos t often	Many times	Most of times	Some times	Never
1	Has difficulty stopping him/herself from worrying					
2	Worries that he/she will do something to look stupid in front of other people					
3	Keeps checking that he/she has done things right (e.g., that he/she closed a door, turned off a tap					
4	Is tense, restless or irritable due to worrying					
5	Is scared to ask an adult for help (e.g., a preschool or school teacher)					
6	Is reluctant to go to sleep without you or to sleep away from home					
7	Is scared of heights (high places)					
8	Has trouble sleeping due to worrying					
9	Washes his/her hands over and over many times each day					
10	Is afraid of crowded or closed-in places					
11	Is afraid of meeting or talking to unfamiliar people					
12	Worries that something bad will happen to his/her parents					
13	Is scared of thunder storms					
14	Spends a large part of each day worrying about various things					
15	Is afraid of talking in front of the class (preschool group) e.g., show and tell					
16	Worries that something bad might happen to him/her (e.g., getting lost or kidnapped), so he/she won't be able to see you again					
17	Is nervous of going swimming					
18	Has to have things in exactly the right order or position to stop bad things from happening					
19	Worries that he/she will do something embarrassing in front of other people					
20	Is afraid of insects and/or spiders					
21	21. Has bad or silly thoughts or images that keep coming back over and over					
22	Becomes distressed about your leaving him/her at preschool/school or with a babysitter					
23	Is afraid to go up to group of children and join their activities					
24	Is frightened of dogs					
25	Has nightmares about being apart from you					
26	Is afraid of the dark					
27	Has to keep thinking special thoughts (e.g., numbers or words) to stop bad things from happening					
28	Asks for reassurance when it doesn't seem necessary					

Gaza Strip MAP



Annexes

Diagnostic Criteria for PTSD (DSM-IV-TR)

In 2000, the American Psychiatric Association revised the PTSD diagnostic criteria in the fourth edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). The diagnostic criteria (Criterion A-F) are specified below.

Diagnostic criteria for PTSD include a history of exposure to a traumatic event meeting two criteria and symptoms from each of three symptom clusters: intrusive recollections, avoidant/numbing symptoms, and hyper-arousal symptoms. Fifth criterion concerns duration of symptoms and a sixth assesses functioning.

Criterion A: stressor

The person has been exposed to a traumatic event in which both of the following have been present:

1. The person has experienced, witnessed, or been confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others.
2. The person's response involved intense fear, helplessness, or horror. Note: in children, it may be expressed instead by disorganized or agitated behavior.

Criterion B: intrusive recollection

The traumatic event is persistently re-experienced in at least one of the following ways:

1. Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: in young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
2. Recurrent distressing dreams of the event. Note: in children, there may be frightening dreams without recognizable content
3. Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated). Note: in children, trauma-specific reenactment may occur.
4. Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
5. Physiologic reactivity upon exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

Criterion C: avoidant/numbing

Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:

1. Efforts to avoid thoughts, feelings, or conversations associated with the trauma
2. Efforts to avoid activities, places, or people that arouse recollections of the trauma
3. Inability to recall an important aspect of the trauma
4. Markedly diminished interest or participation in significant activities
5. Feeling of detachment or estrangement from others
6. Restricted range of affect (e.g., unable to have loving feelings)
7. Sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).

Criterion D: hyper-arousal

Persistent symptoms of increasing arousal (not present before the trauma), indicated by at least two of the following:

1. Difficulty falling or staying asleep
2. Irritability or outbursts of anger
3. Difficulty concentrating
4. Hyper-vigilance
5. Exaggerated startle response

Criterion E: duration

Duration of the disturbance (symptoms in B, C, and D) is more than one month.

Criterion F: functional significance

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Diagnostic Criteria for Separation Anxiety Disorder (DSM-IV-TR)

A. Developmentally inappropriate and excessive anxiety concerning separation from home or from those to whom the individual is attached, as evidenced by three (or more) of the following:

1. Recurrent excessive distress when separation from home or major attachment figures occurs or is anticipated.
2. Persistent and excessive worry about losing, or about possible harm befalling, major attachment figures
3. Persistent and excessive worry that an untoward event will lead to separation from a major attachment figure (e.g., getting lost or being kidnapped)
4. Persistent reluctance or refusal to go to school or elsewhere because of fear of separation
5. Persistently and excessively fearful or reluctant to be alone or without major attachment figures at home or without significant adults in other settings.
6. Persistent reluctance or refusal to go to sleep without being near a major attachment figure or to sleep away from home.
7. Repeated nightmares involving the theme of separation.
8. Repeated complaints of physical symptoms (such as headaches, stomachaches, nausea, or vomiting) when separation from major attachment figures occurs or is anticipated.

