

Al -Quds University
Deanship of Graduate studies
School of Public Health



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**The prevalence of Psychosomatic Disorders among
Traumatized Palestinian Adolescents in Gaza Strip**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

" وَتَوَلَّى عَنْهُمْ وَقَالَ يَا أَسْفَىٰ عَلَىٰ يُوسُفَٰ

وَأَنبِئْهُمْ بِحَيَاتِهِ مِنَ الْهُزْنِ فَهُوَ كَظِيمٌ "

صَدَقَ اللَّهُ الْعَظِيمُ

سورة يوسف (آية ٨٤)

Dedication

I dedicate this work to my father and my mother for holding the excitement and energy I needed to finish this work

My parent : "I don't know what I would have done without your encouragement to keep writing . and telling me to "just get it done!"

To my sisters and my brothers for continues supporting and encouragement . My life has not any meaning without their supporting .

Declaration

I certify that this thesis submitted for the degree of Master is the result of my own research, except where otherwise acknowledged, and that this thesis (or any part of the same) has not been submitted for a higher degree to any other university or institution .

Signed:

Nazmeia Abu Sneada

Date :17- 8- 2009

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Researcher :
Nazmeia A -Abu Sneada

Abstract

Aims: To determine the prevalence of psychosomatic disorders among traumatized Palestinian adolescents in Gaza Strip and to detect the relationship between traumatic events and psychosomatic disorders.

Method: The study sample consisted of 380 adolescents from secondary schools in Gaza Strip, 182 of adolescents were males and 198 were females. Aged from 15-18 years. The sample were collected from North Gaza, Gaza city, Mid Zone, Khan Younis and Rafah. The researcher used descriptive analytic method for data collection by using structured tools as socio-demographic questionnaire , War on Gaza traumatic events checklist , and psychosomatic disorders scale.

Results: The result revealed that the Palestinian adolescents exposed to traumatic events, mean of 14.2 events, The study showed that 35.3% of adolescents were reported mild trauma, 46.6% of them reported moderate trauma, and 18.2% reported severe trauma of study sample, while the most traumatic events due to war on Gaza was "Watching mutilated bodies and wounded people in TV " which rated 92.3% of study sample and " Hearing shelling of the area by artillery" which rated 89.4% . the result found that 29.5% of study sample experienced from psychosomatic disorders, The most frequently reported were other disorders 35.6%, psychological disorders 35.4%, metabolic disorders 32.4%, skeletal disorders 30.9% , cardiovascular 28.1% , digestive disorders 53.7% , respiratory disorders 22.1% , Urogenital disorders 22.0% , while the lowest disorders were skin disorders 19.3% .

The study showed that there were significant correlation between psychosomatic disorders and traumatic events among study sample, which means the high incidence of traumatic events will combined with high incidence of psychosomatic disorders .

According to demographic data the results revealed that there were no significant differences between psychosomatic disorders according to sex, while there were significant differences between psychological and other disorders according to sex among study sample toward females .

The results showed there were no significant differences between the psychosomatic disorders according to type of residence (city, camp, and village) , while there were

significant differences between digestive disorders and Urogenital disorders according to type of residence toward city and village .

The results showed there were significant differences between psychosomatic disorders (psychological disorders, metabolic disorder, Skeletal disorders, digestive disorders, Urogenital disorders) according to place of residence toward Gaza and North Gaza, while there were no significant differences between the rest of psychosomatic disorders according to place of residence .

There were significant differences between psychosomatic disorders according to monthly income toward "less than 600 NIS ".

Conclusion: Adolescents exposed to traumatic events are at risk of developing psychosomatic disorders. A great need for establishing school based programmes to deal with adolescents affected by community and traumatic events

Table of Content

Subject		Page
	Dedication	i
	Declaration	ii
	Acknowledgement	iii
	Abstract	iv
	List of Tables	v
	List of Figures	x
	List of Annexes	xi
1	Chapter 1: Introduction	
1.1	Overview & background	1
1.2	Purpose of the study	5
1.3	Objectives	6
1.3.1	General Objective	6
1.3.2	Specific objectives	6
1.4	Research questions	6
1.5	Justifications of the study	7
1.6	Definition of variables	8
1.6.1	Definition of trauma	8
1.6.2	Definition of psychosomatic disorders	8
1.6.3	Definition of psychosomatic disorders	8
1.7	Gaza strip	9
1.8	General review of study chapters	9
2	Chapter 2: Theoretical Framework & Literature Review	
2.1	Introduction	12
2.2	Trauma	13
2.3	Definitions	13
2.3.1	Definition of trauma	13
2.3.2	Traumatic event	13
2.3.3	Traumatic stress	13
2.3.4	Trauma victim	13
2.4	The Impact of trauma	14
2.5	Types of trauma	15
2.6	Categories of traumatic events	15
2.6.1	Responsibility categorizations	15

2.6.2	Cause categorizations	16
2.6.2.1	Developmental trauma	16
2.6.2.1	Situational trauma	16
2.6.3	Nature of event categorization	17
2.6.3.1	Natural disasters	17
2.6.3.2	Personal loss	17
2.6.3.3	Health trauma	17
2.6.3.4	Victimization	18
2.6.3.5	Criminal violence	18
2.6.3.6	Wars and terrorism:	18
2.7	Effects of traumatic experiences	19
2.7.1	Re-experiencing symptoms	19
2.7.2	Avoidance symptoms	21
2.8	Risk factors that increase your vulnerability to trauma	22
2.9	Somatoform disorders	23
2.10	Introduction	23
2.11	Definition of somatoform disorders	23
2.12	Historical perspective	23
2.13	Prevalence of somatoform disorders	24
2.14	Diagnosis of somatoform disorders	24
2.15	Types of somatoform disorders	25
2.15.1	Conversion disorder	25
2.15.2	Somatization disorder	26
2.15.3	Body dysmorphic disorder	26
2.15.4	Hypochondriasis	26
2.15.5	Somatoform pain disorder	26
2.15.6	Undifferentiated somatoform disorder	27
2.16	symptoms of somatoform disorders	27
2.17	Causes of somatoform disorders	28
2.1	Theories of trauma	29
2.1.1	Background	29
2.1.2	Evolution's Legacy	29
2.1.3	The psychoanalytic model	30
2.1.4	The cognitive-behavioral model	30
2.1.5	Biological model	31
2.1.6	The Fight-or-Flight Response model	31
2.1.7	Learned Helplessness model	32
2.1.8	Loss of “Volume Control”	32
2.1.9	Thinking under stress - action not thought	33
2.1.10	Remembering under stress	34
2.1.11	Emotion and trauma	35
2.2	Theories of psychosomatic medicine	36

2.2.1	psychoanalytic model	36
2.2.2	conversion theory	37
2.2.3	Personality Profiles model	37
2.2.4	Conflict Situations and Specific Response	37
2.2.5	Protective Adaptive Response	38
2.2.6	The Regression Concept	39
2.2.7	Development of psychosomatic diseases	41
2.3	Studies review	43
2.3.1	studies concern with trauma	43
2.3.2	Studies concern with trauma and psychosomatic disorders	53
2.4	Summary of the previous studies	59
3	Chapter 3: Methodology	
3.1	Introduction	62
3.2	Study design	62
3.3	Study population	62
3.4	Study sample	63
3.5	Sampling method	63
3.6	Period of the study	63
3.7	Place of study	63
3.8	Eligibility criteria	65
3.8.1	Inclusion criteria	65
3.8.2	Exclusion criteria	65
3.9	Ethical consideration	65
3.10	Data collection	66
3.11	Instruments of the study	66
3.11.1	Socio-demographic status	66
3.11.2	Gaza Traumatic Events Checklist	66
3.11.3	Psychosomatic disorders Chick list	67
3.12	Data entry and Statistical analysis	67
4	Chapter 4: Results	
4.1	Introduction	71
4.2	Demographic results of the study sample	71
4.3	The prevalence and frequencies	73
4.3.1	The frequencies of traumatic events	73
4.3.2	The prevalence of traumatic events	74
4.3.3	The frequencies of psychosomatic disorders	75
4.4	Traumatic events and demographic variables	75
4.4.1	Traumatic events and sex of the study sample	75
4.4.2	Traumatic events and type of residence	76
4.4.3	Traumatic events and place of residence	76
4.4.4	Traumatic events according to monthly income	77
4.5	Psychosomatic disorders and demographic variables	78
4.5.1	Psychosomatic disorders and sex of the study sample	78

4.5.2	Psychosomatic disorders and educational classes	79
4.5.3	Psychosomatic disorders and type of residence	80
4.5.4	Psychosomatic disorders and place of residence	81
4.5.5	Psychosomatic disorders according to monthly income	84
4.6	Relationship between psychosomatic disorders and trauma	86
5	Chapter 5 : Conclusion	
5.1	Introduction	88
5.2	Main results	88
5.3	Discussion	92
5.4	Recommendation	95
5.5	Recommendation for Future Research	96
	References	
	Abstract (Arabic)	

List of tables

No.	Table content	page
1	Demographic characteristics of the study sample	70
2	Frequency of traumatic events due to war on Gaza	73
3	The prevalence of traumatic events due to war on Gaza	74
4	Standard deviation and weighted mean of psychosomatic disorders	75
5	Independent t- test comparing means of trauma according to sex	75
6	One –way ANOVA comparing trauma according to type of residence	76
7	Means of traumatic events according to type of residence	76
8	One –way ANOVA comparing trauma according to type of residence	76
9	Means of traumatic events according to type of residence	77
10	One –way ANOVA comparing trauma according to monthly income	77
11	Means of traumatic events according to monthly income	78
12	Independent t –test comparing means of psychosomatic disorders according to sex	78
13	One –way ANOVA comparing type of psychosomatic according to Educational classes	79
14	One – way ANOVA comparing psychosomatic disorders according to type of residence	80
15	Means of psychosomatic disorders according to type of residence	81
16	One – way ANOVA comparing psychosomatic disorders according to place of residence	82
17	Means of psychosomatic disorders according to place of residence	83
	One way ANOVA comparing psychosomatic disorders according to monthly income	84
18	Means of psychosomatic disorders according to monthly income	85
19	Pearson Correlation Coefficient test between trauma and psychosomatic disorders	86

List of Figures

No	List of figures	page
1	The relation between the study variables as the researcher expected	12
2	Distribution of the sample according to sex and governorates	65
3	Distribution of the sample according to sex and educational class	66

List of Annexes

No	List of Annexes	page
1	Map of Gaza Strip	106
2	Helsinki committee approval letter	107
3	Ministry of education & higher education approval letter	108
4	Socio –demographic status Questionnaire	109
5	War on Gaza traumatic events checklist	110
6	Psychosomatic Questionnaire	113
7	DSM-IV diagnostic criteria for somatoform disorders	117

Chapter 1

Introduction

Chapter one : Introduction

1.1 Overview & background

Human beings do not live in a vacuum. They are surrounded by others. And those others will be confronted with the traumatic event. These people hear about the event, they perceive the suffering of the victims, and they have to cope with the changes caused by the event and the suffering (Kleber, Figley, and Gersons, 1995). Each year millions of children are exposed to some forms of extreme traumatic stressor. These traumatic events include natural disasters (e.g., tornadoes, floods, hurricanes), motor vehicle accidents, life-threatening illnesses and associated painful medical procedures (e.g., severe burns, cancer, limb amputations), physical abuse, sexual assault, witnessing domestic or community violence, kidnapping, and sudden death of a parent (Caffo and Belaise, 2003). Trauma occurs when human beings are exposed to sudden and unexpected events. The resulting shock may be the trigger for various psychological, physical, emotional, and social problems. Trauma may be caused by natural phenomena such as earthquakes or by man-made phenomena such as wars, domestic violence, and forced migration (American Psychiatric Association, 1994). In order to understand the Palestinian issue, it is necessary to understand the seeds of conflict in Palestine. The Palestinian people lived under the British Mandate from 1917 to 1948. Since then, there have been repeated episodes of war and conflict which have occurred approximately every nine years. This is compounded by a continuous sense of oppression caused by the occupation. (UNRWA, 2005, 2007). The first Intifada started in December 1987, there were numerous killings, detentions without trial, demolition of homes, torture, deportation, and curfews, the second Intifada started in September 2000, since then, children and families have been exposed to various traumatic events, ranging from witnessing murders, or knowledge of such events taking place, to bombardment by helicopters. In the period from October 2000 to January 2007, 75,000 Palestinian buildings have been completely or partially shelled and destroyed in the Palestinian territories by the hands of occupying military forces (UNRWA, 2005, 2007). War on Gaza started in December, 2008. From the outset of the cease-fire, Israel did little to ease its military blockade. As a result, Gazans continued to suffer from a lack of food, fuel, financial aid, electricity, clean

water, medical supplies, and more. This has been, inarguably, an attack on innocent Palestinian civilians.(Sheets, 2009) .Obviously, the psychological consequences of these traumatic experiences have had negative influences on normal child development . These children have not known day of real place in all their lives. From the time when their grandparents were uprooted in 1948, through the years of conflict involving their parents, these children know that suffering and endurance are part of their history as well as their present day reality (Qouta , El-Sarraj ,2004).