B. The duration of the disturbance is at least 4 weeks.

C. The onset is before age 18 years.

D. The disturbance causes clinically significant distress or impairment in social, academic (occupational), or other important areas of functioning.

E. The disturbance does not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder and, in adolescents and adults, is not better accounted for by Panic Disorder with Agoraphobia.

Diagnostic Criteria for Specific Phobia

(Simple Phobia, DSM-IV-TR)

- A. Marked and persistent fear that is excessive or unreasonable, cued by the presence or anticipation of a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood).
- B. Exposure to the phobic stimulus almost invariably provokes an immediate anxiety response, which may take the form of a situationally bound or situationally predisposed Panic Attack. Note: In children, the anxiety may be expressed by crying, tantrums, freezing, or clinging.
- C. The person recognizes that the fear is excessive or unreasonable. Note: In children, this feature may be absent.
- D. The phobic situation(s) is avoided or else is endured with intense anxiety or distress.
- E. The avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with the person's normal routine, occupational (or academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.
- F. In individuals under age 18 years, the duration is at least 6 months.
- G. The anxiety, Panic Attacks, or phobic avoidance associated with the specific object or situation are not better accounted for by another mental disorder, such as Obsessive-Compulsive Disorder (e.g., fear of dirt in someone with an obsession about contamination), Posttraumatic Stress Disorder (e.g., avoidance of stimuli associated with a severe stressor), Separation Anxiety Disorder (e.g., avoidance of school), Social Phobia (e.g., avoidance of social situations because of fear of embarrassment), Panic Disorder With Agoraphobia, or Agoraphobia Without History of Panic Disorder.

Diagnostic criteria for Generalized Anxiety Disorder (DSM IV – TR)

A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance).

B. The person finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months). Note: Only one item is required in children.

(1) Restlessness or feeling keyed up or on edge

(2) Being easily fatigued

(3) Difficulty concentrating or mind going blank

(4) Irritability

(5) Muscle tension

(6) Sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)

D. The focus of the anxiety and worry is not confined to features of an Axis I disorder, e.g., the anxiety or worry is not about having a Panic Attack (as in Panic Disorder), being embarrassed in public (as in Social Phobia), being contaminated (as in Obsessive-Compulsive Disorder), being away from home or close relatives (as in Separation Anxiety Disorder), gaining weight (as in Anorexia Nervosa), having multiple physical complaints (as in Somatization Disorder), or having a serious illness (as in Hypochondriasis), and the anxiety and worry do not occur exclusively during Posttraumatic Stress Disorder.

E. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

F. The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition (e.g., hyperthyroidism) and

does not occur exclusively during a Mood Disorder, a Psychotic Disorder, or a Pervasive Developmental Disorder.

Diagnostic criteria for Social Phobia (DSM IV – TR)

A. A marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others. The individual fears that he or she will act in a way (or show anxiety symptoms) that will be humiliating or embarrassing.

Note: In children, there must be evidence of the capacity for age-appropriate social relationships with familiar people and the anxiety must occur in peer settings, not just in interactions with adults.

B. Exposure to the feared social situation almost invariably provokes anxiety, which may take the form of a situationally bound or situationally predisposed Panic Attack.

Note: In children, the anxiety may be expressed by crying, tantrums, freezing, or shrinking from social situations with unfamiliar people.

C. The person recognizes that the fear is excessive or unreasonable. Note: In children, this feature may be absent.

D. The feared social or performance situations are avoided or else are endured with intense anxiety or distress.

E. The avoidance, anxious anticipation, or distress in the feared social or performance situation(s) interferes significantly with the person's normal routine, occupational (academic) functioning, or social activities or relationships, or there is marked distress about having the phobia.

F. In individuals under age 18 years, the duration is at least 6 months.

G. The fear or avoidance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition and is not better accounted for by another mental disorder (e.g., Panic Disorder With or Without Agoraphobia, Separation Anxiety Disorder, Body Dysmorphic Disorder, a Pervasive Developmental Disorder, or Schizoid Personality Disorder).

H. If a general medical condition or another mental disorder is present, the fear in Criterion A is unrelated to it, e.g., the fear is not of Stuttering, trembling in Parkinson's disease, or exhibiting abnormal eating behavior in Anorexia Nervosa or Bulimia Nervosa.