In the study of (Thabet et al, 2007.2008) showed that Palestinian children still reported a variety of traumatic events as a result of the repeated incursions of the Gaza while each child reported mean traumatic events due to factional fighting between Fatah and Hamas in June 2007 by the Israelis in which each child reported mean 10.18 traumatic events, was 7.42 events. Children exposed to Israelis aggression were commonly reported hearing shelling of the area by artillery, hearing sonic sounds of jetfighters, and watched mutilated bodies on TV. While children exposed to factional fighting reported hearing shootings and gunfire due to fighting in the streets, watching mutilated bodies on TV, and being detained at house during fighting (Thabet et al 2007a , 2007b , 2008 in press). In interesting studies for Thabet et al, he found that children living in Gaza strip experienced a variety of traumatic events, the most common traumatic events for children in both sites were , the watching of pictures of mutilated bodies on television and bombardment of houses by helicopters and tanks (Thabet et al , 2001, 2002 , 2004 , 2006). The Israelis forces used different types of aggressions and assault such as, bombardment and shelling by the helicopters of Palestinian police headquarters, workshops and homes, assassination of Palestinian leaders and Intifada activists, land bulldozing, uprooting fruited trees, confiscating lands, destroying public and private property, arresting people randomly, and humiliating people on the military barricades. In addition to the internal siege, separation of the Palestinian cities, camps, villages, closure and sealed off from the rest of the world, such acts may lead to various psychological problems like sleep disturbances, lack of academic achievement, behavioral disturbances, anxiety, depression, and most importantly of post-traumatic stress disorder reactions (Thabet et al, 2002). Adolescence is a phase in the life span characterized by transitions across numerous developmental domains, including challenges in biological (e.g., puberty), cognitive (e.g., issues of personal identity), and social (e.g., shift toward peers)

spheres. Intertwined with these numerous developmental changes and associated increased levels of stressful life events (Newcomb, Huba 1992). In epidemiological child psychiatry studies, boys are more likely to present with behavioral problems than girls, while girls are more likely to present with emotional problems, particularly in adolescence (Rutter et al, 1970). Sometimes a child or adolescent complains continually of a discomfort or a pain for which a physician cannot find a cause. The pain or the discomfort, however, is very real to the child. When physical complaints have no apparent medical basis they may be a reflection of a stress, such as nervousness in a social situation, a demanding school setting, family discord, separation from parents, or another troubling situation. Stress, as it affects the body and the mind, can play a role in the origin and course of some illnesses. Stress can influence how a child or adolescent perceives the symptoms of the illness, how he or she deals with the illness, and the rate of recovery. Somatoform disorder refers to what many people used to call a psychosomatic disorder. In somatoform disorders, the physical symptoms cannot be fully explained by any underlying physical disorder. People with a somatoform disorder are not faking. They sincerely believe that they have a serious physical problem. Somatoform Disorders is the relatively new term used in the Diagnostic and Statistic Manual, Fourth Edition (DSM-IV) to describe a group of disorders characterized by physical symptoms that cannot be fully explained by a neurological or generalized medical (organic) condition. Although it is common for children to report recurrent physical symptoms with no physical cause. Similar physical presentations of distress have been found in other non-western traumatized populations such as Lebanese children, 58% of whom suffered from somatoform disorders four years after the Israeli invasion of Lebanon in 1982 (Rayhida et al, 1986). Farhood et al (1993) found high rates of Somatization among Lebanese children and parents. Also, Palestinian children in the West Bank were found to predominantly suffer from psychosomatic problems (Baker, 1990). The same study showed that, psychosomatic problems among children were more severe within the refugee and camps, than in urban or rural areas. In another study of Palestinian children living in Gaza exposed to traumatic events during the First Intifada, Abu Hein et al (1993) found that 25% had conversion fits. This presentation applied to both children and adults.

1.2 Purpose of the study & problem statement

The purpose of this study is to assess the prevalence of psychosomatic disorder among traumatized Palestinian adolescents that living in Gaza Strip, in order to enhance our understanding of the deleterious outcomes that trauma may have effect on adolescents, which may help in planning for better management tools for the treatment of the adolescents.

1.3 Objectives

1.3.1 General Objective

The current study aims to examine the prevalence of psychosomatic disorders among traumatized Palestinian adolescents living in Gaza Strip.

1.3.2 Specific objectives

- To determine the prevalence of most common types and severity of traumatic events among Palestinian adolescents in Gaza strip
- To estimate prevalence of psychosomatic disorders among Palestinian adolescents in Gaza strip
- To examine the relationship between traumatic events and psychosomatic disorders among Palestinian adolescents
- To investigate the relationship between psychosomatic disorders and socio demographic status among Palestinian adolescents in Gaza strip

1.4 Research questions

To achieve the research objectives , the study attempted to answer the following research questions :

- What are the most common types and severity of traumatic events which experienced by the Palestinian adolescents in Gaza strip?
- What is the prevalence rate of psychosomatic disorders among traumatized Palestinian adolescents?
- To what extent socio demographic data affect the prevalence of psychosomatic disorders?

- Is there relationship between trauma and psychosomatic disorders among Palestinian adolescents in Gaza strip?

1.5 Justifications of the study

Many of the previous studies deals with issues related to trauma and the way to manage this problem, little information is available regarding psychosomatic disorders and its prevalence rate, so such study opens the door for researchers to study this phenomena from another perspective, this study will attract the attention of decision makers in governmental and non governmental organization (such as ministry of health and education) to the importance of giving special courses in this field for adolescents, because these adolescents constitute a great proportion in any society. In other words this study will introduce new visions and suggestions in institutions dealing with such issues in order to find out ways to help these adolescents and reach to high level of mental health for traumatized adolescents .

Adolescence have highly chance to develop different physical and psychological reactions after exposure to traumatic events. The parents came to the clinic very confused and worry about these new changes in there children behaviors and attitudes, they asked many questions about the ways of intervention in order to overcome these reactions and symptoms, After that it is become evident that, the adolescent is affected by the ongoing traumatic events either directly through direct exposure to the traumatic events or indirectly through the hearing or witnessing the traumatic events. As reaction to these traumatic events the adolescence developed different physical and psychological disorders, in the recent coming future these psychologically affected and traumatized adolescents are going to get married and to have children and become the parents of our children in the future, so what we can expect or predict our coming generations when they are grow up by traumatized and psychologically unstable parents. Because of that, we have decided to make this research to study and detect the prevalence of psychosomatic disorders among the Palestinian adolescent in order to put in practice the useful interventions measures to treat those adolescent from the consequences of the traumatic experience.

1.6 Definition of variables

1.6.1 Definition of trauma :

Kleber and Brom (1992) defined trauma as shocking and extraordinary event which occurs unpredictably and without allowing any preparation time for the individual who can become overwhelmed

Another definition of trauma :

Trauma is a psychologically distressing event is outside the range of usual human experience. Trauma often involves a sense of fear, terror and helplessness..... Trauma is an experience that induces an abnormally intense and prolonged stress response.” (Perry, 2006) , The researcher adopted this definition

1.6.2 Definition of Somatoform disorders :

is a relatively new term for what many people refer to as psychosomatic disorder. In somatoform disorders, either the physical symptoms or their severity and duration can't be explained by any underlying physical disease . (Antia, B. E, 2000).

1.6.3 Definition of psychosomatic disorders :

The term psychosomatic disorder has no precise definition. Most often, the term is applied to physical disorders thought to be caused by psychological factors. However, no physical disorder is caused exclusively by psychological factors. Rather, a physical disorder has a necessary biologic component – factor essential for the disease to occur (Antia, B. E, 2000). The researcher adopted this definition

1.7 Gaza strip

Gaza strip (Annex1) is a narrow piece of land lying on the coast of the Mediterranean sea. Its position on the crossroads from Africa to Asia made it a target for occupiers and conquerors over the centuries. Gaza Strip is very crowded place with area 365 sq . Km and constitute 6.1% of total area of Palestinian territory land . In mid year of 2005 the population number is to be 1.389.789 mainly concentrated in the cities, small village, and eight refugee camps that contain two thirds of the population of Gaza Strip. Gaza strip is composed of five provinces : North Gaza, Gaza city, Mid zone,

khan Younis and Rafah . there are five towns in Gaza strip, eight refugee camps and fourteen villages.(MOH, 2005). In Gaza Strip, the population density is 3.808 inhabitants/km that comprises the following main fine governorates .(MOH,2005) .

1.8 General review of study chapters

On chapter one, the researcher will present the study proposal which includes the introduction, background, research problem, justification, objectives, questions, Geographical and Demographical background in addition to general presentation to the study chapter. According to chapter two, the researcher will review the main literatures and studies that talked about trauma and psychosomatic disorders, In the same chapter which concern with the conceptual frame work, the researcher will displays in depth the main parts of this study witch involve description about trauma and psychosomatic disorders. Through methodology which represent chapter three, the researcher will describe the study design, the study sample, place of application, ethical consideration, study instruments, data collection, procedures, and data analysis procedures. Chapter four includes description of data analysis procedures and presentation of the main results of the study which involves the result of demographic data, and study questions; Where as on chapter five the researcher will presents the main results , discuss it , and put new recommendations for further researchers .

Chapter 2

Conceptual Framework

&

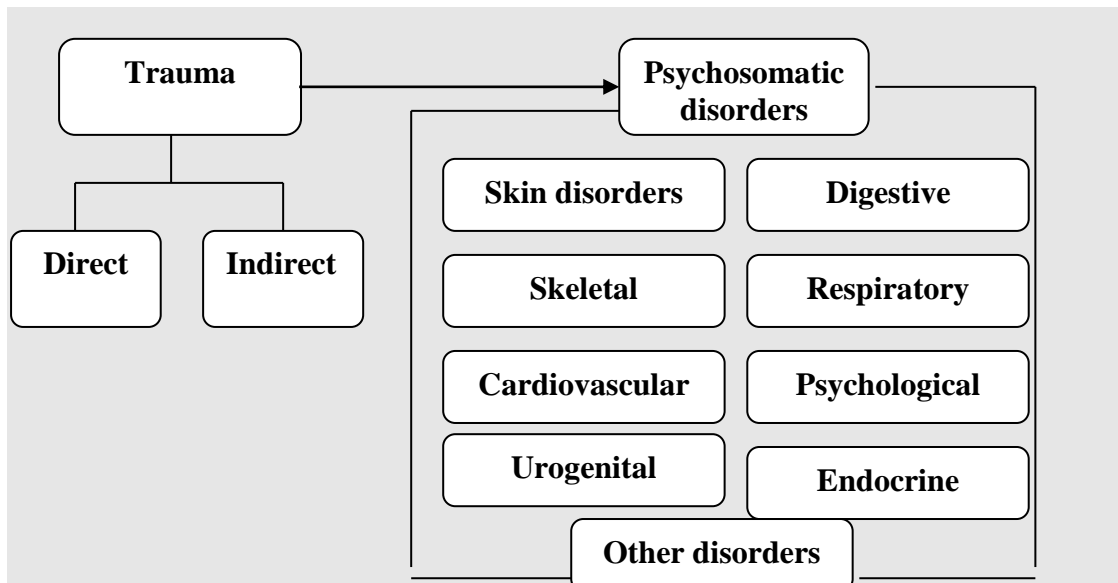
Literature Review

Chapter 2:

Conceptual framework & literature review

In this chapter the researcher will present the conceptual frame work which consist of two parts. The first part concerns with trauma, where as the second part talk about psychosomatic disorders,. In relation to trauma, the researcher will describe its definitions, its components ,symptoms, and its areas of application . In accordance to psychosomatic, the researcher mentioned the definition, cause, its type and symptoms. Furthermore In this chapter the researcher divided the previous studies in to two parts. The first part contains the studies that focus on trauma. Where as The second part concerns with psychosomatic disorders. The previous studies will be use in discussing the results of the current study either in case of supporting or opposing it .Also the researcher tried to draw the relations between them as the researcher expected ; as shown in the following figure:

figure (1): the relation between the study variables as the researcher expected



Conceptual framework

Part 1: theoretical framework

2.6 Trauma

2.7 Definitions:

2.7.1 Definition of trauma:

“Trauma is a psychologically distressing event is outside the range of usual human experience. Trauma often involves a sense of fear, terror and helplessness..... Trauma is an experience that induces an abnormally intense and prolonged stress response.” (Perry, 2006)

2.7.2 Traumatic event

A traumatic event is defined by the Diagnostic and Statistical Manual IV (of the American Psychiatric Association 2000) as “an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others.” (APA ,2000)

2.7.3 Traumatic stress

Stress resulting from exposure to, or witnessing of events that are severe and/or life threatening. The extent of traumatic stress experiences varies by duration of exposure and number of exposures. Additionally, the amount of stress incurred will vary according to the availability of resources and coping skills . (Terr, 1994)

2.7.4 Trauma victim

Are those individuals who are impacted by a traumatic occurrence

Primary Trauma Victim - individuals who are directly involved in the trauma

Secondary Victim - individuals who are indirectly impacted by the trauma. These include relatives and loved ones, members of the immediate community or surrounding area, and of course may include relief workers and persons who respond to the incident, and people who experience the trauma through the media. (Perry, 2006).

2.8 The Impact of trauma

Until quite recently , people believed that children were not affected by trauma because they were “too young to remember or understand” what had happened to them. It is now clear that exposure to traumatic events can affect all aspects of development – physical, emotional, social, psychological and cognitive – even in babies. It is also known that every child who is exposed to a traumatic event will experience and respond to it in his or her own way, depending on their age, developmental stage, the type of the traumatic event(s) and the social environment surrounding the child (Fitzgerald Rice & Groves, 2005).

Children are likely to experience the effects of trauma in varying ways which may include some or all of the following:

- Disrupted attachment relationships
- Rapid behavioural regressions i.e. behaviours that is too young for their age.
- Failure to achieve developmental competencies or milestones.
- Anticipatory behaviour and traumatic expectations e.g. a fear response with a loud noise.
- Lack of capacity for emotional self-regulation i.e. an inability to calm themselves or control emotions.
- Aggressive behaviour against self and others
- Disrupted sleep, eating, and self-care
- Multiple somatic problems, from upset tummies to headaches
- Self-hatred and self-blame
- Feelings of low self worth and hopelessness.
- Poor social skills
- Tend to be withdrawn, or to bully other children
- Apparent lack of awareness of danger and resulting self endangering behaviours
- Flight , Freeze or Fight responses
- Avoidance and controlling behaviours

2.9 Types of trauma

Simple: This type of trauma is usually caused by a single incident. The incident is usually one that involves life threatening events and/or events that are have the potential to cause serious injury. Examples: Car Accident , Fire Cyclone , Shooting

Complex: This type of trauma usually longer in duration and involves multiple incidents. The incidents are usually ones that involve interpersonal violence or violation and as a result are almost always associated with a sense of shame and stigma. Examples:· All forms of child abuse , Bullying, Experiences of War , Imprisonment (Meichenbaum , 1994):

2.10 Categories of traumatic events

It is important to have understanding of the different categories of trauma . There are three categorizations of trauma :

2.10.1 Responsibility categorizations

There have been many attempts to categorize trauma. These categorization of traumatic occurrences generally are organized by: who or what is responsible for the trauma, the cause of the trauma , or categorizations as well as the factors which impact the severity of trauma and traumatic responses

Crises may be viewed as either natural, or human-made. Natural crises include those disasters that are created by the forces of nature such as tornados, hurricanes, and floods. When the cause is viewed as human made, the reactions may be more emotionally devastating. Human made tampering, chemical attacks/dispersement, ethnic cleansing, riots and wars, suicide, murder, and crime and violence. This is likely because the disaster is viewed as within the control of individual persons, and

therefore avoidable. It is not only the acts themselves, but the threat of these acts which may have psychologically traumatizing impact. Society at large is at risk due to close proximity of persons in public and working spaces such as office buildings, public transportation and public events. Globally, people around the world have begun to see themselves as vulnerable.

Natural Disasters - includes natural disasters such as astornados , hurricanes, fires, earthquakes, typhoons, floods, and tsunamis.

Human-made Disasters include building/structural collapse, medical/food tampering, chemical attacks/dispersement, ethnic cleansing, riots and wars, suicide, murder, terrorism, and crime and violence. (Yule,. & Williams, 1990).

2.10.2 Cause categorizations

Events that lead to trauma may be expected, such as the death of a family member who is terminally ill, or unexpected, such as the terrorist attack. Trauma can additionally be

categorized as part of normal development such as when children leave their parents' home, or they can be specific to an unanticipated situation(Yule,. & Williams, 1990)..

2.10.2.1 Developmental trauma

These crises are predictable because they occur as part of the maturation process. Developmental theorists believe that people progress through a series of life stages. During each of the life stages, there are particular tasks which must be resolved in order for the person to develop in a healthy fashion. If a person fails to accomplish the necessary task they may experience crises related to the lack of meeting developmental criteria (Erickson, 1963).

Developmental theorists include Freud, Kohlberg, and Piaget.

For example, if during young adulthood a person fails to learn how to sustain committed and intimate relationships they will likely be unsatisfied in future relationships and find they lack intimate connectedness with others. Developmental crises might also include 'mid-life crises' or 'empty-nest syndrome'.

2.10.2.2 Situational trauma

These result from unanticipated events that are extraordinary in nature. These may happen at anytime in one's life and can include natural disasters such as tornado's and hurricanes, or they can be man-made disasters such as the terrorist attacks, suicides, automobile accidents, train crashes etc.

2.10.3 Nature of event categorization

Categorization by the nature of the event varies, but in general researchers attempt to group specific traumatic incidences into categories that reflect the pervasive shared elements of particular trauma. Thus, while most trauma involves loss, specific types of loss are viewed as having some common elements which impact upon the severity of the trauma and the severity of the reaction to the trauma. Factors which may increase traumatic severity include: predictability, controllability and intensity. Additionally, the reaction to trauma is impacted by the prolonged, repeated, or individual nature of the event or situation. (Yule,. & Williams, 1990).

2.10.3.1 Natural disasters

Includes natural disasters such as tornados, hurricanes, fires, earthquakes, typhoons, floods, and tsunamis. These disasters may have low predictability (such as fires and earthquakes) or there

may be some advance notice giving people time to take precautions or vacate. The occurrence of natural disasters are generally considered to have no or little controllability although there may be some control over impact.

2.10.3.2 Personal loss

The most prevalent type of trauma is that of the loss of a person who has played a key role in the person's life. Losses may also include pets, jobs, or any familiar object or environment. This includes loss due to death, divorce, and separation. Separations can be marital, parental, siblings, or other important support persons. Intensity of this trauma varies by the intensity of the relationship with the person, object, or life situation. Repeated personal losses without sufficient recovery time complicates and intensifies the reaction .

2.10.3.3 Health trauma

Includes trauma due to the onset of disability or illness. Intensity is affected by the severity of the disability or illness and the effects upon typical and routine functioning and may also be affected by issues of self-blame. If the individual blames the disability on their own behaviors (driving under the influence of alcohol or participating in unprotected sexual activity) the trauma may be viewed by the individual as having high controllability.

2.10.3.4 Victimization

Physical or emotional trauma results from abuse or neglect. This includes: physical abuse, sexual abuse, and neglect. Victimization can be repeated, prolonged, or a single event. These may subject the individual to a prolonged period of perceived or actual life threatening situations which increases the intensity of the event. Victims may blame themselves for behaviors prior or during the trauma increasing the perception of controllability.

2.10.3.5 Criminal violence

Victims are subject to a individual events such as robbery and homicide, and criminal assault in which they experienced a lack of control over their belongings and/or their bodies and may have been subjected to a life threatening situation. Re-victimization may compound reactions.

2.10.3.6 Wars and terrorism:

Many of these are intense, massive in scale, and long-term in nature exposing victims to repeated life-threatening situations. Additionally, persons may have engaged in perpetrating violence against others. This may intensify the response to trauma because the perpetration can

be seen as counter to the self-image. It may be particularly distressful if it comes to be viewed as an avoidable and controllable occurrence.

2.11 Effects of traumatic experiences

When people find themselves suddenly in danger, sometimes they are overcome with feelings of fear, helplessness, or horror. These events are called traumatic experiences. Some common traumatic experiences include being physically attacked, being in a serious accident, being in combat, being sexually assaulted, and being in a fire or a disaster like a hurricane or a tornado. After traumatic experiences, people may have problems that they didn't have before the event. If these problems are severe and the survivor does not get help for them, they can begin to cause problems in the survivor's family. This fact sheet explains how traumas can affect those who experience them. This fact sheet also describes family members' reactions to the traumatic event and to the trauma survivor's symptoms and behaviors. Finally, suggestions are made about what a survivor and his or her family can do to get help for PTSD. People who go through traumatic experiences often have symptoms and problems afterward. How serious the symptoms and problems are depends on many things including a person's life experiences before the trauma, a person's own natural ability to cope with stress, how serious the trauma was, and what kind of help and support a person gets from family, friends, and professionals immediately following the trauma. (Yule,. & Williams, 1990) . Because most trauma survivors are not familiar with how trauma affects people, they often have trouble understanding what is happening to them. They may think the trauma is their fault, that they are going crazy, or that there is something wrong with them because other people who experienced the trauma don't appear to have the same problems. Survivors may turn to drugs or alcohol to make themselves feel better. They may turn away from friends and family who don't seem to understand. They may not know what to do to get better.

What are the common effects of trauma?

During a trauma, survivors often become overwhelmed with fear. Soon after the traumatic experience, they may re-experience the trauma mentally and physically. Because this can be uncomfortable and sometimes painful, survivors tend to avoid reminders of the trauma. These symptoms create a problem that is called posttraumatic stress disorder (PTSD). PTSD is a specific set of problems resulting from a traumatic experience and is recognized by medical and mental-health professionals . (De Silva, 1999) .