ملخص الدراسة

تهدف هذه الدراسة للتعرف فعليا لآثار المترتبة للتعرض للصدمة الناتجة عن الحروب على تكتوينا اضطراب كرب ما بعد الصدمة واضطراب القلق لدى أطفال المرحلة ما قبل المدرسة بعد الهجمات الاسرائيلية المتكررة التي تعرضوا لها. وعلاقتها ببعض المتغيرات الاجتماعية والديموغرافية مثل عدد الاخوة، جنس الطفل، والدخل الشهري للأسرة وغيرها.

تصميم الدراسة: تم استخدام دراسة تحليلية وصفية قصيرة الأمدز و تتكون العينة من 399 أم لأطفال ما قبل المدرسة اللذين يترددون على رياض الأطفال الموجودة في المحافظات الخمس لقطاع غزة و اللذين تتراوح أعمارهم بين 3-5 سنوات.

استخدم الباحث مقياساً لأحداث الصدمة التي تعرض لها الأطفال في غزة. و استخدم كذلك مقياس UCLA PTSD Reaction Index الخاص بالأطفال ما قبل المدرسة لقياس اضطراب كرب ما بعد الصدمة، ومقياس Spence لقياس اضطراب القلق لدى أطفال المرحلة ما قبل المدرسة والذين تم تعيّنهم أيضاً من خلال الأمهات. بالإضافة للاستخدام نموذجاً لوضع الاجتماعي والديموغرافي للأسرة.

النتائج: لقد وجد الباحث ان نسبة اطفال مرحلة ما قبل المدرسة الذين تعرضوا لأحداث صدمة شديدة كانوا حوالي 26.6% و الذين تعرضوا لأحداث صدمة متوسطة كانوا حوالي 46.6%، أما الأطفال الذين تعرضوا لأحداث صدمة قليلة كانت نسبتهم 26.8%. و نسبة انتشار اضطراب كرب ما بعد الصدمة بعد أكثر من ستة أشهر على انتهاء الحرب كانت 6%.

كما وجدت الدراسة ان أعراض اضطراب كرب ما بعد الصدمة كانت أكثر انتشاراً لدى الأطفال الذين كانت أعمارهم 5 سنوات.

وكان متوسط انتشار اضطراب القلق 49.84%، و لكن هذه النتيجة قد لا تتعلق فقط بالتعرض لأحداث الحرب الصادمة وذلك لوجود عوامل أخرى قد تلعب دوراً في التسبب بتطوير اضطرابات القلق لدى الأطفال مثل الأساليب المختلفة للرعاية الوالدية، العنف، الثقافة، الدعم الاجتماعي ومشكلات الصحة النفسية عند الأهل.

أظهرت النتائج كذلك أن المخاوف المتعلقة بأمور معينة كانت الأكثر انتشاراً يليها المخاوف العامة ثم يليها قلق الانفصال و المخاوف الاجتماعية.

أظهرت الدراسة أن هناك علاقة قوية بين التعرض للصدمة و نتائج اضطراب كرب ما بعد الصدمة و القلق لدى أطفال ما قبل المدرسة. بالإضافة الى وجود علاقة بين نتائج اضطراب كرب ما بعد الصدمة و نتائج اضطرابات القلق لدى هؤلاء الأطفال. مما يعني أنه كلما تعرض الطفل لأحداث صدمة أكثر كلما زادت احتمالية تطوّر اضطراب ما بعد الصدمة والقلق المرضي.

لم تجد الدراسة اي فروقات واضحة في نتائج الذكور و الاناث فيما يتعلق بالصدمة و تطوّر اضطراب ما بعد الصدمة و كذلك اضطرابات القلق.

التوصيات: الدراسات المستقبلية لا بد أن تتضمن التقييم النفسي لمقدم الرعاية للطفل (الأم أو الأب) بالإضافة الى التقييم الخاص بالطفل نفسه من أجل فهم أثر الأسرة و الدعم الاجتماعي على تطور اضطراب كرب ما بعد الصدمة و اضطرابات القلق لدى أطفال ما قبل المدرسة في قطاع غزة، بالإضافة الى عمل دراسات أكثر عمقاً تقيس أثر

عدد الأحداث الصادمة التي تم التعرض لها الطفل بالإضافة الى قياس أثر شدة الحدث لأنواع مختلفة من صدمات الحرب عوضاً عن القيام بعد الخبرات الصادمة التي تعرض لها الأطفال فقط من أجل تحديد شدة الأحداث الصادمة.