2.11.1 Re-experiencing symptoms:

Trauma survivors commonly re-experience their traumas. This means that the survivor experiences again the same mental, emotional, and physical experiences that occurred during or just after the trauma. These include thinking about the trauma, seeing images of the event, feeling agitated, and having physical sensations like those that occurred during the trauma. Trauma survivors find themselves feeling as if they are in danger, experiencing panic sensations, wanting to escape, getting angry, and thinking about attacking or harming someone else. Because they are anxious and physically agitated, they may have trouble sleeping and concentrating. The survivor usually can't control these symptoms or stop them from happening. Mentally re-experiencing the trauma can include:

- Upsetting memories such as images or thoughts about the trauma
- Feeling as if the trauma is happening again (flashbacks)
- Bad dreams and nightmares
- Getting upset when reminded about the trauma (by something the person sees, hears, feels, smells, or tastes)
- Anxiety or fear, feeling in danger again
- Anger or aggressive feelings and feeling the need to defend oneself
- Trouble controlling emotions because reminders lead to sudden anxiety, anger, or upset
- Trouble concentrating or thinking clearly

People also can have **physical** reactions to trauma reminders such as:

- Trouble falling or staying asleep
- Feeling agitated and constantly on the lookout for danger
- Getting very startled by loud noises or something or someone coming up on you from behind when you don't expect it
- Feeling shaky and sweaty
- Having your heart pound or having trouble breathing

Because trauma survivors have these upsetting feelings when they feel stress or are reminded of their trauma, they often act as if they are in danger again. They might get overly concerned about staying safe in situations that are not truly dangerous. For example, a person living in a

safe neighborhood might still feel that he has to have an alarm system, double locks on the door, a locked fence, and a guard dog. Because traumatized people often feel like they are in danger even when they are not, they may be overly aggressive and lash out to protect themselves when there is no need. For example, a person who was attacked might be quick to yell at or hit someone who seems to be threatening.

Re-experiencing symptoms are a sign that the body and mind are actively struggling to cope with the traumatic experience. These symptoms are automatic, learned responses to trauma reminders. The trauma has become associated with many things so that when the person experiences these things, he or she is reminded of the trauma and feels that he or she is in danger again. It is also possible that re-experiencing symptoms are actually a part of the mind's attempt to make sense of what has happened. (De Silva, 1999).

2.11.2 Avoidance symptoms:

Because thinking about the trauma and feeling as if you are in danger is upsetting, people who have been through traumas often try to avoid reminders of the trauma. Sometimes survivors are aware that they are avoiding reminders, but other times survivors do not realize that their behavior is motivated by the need to avoid reminders of the trauma. (De Silva, 1999).

Ways of avoiding thoughts, feelings, and sensations associated with the trauma can include:

- Actively avoiding trauma-related thoughts and memories
- Avoiding conversations and staying away from places, activities, or people that might remind you of the trauma
- Trouble remembering important parts of what happened during the trauma
- Shutting down emotionally or feeling emotionally numb
- Trouble having loving feelings or feeling any strong emotions
- Finding that things around you seem strange or unreal
- Feeling strange
- Feeling disconnected from the world around you and things that happen to you
- Avoiding situations that might make you have a strong emotional reaction
- Feeling weird physical sensations

- Feeling physically numb
- Not feeling pain or other sensations
- Losing interest in things you used to enjoy doing

Trying to avoid thinking about the trauma and avoiding treatment for trauma-related problems may keep a person from feeling upset in the short term, but avoiding treatment means that in the long term, trauma symptoms will persist . (De Silva, 1999).

2.12 Risk factors that increase your vulnerability to trauma

Not all potentially traumatic events lead to lasting emotional and psychological damage. Some people rebound quickly from even the most tragic and shocking experiences. Others are devastated by experiences that, on the surface, appear to be less upsetting. A number of risk factors make people susceptible to emotional and psychological trauma. People are more likely to be traumatized by a stressful experience if they're already under a heavy stress load or have recently suffered a series of losses. People are also more likely to be traumatized by a new situation if they've been traumatized before – especially if the earlier trauma occurred in childhood . (De Silva, 1999).

Somatoform disorders

Introduction

Somatoform disorder refers to what many people used to call a psychosomatic disorder, which used to refer to physical symptoms that appear to be caused or worsened by mental factors, rather than by a physical disorder. Now, the term somatoform disorders is used to refer to these disorders. The term does not imply that physical symptoms are imagined or are being faked . People with a psychosomatic disorder actually experience the symptoms. The mind and body interact in many other ways. Social and mental stress can aggravate many physical disorders, including diabetes mellitus, coronary artery disease, and asthma. Such stress can trigger, worsen, or prolong physical symptoms. Stress can cause physical symptoms even when no physical disorders present. Sometimes physical symptoms result from the body's automatic response to emotional stress, as when heart rate and blood pressure increase in response to fear.

Sometimes a physical symptom appears to be a metaphor for an emotional physical symptom may reflect identification with another person's pain. (Campo and Fritsch, 1994)

2.13.1 Definition of somatoform disorders

In the DSM-IV the following definition of somatoform disorders is given: 'The common feature of somatoform disorders is the presence of physical symptoms that suggest a medical condition and are not fully explained by a general medical condition. The symptoms must cause clinically significant distress or impairment in social, occupational or other areas of functioning (APA ,1994).

2.13.2 Historical perspective

The existence of physical symptoms without an apparent physical cause is not a new phenomenon. For many years, there have been reports of patients with unexplained physical symptoms. The term "hysteria" was used first by the Greeks to refer to these individuals. In 1859 Paul Briquet studied patients with multiple unexplained physical symptoms, which resulted in another term, "Briquet's Syndrome." Charcot, Bernheim, Janet and Freud studied "hysterical" symptoms using hypnosis, and their work resulted in the development of the concept of disassociation. As the DSM has been revised over the years, other terms, such as conversion hysteria and conversion reaction, have been used to describe Somatoform Disorders(De Gucht V, Fischler B,2006).

2.14 Prevalence of somatoform disorders

Studies show conflicting evidence regarding the occurrence of Somatoform Disorders.

In a child psychiatric outpatient study, rates ranged from 1.3 to 5%. In a general population study, somatic complaints were found in 11% of girls, and 4% of boys. Adult studies show 2% in women and less than .2% in men. Somatoform disorders are believed to occur more often in less sophisticated or less educated populations. In terms of gender differences there is a 5:1 female-male ratio. Studies of prepubertal children report an equal ratio in boys and girls; in post-puberty, however, the female incidence increases.(Kirmayer LJ, Robbins JM,1991)

2.15 Diagnosis of somatoform disorders

The challenge in working with somatoform disorders is to simultaneously exclude medical causes for physical symptoms while considering a mental health diagnosis. The diagnosis of a somatoform disorder should be considered early in the process of evaluating a patient with

unexplained physical symptoms. Appropriate non psychiatric medical conditions should be considered, but over evaluation and unnecessary testing should be avoided. There are no specific physical examination findings or laboratory data that are helpful in confirming these disorders; it often is the lack of any physical or laboratory findings to explain the patient's excessive preoccupation with somatic symptoms that initially prompts the physician to consider the diagnosis.

Two related disorders, factitious disorder and malingering, must be excluded before diagnosing a somatoform disorder. In factitious disorder, patients adopt physical symptoms for unconscious internal gain (i.e., the patient desires to take on the role of being sick), whereas malingering involves the purposeful feigning of physical symptoms for external gain (e.g., financial or legal benefit, avoidance of undesirable situations). In somatoform disorders, there are no obvious gains or incentives for the patient, and the physical symptoms are not willfully adopted or feigned; rather, anxiety and fear facilitate the initiation, exacerbation, and maintenance of these disorders . There are three required clinical criteria common to each of the somatoform disorders: The physical symptoms (1) cannot be fully explained by a general medical condition, another mental disorder, or the effects of a substance; (2) are not the result of factitious disorder or malingering; and (3) cause significant impairment in social, occupational, or other functioning.

2.16 Types of somatoform disorders

2.16.1 Conversion disorder

is the most common type diagnosed in children. Conversion Disorder involves unexplained symptoms or deficits affecting voluntary motor or sensory function (Annex 2) that are suggestive of a neurological or other general medical condition. The symptoms resemble neurological conditions and physical ailments such as blindness, seizures, gait imbalance, paralysis, tunnel vision and numbness. Children may complain of weakness; they may have trouble walking, talking, or hearing. Trauma and abuse increase the likelihood of Conversion Disorder, which is usually triggered by psychological factors (Escobar J, et al,1998)

2.16.2 Somatization disorder

Somatization disorder is a clinical syndrome characterized by recurrent multiple somatic complaints that cannot be explained medically (Annex 3) .it is begins before age 30 years,

extends over a period of years, with prevalence rates below 0.5% and is characterized by a combination of pain, gastrointestinal, sexual and pseudo neurological symptoms. This chronic, recurrent disorder with multiple complaints is often presented in a dramatic and exaggerated way. The patient often describes her symptoms in a vague yet dramatic or exaggerated manner with frequent consultations with a number of physicians. (Escobar J, et al,1998)

2.16.3 Body dysmorphic disorder

is the preoccupation with an imagined or exaggerated defect in physical appearance which causes significant distress or impairment in social, occupational, or other important areas of functioning (Annex 4). The essential feature of this disorder is an intense pre-occupation with some imagined defect in appearance in a normal-looking individual. For example, he suspects and complains about some facial flaws – unequal sizes in his eyes or ears, a crooked nose, or excessive wrinkles or hairs. Other perceived defects may involve the hands, legs, breasts, etc. Although it may be true that no one is perfectly symmetrical in his body parts .(Escobar JI, et al 1998)

2.16.4 Hypochondriasis

The central symptom of hypochondriasis is the preoccupation with the fear of having a serious disease based on the person's misinterpretation of bodily symptoms or bodily functions (Annex 5) . This is in spite of appropriate physical evaluation, or laboratory investigations, which do not support the diagnosis of any physical pathology.(Fink P, et al , 1999). Medical reassurance is not enough to allay such fear. Although co-existing medical conditions may be present, they are not of sufficient magnitude to account for the physical signs or sensations The prevalence rates in primary care vary from 3% to 5%.. (Escobar J, et al,1998).

2.16.5 Somatoform pain disorder

The essential feature of this disorder is a pre-occupation with pain for which there is no adequate physical finding to account for the pain or its intensity(Annex 6) . No tissue pathology is detected, or else the pain symptom is grossly disproportionate to any pathology that may exist. It is inconsistent with anatomical distribution of the nervous system although it may mimic the pain distribution of a known disease. e.g. angina-like chest pain. Sometimes, psychological factors are a etiologically evident, for instance when there is a clear temporal relationship between an environmental event (e.g. a relative had died suddenly of an acute myocardial infarct) and the initiation or exacerbation of the pain. Often the pain is described as

constant, and continues unabated throughout the day. The patient often requests, or else demands, for extensive and complicated laboratory investigations, and surgical intervention. Pain Disorder is characterized by pain as the predominant focus of clinical attention. In addition, psychological factors have an important role in the onset, severity, exacerbation, or maintenance.(Escobar JI, et al ,1998) .

2.16.6 Undifferentiated somatoform disorder

Among all somatoform disorders, the undifferentiated somatoform disorder is most often encountered in general medical settings . is characterized by at least one medically unexplained physical symptom, causing impairment for a minimum of 6 months unexplained physical complaints (Annex 7), lasting at least 6 months, Consequently, this definition covers functional syndromes and benign pain. Among primary care attendees, Fink reported a prevalence of undifferentiated somatoform disorder as high as 27% . (Fink P, et al ,1999) .

2.17 symptoms of somatoform disorders

Young children typically complain of vague symptoms; school-age children are better able to localize their pain, and adolescents can describe their pain in detail. Many complaints are short-lived, but when a child complains repeatedly, and a physician can find no physical basis for the complaint, the child may have a Somatoform Disorder. The recurrent symptoms commonly reported by children and adolescents are:

- Headaches
- Stomachs and abdominal distress
- With the hormonal changes of puberty, anxiety and worry, fatigue, loss of appetite, aches and pain are frequent symptoms, more prevalent in girls than boys

- Symptoms that mimic neurological disorders, such as double vision, poor balance and coordination, paralysis, seizures
- Imagined physical deformities or defects
- Back pain
- Fatigue
- Sore muscles

.Academic problems, school refusal, social withdrawal, anxiety and behavioral problems often accompany and may trigger Somatoform Disorders.

2. 18 Causes of somatoform disorders

Children and adolescents react differently to stress, depending on individual personal characteristics, such as their appraisal of the event and their coping strategies. Certain children and adolescents have more difficulty in expressing their emotions directly, due to their individual temperament, the emotional climate of the family, and cultural customs. The most common triggers of Somatoform Disorders are psychosocial trauma (physical or sexual abuse) or family conflict. The specific origins of Somatoform Disorder are as yet unknown, although there are a number of theories.

- 1) Psychosocial theory views the symptoms as social communication to express emotions or to symbolize feelings that cannot be verbalized.
- 2) A psychodynamic interpretation views symptoms as repressed instinctual impulses. Psychosomatic pains are believed to be the bodily expressions of underlying and unresolved emotional issues – painful memories, unconscious conflicts, sometimes sexual abuse.
- 3) Biological studies suggest the individual may have a faulty perception and assessment of sensory inputs.
- 4) Genetic data suggest that somatoform disorders tend to run in families with an occurrence of 10 - 20% of first degree female relatives.

Part 2: literature review

2.1 Theories of trauma

2.1.1 Background

To understand what trauma does we have to understand what it is. Lenore Terr, a child psychiatrist who did the first longitudinal study of traumatized children writes, psychic trauma occurs when a sudden, unexpected, overwhelming intense emotional blow or a series of blows assaults the person from outside. Traumatic events are external, but they quickly become incorporated into the mind” (Terr, 1990).

Van der Kolk makes a similar point about the complicated nature of trauma when he says, “Traumatization occurs both internal and external resources are inadequate to cope with external threat ” (Van der Kolk, 1989).

Very important point that it is not the trauma itself that does the damage. It is how the individual’s mind and body reacts in its own unique way to the traumatic experience in combination with the unique response of the individual’s social group. Children are traumatized whenever they fear for their lives or for the lives of someone they love. A traumatic experience impacts the entire person - 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 ” (Terr, 1990).

2.1.2 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. The social nature of our species is guaranteed by an innate sense of reciprocity that can be observed even among primates. But this same sense of “fair play” leads not only to the evolution of justice systems, but also to the need for revenge. The result is that you cannot hurt anyone, most importantly children, without setting the stage for revenge that will be exacted either upon themselves, upon others, or both. Finally, we are physiologically designed to function best as an integrated whole, just like the computers that we now build. The fragmentation that accompanies traumatic experience degrades this integration and impedes maximum performance in a variety of ways. Human brains function best when they are adequately stimulated but simultaneously protected from overwhelming stress (Perry, 1993).

2.1.3 The psychoanalytic model

The psychoanalytic model of the disorder hypothesizes that the trauma has reactivated a previously quiescent, yet unresolved psychological conflict. The revival of the childhood trauma results in regression and the use of the defense mechanisms of repression, denial, reaction formation and undoing. According to Freud, a splitting of consciousness occurs in patients who reported a history of childhood sexual trauma. A preexisting conflict might be symbolically reawakened by the new traumatic event. The ego relives and thereby tries to master and reduce the anxiety. (Terr, 1989).

2.1.4 The cognitive-behavioral model

the cognitive aspect of trauma posits that affected persons cannot process or rationalize the trauma that precipitated the disorder. They continue to experience the stress and attempt to avoid experiencing it by avoidance techniques. Consistent with their partial ability to cope cognitively with the event, persons experience alternating periods of acknowledging and blocking the event. The attempt of the brain to process the massive amount of information provoked by the trauma is thought to produce these alternating periods. The behavioral aspect of trauma emphasizes two phases in its development. First, the trauma (the unconditioned stimulus) that produces a fear response is paired, through classical conditioning, with a conditioned stimulus (physical or mental reminders of the trauma, such as sights, smells, or sounds). Second, through instrumental learning, the conditioned stimuli elicit the fear response

independent of the original unconditioned stimulus, and persons develop a pattern of avoiding both the conditioned and the un-conditioned stimulus. Some persons also receive secondary gains from the external world, commonly monetary compensation, increased attention or sympathy, and the satisfaction of dependency needs. These gains reinforce the disorder and its persistence.(Eisenbruch, 1991).

2.1.5 Biological model

The serotonin system. Serotonin serves as a modulator of emotional and physiological functioning in the central nervous system (CNS; Lesch & Moessner (1998),Specifically, serotonin plays a role in memory, learning, temperature regulation, mood, sexual behavior, cardiovascular function, muscle contraction, and endocrine regulation. Serotonin also is involved in behaviors like eating, sleeping, and aggression. Exposure to traumatic events leads to an increase in the release of serotonin, but the increased activity of the serotonin system likely causes long-term down regulation of serotonin production.

Numerous studies have evaluated cortisol levels in traumatized and neglected children. Interestingly, cortisol concentration appears to change as a function of time following the traumatic event. On the one hand, when cortisol levels were measured within months after a traumatic event, cortisol levels were significantly greater in traumatized individuals than in healthy controls (Carrion et al., 2002; De Bellis, Keshavan et al., 1999; Delahanty, Nugent, Christopher,&Walsh, 2005).

2.1.6 The Fight-or-flight response model

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 (Van der Kolk, 1996).

2.1.7 Learned helplessness model

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).

2.1.8 Loss of "volume control" model

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. If you have never been able to really control your feelings, and you discover that alcohol gives you some sense of control over helplessness will count for much more than anyone's warnings about the long-term consequences of alcohol abuse (Bloom, 1997).

2.1.9 Thinking under stress - action not thought

Our capacity to think clearly is also severely impaired when we are under stress. When we perceive that we are in danger, we are physiologically geared to take action, not to ponder and deliberate. In many situations of acute danger it is better that we respond immediately without taking the time for complicated mental processing, that we respond almost reflexively to save our lives or to protect those we love. When stressed, we cannot think clearly, we cannot consider the long-range consequences of our behavior, we cannot weigh all of the possible options before making a decision, we cannot take the time to obtain all the necessary information that goes into making good decisions. Our decisions tend to be based on impulse and are based on an experienced need to self-protect. As a consequence these decisions are inflexible, oversimplified, directed towards action, and often are very poorly constructed (Janis, 1982).

In such situations people demonstrate poor judgment and poor impulse control. The mind is geared towards action and often the action taken will be violent. Many victims have long-term problems with various aspects of thinking. An intolerance of mistakes, denial of personal difficulties, anger as a problem-solving strategy, hyper vigilance, and absolutistic thinking are other problematic thought patterns that have been identified (Alford, Mahone, and Fielstein, 1988).

2.1.10 Remembering under stress

Our way of remembering things, processing new memories, and accessing old memories is also dramatically changed when we are under stress. Still, there is a growing body of evidence indicating that there are actually two different memory systems in the brain - one for normal learning and remembering that is based on words and another that is largely nonverbal (Van der Kolk, 1996).

Our verbally based memory system is vulnerable to high levels of stress. Under normal conditions, the two kinds of memory function in an integrated way. Our verbal and nonverbal memories are thus usually intertwined and complexly interrelated. What we consider our

“normal” memory is based on words. From the time we are born we develop new categories of information, and all new information gets placed into an established category, like a filing cabinet in our minds. We talk in words, of course, but we also think with words. The person we identify as “me” is the person who thinks and has language. When we need to recall something, we go into the appropriate category and retrieve the information we need. But under conditions of extreme stress, our memory works in a different way. When we are overwhelmed with fear, we lose the capacity for speech, we lose the capacity to put words to our experience. Without words, the mind shifts to a mode of thinking that is characterized by visual, auditory, olfactory, and kinesthetic images, physical sensations, and strong feelings. This system of processing information may be adequate under conditions of serious danger. But the powerful images, feelings, and sensations do not just “go away”. They are deeply imprinted, more strongly in fact, than normal everyday memories. The neuroscientist Joseph LeDoux (1992) has called this “emotional memory” and has shown that this kind of memory can be difficult or impossible to erase, although we can learn to override some of our responses. This “engraving” of trauma has been noted by many researchers studying various survivor groups (Van der Kolk, 1996).

Problems may arise later because the memory of the events that occurred under severe stress are not put into words and are not remembered in the normal way we remember other things. Instead, the memories remain “frozen in time” in the form of images, body sensations like smells, touch, tastes, and even pain, and strong emotions. A flashback is a sudden intrusive re-experiencing of a fragment of one of those traumatic, un verbalized memories. During a flashback, people become overwhelmed with the same emotions that they felt at the time of the trauma. Flashbacks are likely to occur when people are upset, stressed, frightened, or aroused or when triggered by any association to the traumatic event. Their minds can become flooded with the images, emotions, and physical sensations associated with the trauma and once again. But the verbal memory system may be turned off because of the arousal of fear, so they cannot articulate their experience and the nonverbal memory may be the only memory a person has of the traumatic event. If we cannot remember an experience we cannot learn from it. This is one of the most devastating aspects of prolonged stress. The implicit functioning of the brain, life-saving under the immediate conditions of danger, becomes life threatening when the internal fragmentation that is the normal response to overwhelming trauma, is not healed. The picture becomes even more complicated for children who are exposed to repeated experiences of unprotected stress. Their bodies, brains, and minds are still developing. We are only beginning to understand memory, traumatic memory, and how these memory systems develop and influence each other (Perry, 1993; Schwarz & Perry, 1994).

2.1.11 Emotions and trauma

In fact, however, people rarely die from emotional upsets. A fundamental reason for such rarity, despite the extent of fearful circumstances that children face, is the built-in “safety valve” that we call “dissociation”. Dissociation is defined as “a disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment”. Dissociation helps us do more than one thing at once. We can go on autopilot and automatically complete tasks that we have previously learned well, while we are focused on something else. This increase in efficiency may help explain why we evolved the ability. We are able to cut off all our emotions but that usually happens only in extreme cases of repetitive and almost unendurable trauma. More commonly we cut-off or diminish specific emotional responses, based on the danger the emotion may present to continued functioning. Our emotions are intimately tied to the expression of emotion through our facial expressions, our tone of voice, our gestures, so that we easily give away what we may be consciously trying to hide. If you grow up in a violent home, where every time you express anger you get beaten, it is best that you never show anger. If you grow up in a home – or a culture – that says that little boys who cry are wimps who should be taught a “lesson”, then it is a good idea to learn to never feel sadness, therefore minimizing the danger of tears. If any sign of pleasure or laughter is met with hostility and abuse, then it is best that you never feel joy. In this way, children from destructive situations learn how not to feel, they learn to dissociate their emotions from their conscious experience and their nonverbal expression of that emotion and in doing so, they can possibly stay safer than if they show what they feel. That does not mean that the emotion actually goes away. It does not. Emotions are built-in, part of our evolutionary, biological heritage and we cannot eliminate them, we can only transmute them. There is an abundance of evidence from various sources that unexpressed emotions may be very damaging to one’s mental and physical health (Pennebaker, 1997).

2.2 Theories of psychosomatic medicine

2.2.1 psychoanalytic model

Freud early in the history of analysis viewed hysteria in relation to trauma. This became a subject of great interest to Ferenczi particularly in his clinical activities in trying to find the balance between fantasy and trauma. The enactment in the body, as a psychosomatic symptom, is a way of unconsciously drawing attention to that which cannot be processed emotionally. A young man with a long-standing obsessional character had a sudden onset of motor disturbance. A recent set of family calamities triggered a psychosomatic defense against his having to be affectively in touch with a breakdown, which first occurred when he was 2 years old, and which he had never mourned. It was only after the development of a severe body tic following the family disruption that the possibility of finding lost affect and the capacity for an integration of the psychic and somatic became available through the analytic process. (Sklar ,2008)

2.2.2 conversion theory

One of the earliest of the psychiatric or psychoanalytic excursions into the field of psychosomatic medicine was the attempt to view psycho physiological disorders as conversion phenomena in which the symptom symbolized the repressed feeling. Ferenczi, for example, described what he considered to be the symbolic role of diarrhea. Melanie Klein thinks of psychosomatic phenomena as pregenital conversions. More recently Garma has defended the position that peptic ulcer is the symbolic expression of an internalized aggressive mother (Alexander, 1950).

2.2.3 Personality profiles theory

However, at the present time psychosomatic workers particularly in the United States are almost unanimous in refusing to accept the conversion theory of psycho physiological symptoms. Dunbar challenged this concept as early as 1935 and attempted to demonstrate, as an alternative way of understanding psychosomatic illness, that certain diseases have a high statistical correlation with certain specific personality types. She outlined personality profiles, for example, for sufferers from peptic ulcer, migraine, coronary occlusion, and many other illnesses. Her formulations had a superficial plausibility, but although personality profile studies of various illnesses continue to appear in the literature, further empirical observation has led most workers to question the validity of this conceptual model (Shapiro and Edward ,1980).

2.2.4 Conflict situations and specific response

After Dunbars, the most important contribution to psychosomatic theory was Alexander's. While agreeing with her that psychosomatic disorders were not symbolic conversion phenomena, he contradicted her main thesis by stating flatly that "a mysterious and vague correlation between personality and disease does not exist." His studies and the studies of his colleagues led him to conclude that it is not a personality type that is characteristic of a patient with a given disorder, but a typical conflict situation which can develop in individuals with varying personalities. He feels that in each psychosomatic illness there is a nuclear emotional conflict which is chronically present. He feels that each conflict has a specific physiological accompaniment physiological responses to emotional stimuli, both normal and morbid, vary according to the nature of the precipitating emotional state. Laughter is the response to merriment, weeping to sorrow; . . . Increased blood pressure and accelerated heart action are a constituent part of rage and fear. . Attacks of asthma are correlated with an unconscious suppressed impulse to cry for the mother's help. Alexander acknowledges that certain psychological influences like anxiety, repressed hostility, dependent cravings, inferiority feelings, and so on, are present in all psychosomatic disorders, but he argues: . . . it is not the presence of any one or more of these psychological factors that is specific but the presence of the dynamic configuration in which they appear., He emphasizes that the psychosomatic disorder or "vegetative neurosis," as he often refers to it, is not an expression or symbolization of an emotion, but is the physiological response of the organ to chronically present or periodically returning emotional states. He thus postulates the reverse of the classical causal sequence of disturbed structure resulting in disturbed function. He argues that it also happens that disturbed function results in disturbed structure. Thus, he states that in cases of peptic ulcer the patient's repressed longing for help and love are unconsciously equated with the longing for food, that most primitive form of sustenance and help. This mobilizes the innervations of the stomach which then "responds continuously as if food were being taken in or about to be taken in." It is the continuous secretion which ensues, with its accompanying high acidity, that is claimed to be an important causative factor in ulcer formation. (Yates,2005)

2.2.5 Protective adaptive response

Wolff is the author of another significant contribution to psychosomatic theory. He postulates that the body reacts to stress with what he calls, more teleologically than is perhaps desirable, a protective adaptive response. He definitely disassociates himself from the "emotion- acting-on-the-body" language. He states quite clearly that protective reactions are not chain reactions in

which the individual first feels some emotion such as fear or hostility which then results in altered function of the gut or heart or some other organ, and ultimately in abnormal behavior. He points out that altered feeling, bodily adjustments, and behavior all occur at the same time, though in varying relative amounts, and are all aspects of the individual's reaction to stress. In contrast to Dunbar, who believes that it is the patient's personality which determines his response to stress, and to Alexander, who states that the response depends on the specific emotional conflict that is troubling the patient, Wolff feels that an individual responds somatically to stress and conflicts of many different

kinds in a fashion that is consistent for him and which is determined on a hereditary basis. The implication is that the individual and his clan meet life in a particular way, different from the members of other stocks. An individual may have been a potential "nose reactor" or "color reactor" all his life without ever having actually called upon a particular protective pattern for sustained periods because he did not need to. A given protective pattern may remain inconspicuous during long periods of relative security, and then with stress, become evident as a disorder involving the gut, the heart and the vascular system, the naso-respiratory apparatus, the skin or general metabolism. Furthermore, he believes There are at least four implications that can be drawn from this theory: (1) that an individual reacts to stress of many different kinds in a similar way; (2) that the particular way an individual reacts to stress is similar to the way his stock (family) does; (3) that an individual reacts to stress of many different kinds with a characteristic set of bodily changes, feelings and attitudes; and (4) that different people who react to stress with the same bodily changes must also react to stress with the same emotional attitudes and feeling tones. (D Servan-Schreiber et al. ,2000)

2.2.6 The Regression concept

A concept that is currently attracting the attention of a number of workers in the field of psychosomatic research is that of regression. Alexander had used the term "vegetative retreat" in speaking of a group of patients who, instead of actively facing stressful situations, withdraw into a type of behavior and bodily functioning more appropriate to the period of childhood.

Physiological Regression: But it is Michaels who, in 1944, first more explicitly attempted to extend Freud's concept of regression to the field of physiology. He cited attempts made by authors as diverse as Spencer and Hughlings Jackson to apply analogous concepts to their own specialized fields. It is suggested that in psychosomatic disease, a regressive process takes place, with the emergence of physiological responses, which, although they had been appropriate to the infantile situation, are no more appropriate to the adult than are the parallel

manifestations of psychological regression. It is, moreover, impossible to separate the psychological from the physiological functions so that, on the one hand, profound physiological regressions predominantly precipitated by psychological events, and on the other hand, certain psychological manifestations of serious physical illnesses are both characterized by the appropriate physical and psychological symptomatology. In short, the psychotic features which have been recognized in certain serious psychosomatic diseases confirm the evidence that, in these illnesses, physiological regression to the mechanism of a very early infantile level has taken place. (Yates,2005)

Regressive Enervation: Szasz has also made extensive use of the concept of regression to explain psycho physiological phenomena. He introduces the concept of "regressive innervation," which he defines as "an increased state of excitation of functionally specific (localized) parasympathetic pathways." Because the parasympathetic nervous system develops earlier than the sympathetic, Szasz argues that an increased state of excitation of the parasympathetic division is regressive and represents a retreat to adaptation of stress. He states that Cannon overemphasized the role of the sympathetic nervous system and paid too little attention to the parasympathetic. Szasz feels that "the majority of syndromes encountered in clinical medicine represent chronic and localized parasympathetic excitation." He includes under diseases of regressive enervation hay fever, vasomotor rhinitis, common cold, asthma, peptic ulcer, diarrhea, ulcerative colitis, coronary diseases, heart block, urticaria, and others. (Yates,2005)

Be examination and Appraisal: What can be said about these attempts to understand psycho physiological phenomena as regressive shifts to immature modes of functioning? How valid are these generalizations and how useful is this particular conceptual model? How much does it help us to predict or to modify events? How productive is it of earnest and inspired investigation? One is impressed by the scale of the conceptualizations which these authors have attempted. Each one has boldly sketched a design which is offered as a blueprint for the understanding of very complex psychosomatic phenomena. However, the manner of the execution of their task is open to serious reservations. Ideally, when proposing a theory, scientists bring up for consideration all evidence that is relevant to their hypotheses, whether it is favorable or not. Darwin is said to have made special notes of facts that appeared to contradict his theory of evolution because he was very much aware of the only too human propensity to overlook and to forget such facts. This kind of disinterested presentation of all the evidence available is not always to be found in the papers on physiological regression. Instead, random isolated supporting evidence is sometimes quoted, while the solid mass of

experimental and clinical data that contravenes the thesis is ignored. The speculative nature of the hypotheses is most clearly underlined by the title of Michael's contribution, "A Psychiatric Adventure in Comparative Pathophysiology of the Infant and Adult." He implicitly acknowledges the logical looseness of his analysis, stating that he is cognizant of the fact that a good deal of the material presented "may consist of analogies and parallels." And in Margolin's paper, there is a regrettable blurring of Alexander's widely accepted distinction between hysterical and psycho physiological disorders which detracts from the relevance of some of the evidence he marshals in defense of his theory. (Yates,2005)

2.2.7 Development of psychosomatic diseases

Margolin, and Alexander before him, have clearly distinguished two phases of psychosomatic illness. The first is a functional phase consisting of reversible, disproportionate, or inappropriate responses in an organ or in its constituent tissues. The second phase is the stage of irreversible tissue changes which result in the so-called psychosomatic disease. The thesis that psychosomatic illnesses develop in this two-phase manner—that is, that a psychosomatic disease results from tissue changes secondary to the chronic stimulation of an organ in a situation of unresolved emotional tension—has received widespread acceptance among workers in the field of psychosomatic medicine. Writers have devoted their attention to explaining the first phase and have more or less taken the second phase for granted, although in accounting for the fact that the second phase is not inevitable, other determinants such as constitution are usually invoked. Margolin attempts to account for the development of the second phase by stating that the tolerance of tissues for physiological fluctuations decreases with age. He feels that physiological regression to modes of functioning characteristic of infancy exposes the organ involved to fluctuations greater than it can now tolerate, and that the tissue changes which then occur lead to one of the psychosomatic diseases. As an aid to the understanding of this sequence of events, it would appear that the concept of physiological regression has relevance only to the extent that it is clearly established that these diseases do indeed result from long-continued and excessive physiological fluctuations of a kind that are tolerated better in infancy. (D Servan-Schreiber et al,2000)

Hypertension: But even in his original contribution, Michaels conceded that "one of the marked exceptions to the general consistency of the resemblance of the psychosomatic symptom of the adult and the physiological state of the infant is the state of hypertension in many neurotic individuals." More recently Engel has also challenged the specific relationship

of fluctuations in blood pressure and essential hypertension.¹ Alexander and others have long contended that fluctuations in blood pressure secondary to chronic inhibited rage are etiologically related to essential hypertension. But Engel points out "that even if rage or aggression do prove to be the specific psychic states associated with such pressure response, there are as yet no data to indicate how such fluctuations in measured blood pressure obtained during acute situations are related to the disease hypertension. (Campo and Fritsch 1994)

Ulcerative Colitis: More recently, in his comprehensive consideration of ulcerative colitis, Engel 9-10 concludes that this disease is essentially a disorder of the vascular system of the mucosa and sub mucosa of the bowel. It is implied that it has no counterpart in normal infant physiology and that in fact when the infant's bowel is subject to the same somatic process it too develops ulcerative colitis.

Peptic Ulcers: Mirsky²⁶ has reported observations on gastric activity using blood and urine pepsinogen as a measure of gastric secretion. From his studies it would appear that there is a certain percentage of individuals of all age groups from infancy onward who are hypersecretors and that it is only in the presence of hyper secretion that peptic ulcers can develop. The studies, admittedly incomplete, would not seem to confirm the hypothesis that ulcer patients under stress regress physiologically to a mode of functioning that is normal in infancy but inappropriate for adult life. They would suggest rather that there are individuals who, from infancy onwards, are gastric hypersecretors and that these individuals when faced with particular kinds of stress *may* develop peptic ulcers. It also appears¹⁵ that duodenal ulcer is commoner among children than has been suspected.

2.3 Studies review

2.3.1 studies concern with trauma

In a very interesting study of the Middle East, on 2220 Lebanese adolescents found that on average, a Lebanese child has experienced five to six different types of war related traumatic events during his or her life, and some events were experienced several times. Exposure to shelling or combat, displacement, extreme poverty and witnessing violent acts were the most common traumatic experience faced by Lebanese adolescents. In contrast, involvement in military activities, being a victim of violent acts, and suffering from serious physical injuries were less common experience. In addition, the number and types of traumatic experiences varied significantly by age, gender, socioeconomic status and region of residence (Maksoud, 1992).

In another study, Abdel-Khalek (1997) conducted a survey of the fear-eliciting stimuli associated with Iraqi aggression amongst 2083 Kuwaiti children and adolescents between the ages of 13-17 years. This study used a fear schedule of 30 items, which was administered 5.7 years after the Iraqi invasion of Kuwait. This study found that girls had significantly higher mean scores than boys in all 30 items as well as the total score. This study concluded that the Iraqi invasion's aversive effects had persisted over 5.7 years since the traumatic experience had occurred. (Abdel-Khalek , 1997).

In Palestinian study of 234 Palestinian adolescents found that, the rate of adolescents who reported moderate to severe PTSD reactions at follow-up had decreased from 40.6% (N=102) to 10.0% (N=74). 49 adolescents (20.9%), were rated above the cut-off for mental health problems on the Rutter A2 (parent) Scales, and 74 adolescents (31.8%) were above the cut-off on the Rutter B2 (teacher) Scales. The total scores on all three measures had significantly decreased during the one-year period. The total CPTS-RI score at follow-up was best predicted by the number of traumatic experiences recalled at the first assessment. (Thabet et al, 1999).

In cross- sectional study aimed to establish the nature of traumatic events recollected by children living in areas of military and political conflict, the prevalence of post traumatic stress reactions . and the relationship between children and mother mental health. among 286 Palestinian children from Gaza strip aged from 9-18 years and their mothers . He used Gaza Traumatic Events Checklist, Impact of Events Scale (children) , and general Health Q questionnaire (mothers) . The result said that children experienced an average number of four traumatic events , both direct experience of violence and through adults or the media. One third of the children reported significant post traumatic stress disorders, and it was among girls higher than boys.(Thabet et al, 2001).

In this study on 1008 adults found that, There was a substantial burden of acute PTSD and depression in Manhattan after the September 11 attacks. Experiences involving exposure to the attacks were predictors of current PTSD, and losses as a result of the events were predictors of current depression. In the aftermath of terrorist attacks, there may be substantial psychological morbidity in the population. The groups showed comparable physiological responses to the

tones at 1 week post trauma. However, at 1 and 4 months post trauma, the subjects with PTSD (Sandro, et al 2002).

As part of a United Nations Children's Fund psychosocial programme during the war in Bosnia-Herzegovina, data were collected from a community sample of 2,976 children aged between 9 and 14 years. Children completed standardized self-report measures of posttraumatic stress symptoms, depression, anxiety, and grief, as well as a report of the amount of their own exposure to war-related violence. Results showed that children reported high levels of posttraumatic stress symptoms and grief reactions. However, their self-reported levels of depression and anxiety were not raised. Levels of distress were related to children's amount and type of exposure, Girls reported more distress than boys, but there were few meaningful age effects within the age band studied (.Smith ,et al, 2002) .

But in interesting study conducted in Palestine On 91 adolescents exposed to home bombardment and demolition during Al - Aqsa Intifada and 89 controls who had been exposed to other types of traumatic events related to political violence completed self - report measures of post traumatic stress, anxiety and fears, he found that, significantly more adolescents exposed to bombardment and home demolition reported symptoms of PTSD and fear than controls group, by contrast, adolescents exposed to other events, mainly through the media and adults, reported more anticipatory anxiety and cognitive expression of distress than adolescents who were directly exposed. (Thabet et al, 2002).

In this study to examine the effect of trauma on mental health of ambulance drivers whom exposed for direct or indirect traumatic events during Al-Aqsa Intifada.. A total of 227, there were 115 ambulance drivers, 112 control group were included in the study sample, the sample were collected from North, Gaza city, Med Zone, Khan Younis and Rafah Data for this study was collected by using trauma check list, Davidson trauma Scale, Hopkins Symptoms check list and Beck Depression Inventory. The result of study. showed that both groups are complain from different level of traumatic events, PTSD symptoms, anxiety and depression, ambulance drivers there were complain from traumatic events more than control group, while they were complain from PTSD symptoms, anxiety and depression less than control group.(Abu laila ,2003).

In this study , to examine and describe the psychological effects of exposure of war-like circumstances on children and adolescents of Gaza Strip since the eruption of the second Intifada , Participants for this study were 229 Palestinian adolescents living in the Gaza Strip who were administered measures of posttraumatic stress disorder (PTSD), depression, anxiety, and coping , Results Of the 229 participants, 68.9% were classified as having developed PTSD, 40.0% reported moderate or severe levels of depression, 94.9% were classified as having severe anxiety levels, and 69.9% demonstrated undesirable coping responses. A canonical discriminate analysis revealed that adolescents diagnosed with PTSD tended to be those who reported the highest levels of depression, anxiety, and positive reappraisal coping, and the lowest levels of seeking guidance and support coping (Abu Hein et al , 2004).

In this study to determine the rate of exposure to traumatic events; estimate prevalence rates of symptoms of posttraumatic stress disorder (PTSD), depression, and anxiety; identify resources used for emotional support and risk factors for mental health symptoms; and assess the present coverage of basic needs in Nangarhar province, Afghanistan. Design, Setting, and Participants A cross-sectional multicluster sample survey of 1011 respondents aged 15 years or older, conducted in Nangarhar province during January and March 2003; 362 households were represented with a mean of 2.8 respondents per household (72% participation rate). Main Outcome Measures Posttraumatic stress disorder symptoms and traumatic events using the Harvard Trauma Questionnaire; depression and general anxiety symptoms using the Hopkins Symptom Checklist; and resources for emotional support through a locally informed questionnaire. Results During the past 10 years, 432 respondents (43.7%) experienced between 8 and 10 traumatic events; 141 respondents (14.1%) experienced 11 or more. High rates of symptoms of depression were reported by 391 respondents (38.5%); anxiety, 524 (51.8%); and PTSD, 207 (20.4%). Symptoms were more prevalent in women than in men (depression: odds ratio [OR], 7.3 [95% confidence interval {CI}, 5.4-9.8]; anxiety: OR, 12.8 [95% CI, 9.0-18.1]; PTSD: OR, 5.8 [95% CI, 3.8-8.9]). Higher rates of symptoms were associated with higher numbers of traumas experienced. The main resources for emotional support were religion and family. Medical care was reported to be insufficient by 228 respondents (22.6%) (Willem, et al , 2004).

In this study to examined the prevalence and nature of co morbid post-traumatic stress reactions and depressive symptoms, and the impact of exposure to traumatic events on both

types of psychopathology among Palestinian children during war conflict in the region. Study for 403 children aged 9-15 years, who lived in four refugee camps, were assessed by completing the Gaza Traumatic Events Checklist, the Child Post Traumatic Stress Reaction Index (CPTSD-RI), and the Short Mood and Feelings Questionnaire (MFQ). The result of these study indicate that Children reported experiencing a wide range of traumatic events, both direct experience of violence and through the media: Children living in war zones are at high risk of suffering from PTSD and depressive disorders. (Thabet, 2004).

In this study was to explore the occurrence of dissociative symptoms in relation to reported traumatic experiences among adolescents. A normative sample of 216 adolescents and a clinical sample of 30 cases with a history of traumatization were given the Swedish translation of Dissociation Questionnaire. The results showed that 8.8% of the adolescents reported scores above the cut-off score of 2.5 on the Dis-Q-Sweden, with a female /male ratio of 2.6:1. In the normative sample, 53 (24.5%) of the adolescents reported one or more trauma experiences. The adolescents who self-reported trauma experiences in the normative sample scored higher on the total Dis-Q-Sweden scores and on three of the four subscales compared to the adolescents with no such experiences. The clinical group exhibited significantly higher Dis-Q-Sweden scores than the normative sample on every scale, with 60% above the cut-off score. The study confirms the results from earlier studies that adolescents with a history of trauma exhibit more dissociative symptoms in this study according to Dis-Q-Sweden. (Svedin et al ,2004)

In this study ,to examined the relationship between psychic trauma and school performance among preparatory school children in Gaza Strip. Methods: A cross-sectional study was carried out at eight governmental and United Nations Relief and Work Agency Preparatory School in Gaza Strip. Data was collected through indirect method using a structural interviewed questionnaire and reviewing school records . trauma was classified to three levels mild, moderate and severe according to Gaza Traumatic Chick list, School performance was assessed by recording scores in Math, Arabic Language (English) and total average in the first half of scholastic year concentration , attention and participation in class activities . Results: The study showed that 19.7% of children reported mild trauma, 72.4% of them reported moderate trauma, and 7.9% reported severe trauma. Also, 71.2% of the study sample developed post traumatic stress disorder. A significant association between trauma, PTSD and low school performance was observed. Conclusion: there is a positive association between trauma, PTSD

and school performance, this association was demonstrated through lower means of scores in Math, Arabic language and total average of children after the Intifada events than before it. (EL-M ajdalawi,2004) .

In this study aimed was to identify the prevalence of trauma, PTSD, and ADHD in children living in area of war and conflict in Gaza Strip and West Bank and relationship between trauma, ADHD, and PTSD. **Method:** A random sample of 200 children from 15 UNRWA schools in Gaza) and 150 children from 8 schools from Bethlehem and East Jerusalem were selected. The age of children was ranged between 6-15 years. The age of children in Gaza range between 6-13 years old (Mean =9.49, SD = 2.2) and in west bank between 9-15 years old (Mean =10.05, SD =1.6). Children were asked to fill the following questionnaires: Gaza Traumatic Events Checklist, Impact of Event Scale, while parents and teachers filled the Structured Clinical Interview of mothers and fathers for DSM-IV diagnosis of ADHD. **Results:** The mean of traumatic experiences in Gaza Strip was 5.1 (SD = 3.4) and in West Bank were 7.5 (SD = 4.7). IES scores were significantly associated with the total number of experienced traumatic events. Eighty-seven (39.2%) of children from Gaza Strip reported post traumatic stress disorder (40 and above in IES) compared to 51 (34%) of children from West Bank.. The event that was significantly associated with IES scores was day raids of their home, nigh raids at their home, tear gas inhalation, witnessing arrest of a friend , and witnessing bombardment of other homes by airplanes and helicopters. According to parents, Children with many traumatic events were rated as having ADHD by parents and teachers. **Conclusion:** Palestinian children are still experiencing a variety of traumatic events which lead to psychological symptoms including PTSD and ADHD. A need for a programme to deal with children who were diagnosed as having ADHD due to environmental stressors and trauma is needed. A public awareness campaign of the effect of trauma on children well being must be enhance targeting schools, community, and youth clubs.(Thabet et al , 2004)

In this study were, first, to examine how exposure to war trauma, maternal neuroticism and psychological distress are associated with child psychological distress, and, second, whether good maternal mental health and low neuroticism can moderate the negative impact of war trauma on child mental health. Third, we examined whether mother-child dyads' psychological distress was dependent on who was the main war trauma victim in the family: the mother, the child or both. Fourth, we tested whether mother-child dyads express similar or different

symptoms. The sample consists of 121 Palestinian children (aged 6-16 years; 45% girls and 55% boys), and their mothers (aged 21-55 years) living under conditions of military violence and war in Gaza. Child psychological distress was measured using the CPTS-RI (child-reported) and Rutter Parent Questionnaire (mother-reported), and mothers' mental health was measured using the SCL-90-R. The results failed to show any moderating effect of good maternal mental health or low neuroticism in protecting child mental health from negative impact of war trauma. The main effects showed that the child's young age, war trauma and poor maternal mental health were associated with children's internalizing symptoms, and male gender, maternal neuroticism and poor mental health with children's externalizing symptoms. There were gender differences in psychological distress depending on whether the mother, the child or both were the main war trauma victim in the family: girls showed particularly high psychological distress when their mothers were exposed to war trauma (family systems model), whereas boys showed high levels of distress when both they themselves and their mothers were exposed to war trauma (accumulative impact model). Similarities were confirmed in dyadic symptom expression: significant associations were found between mothers' depressive and children's internalizing symptoms, and between mothers' hostile and children's externalizing symptoms (Qouta et al, 2005).

In this study to examine that exposure to early trauma may increase the risk of dysfunctional responses to anomalous psychotic experiences resulting in psychotic symptom formation. Method: In a three-wave longitudinal general population study, 4045 never-psychotic individuals exposed and non-exposed to trauma before the age of 16 years, according to baseline interview were interviewed for the onset of psychotic experiences 3 years later (T2). In 36 individuals with incident psychosis at T2, assessments were made, for each psychotic experience, of i) the amount of distress associated with and ii) the degree of coping and subjective control over the experience. Results: In the 16 observations of an incident psychotic experience, in the absence of distress, the baseline rate of early trauma was low (6%) , whereas it was much higher in the 21 observations of an incident psychotic experience with distress, Similarly, coping attempts in the context of early trauma was associated with less control. (Bak et al, 2005)

In this study To examine the relationship between exposure to war trauma and behavioral and emotional problems among pre-school children Method Total of 309 children aged 3-6 years were selected from kindergartens in the Gaza Strip, and were assessed by parental

reports in regard to their exposure to war trauma, using the Gaza Traumatic Checklist, and their behavioral and emotional problems, using the Behavior Checklist (BCL) and the Strengths and Difficulties Questionnaire (SDQ). Results : Pre-school children were exposed to wide range of traumatic events. The total number of traumatic events independently predicted total BCL and SDQ scores. Exposure to day raids and shelling of the children's houses by tanks were significantly associated with total behavioral and emotional problems scores.. (Thabet et al ,2006)

In this study aimed to investigate gender differences in relation to exposure to domestic violence, political violence, family relations and psychological symptomatology in Palestinian adolescents. The sample consisted of 1766 adolescents, males (54.1%) and females (45.9%), residents of West Bank cities subjected to violent political conflict. Participants completed a self-report questionnaire consisting of the following measures: demographic variables, domestic violence, political violence events, the McMaster Family Assessment Device, and the Brief Symptom Inventory (BSI) psychological symptomatology. Results indicated that whereas there was no significant difference in the level of exposure to political violence between boys and girls, female adolescents exhibited higher levels of psychological symptoms compared to their male counterparts. Girls also reported higher levels of exposure to domestic violence and lower levels of family function than boys. (Al-Krenawi , Wiesel , and Sehwal ,2006)

In this study ,to examined the relationship between childhood trauma and dissociative experience in adulthood in patients with borderline personality disorder. Method: Dissociative experiences scale scores and subscale scores for the Childhood Trauma Questionnaire were correlated in 139 patients. Patients were dichotomized into high or low dissociators using the Median Dissociative Experiences Scale score as the cut-off. Results: Childhood Trauma Questionnaire Subscale scores for emotional and physical abuse and emotional neglect but not sexual abuse correlated significantly with Dissociative Experiences Scale scores. High dissociators reported significantly greater levels of emotional abuse, physical abuse, emotional neglect and physical neglect but not sexual abuse than low dissociators. Conclusion: Patients with borderline personality disorder therefore demonstrated levels of dissociation that increased with levels of childhood trauma, supporting the hypothesis that traumatic childhood experiences engender dissociative symptoms later in life. Emotional abuse and neglect may be

at least as important as physical and sexual abuse in the development of dissociative symptoms. (Watson et al ,2006.).

In this study to examine the relationship between ongoing war traumatic experiences, PTSD and anxiety symptoms in children, accounting for their parents' equivalent mental health responses. *Methods* : The study was conducted in the Gaza Strip, in areas under ongoing shelling and other acts of military violence. The sample included 100 families, with 200 parents and 197 children aged 9–18 years. Parents and children completed measures of experience of traumatic events (Gaza Traumatic Checklist), PTSD (Children's Revised Impact of Events Scale, PTSD Checklist for parents), and anxiety (Revised Children's Manifest Anxiety Scale, and Taylor Manifest Anxiety Scale for parents). *Results* Both children and parents reported a high number of experienced traumatic events, and high rates of PTSD and anxiety scores above previously established cut-offs. Among children, trauma exposure was significantly associated with total and subscales PTSD scores, and with anxiety scores. In contrast, trauma exposure was significantly associated with PTSD intrusion symptoms in parents. Both war trauma and parents' emotional responses were significantly associated with children's PTSD and anxiety symptoms. *Conclusions* Exposure to war trauma impacts on both parents' and children's mental health, whose emotional responses are inter-related. Both universal and targeted interventions should preferably involve families. These could be provided by non-governmental organizations in the first instance.(Thabet et al ,2008) .

2.3.2 Studies concern with trauma and psychosomatic disorders

In study of baker (1990) the mental health of 796 Palestinian children living in the occupied West Bank and Gaza Strip was assessed in terms of reported psychological status and behavioral symptoms , the results, indicate that exposure to political and military violence associated with conduct and psychosomatic problems ,The same study showed that, conduct and psychosomatic problems among children were more severe within the refugee camps, than in urban or rural areas (Baker, 1990).

In this study for sample of 24 adults Lebanese age between 20-25 years old whom witness face to face the car expulsion and live with its results even they contribute in providing the first aid to transporting of causality . Naboulsi determine character of new and special syndrome that is not classified in any of the international classification.. They called it (car expulsion syndrome). . Due to the result of this expulsion , drug abuse and alcohol intake are increase in

addition to the aggression among youth . Also , it has psychosomatic disorders among those people disturbance in circulatory system. Digestive system, musculoskeletal system and sexual disability (Naboulsi , 1991).

In this study of Abu Hein to determine the prevalence of mental health among 127 political prisoners in Gaza strip their age was 19-40 years , he use Harding Scale of depression , anxiety and psychosomatic Scale , the result showed that 46% of study sample complained of paranoia , 32% psychosomatic disorders , 18% anxiety , 17% depression and 8% obsessive of study sample (Abu Hein , 1991) .

In this study to examine the incidence of traumatic events in childhood, such as sexual and physical abuse, in a chronic pain group and a control group of hospital employees without chronic pain. Method: Ninety two patients with chronic pain, age range 20-62, were consecutively recruited from the outpatient clinics of a rehabilitation hospital and a general hospital. Ninety eight hospital employees, age range 20-62, were consecutively recruited from the employee health office of a rehabilitation hospital. All participants responded to nine questions related to sexual, physical and verbal abuse in childhood and completed the Childhood Traumatic Events Scale. A logistic regression with age, gender, sexual, physical, and verbal abuse, death of a family member, childhood illness, major upheaval before age 17, as independent variables were used to predict membership in the pain group contrasted with the control group. Results : Child abuse was reported in the childhood history by 54.4% of the chronic pain group, compared with 21.4% of the control group. A logistic regression showed that after adjusting for gender and age, sexual and verbal abuse were statistically significant predictors of being a member of the pain group. A logistic regression was modeled to predict child abuse when gender was taken into account. The results of the logistic regression showed that pain was a significant predictor for sexual abuse after adjusting for gender and age . Gender was not a statistically significant predictor for sexual abuse, after adjusting for pain and age . Conclusion: A history of physical, sexual and verbal abuse is more likely to occur in a chronic pain group than in a control group of hospital employees. Although child abuse is reported to be as high as 25% in the general American population, the statistics for chronic pain patients are twice as high as in the general population. The mechanisms for abuse include age, gender, and early family environment. (Goldberg, Pachas, Keith , 1999).

In the study of ELtala,a ,(2000) examine the effect of stressful events on psychosomatic disorders among 450 Palestinian prisoners , he use as tool trauma scale and psychosomatic questionnaire , the result showed that there were significant positive correlation between stressful events and psychosomatic disorders, and prevalence of psychosomatic disorders , also there were significant differences comparing psychosomatic disorders according to educational level , there were significant differences comparing psychosomatic disorders according to type of residence toward camp and village (ELtala,a ,2000).

In this study aimed to examine association between severe childhood trauma, adult Somatization and complex post-traumatic stress disorder (cPTSD), the purpose of the present paper was to assess this syndrome and its clinical correlates in patients with Somatization disorder (SD). METHODS: A total of 28 patients (82% women, mean age = 41.7+/-10.1 years) meeting DSM-IV criteria for SD as confirmed by the Structured Clinical Interview for DSM-IV, Axis I were compared to 28 age- and gender-matched patients with major depression, but without a lifetime diagnosis of SD. They completed the Structured Interview for Disorders of Extreme Stress, the Brief Symptom Inventory, the Inventory of Interpersonal Problems-Circumplex Scales, and the SF-36 Health Survey. RESULTS: Compared to the control group, SD patients had higher risks for current and lifetime diagnoses of cPTSD (odds ratio (OR) = 15.0, 95% confidence interval (CI) = 1.76-127.54; and OR = 8.33, 95%CI = 2.04-34.07, respectively). SD subjects with cPTSD had more psychological distress, more interpersonal problems and worse psychosocial functioning than those without the syndrome. CONCLUSION: The concept of complex PTSD may hold clinical utility when applied to SD patients because it identifies a distinct subgroup characterized by severe psychosocial impairment. The diagnostic and therapeutic implications of the present findings are discussed. (Spitzer et al ,2001)

In this study was to examine childhood traumatic experiences and dissociative characteristics in women with chronic headache and low back pain. Setting: The patients were evaluated in the multidisciplinary pain clinic of a university hospital Outcome Measures: All the patients were assessed with use of a semi structured questionnaire, the Dissociative Experiences Scale (DES), the Somatoform Dissociation Questionnaire (SDQ), and the Childhood Abuse and Neglect Questionnaire. the result of this study that ; There were no significant differences between the headache and low back pain groups in terms of prevalence of history of neglect; abuse; or

sexual, physical, and emotional abuse separately. In addition, no significant differences were found between the groups with respect to the Dissociative Experiences Scale scores. However, analysis of the SDQ scores showed that the neglect rate in the two groups differed significantly. According to findings, the neglect rate was higher in the headache group . (Yucel et al,2002) .

In this study to assess whether somatization and health anxiety predicted health care use and quality of life 6 months later in all patients or in those without demonstrable abnormalities. Method, On the first clinic visit, participants completed the Illness Perception Questionnaire (IPQ), the Health Anxiety Questionnaire (HAQ), and the Hospital Anxiety and Depression Scale (HADS). Outcome was assessed as: (a) the number of medical consultations over the subsequent 6 months, extracted from medical records, and (b) Short-Form Health Survey 36 (SF36) physical component score 6 months after index clinic visit. Results , A total of 295 patients were recruited (77% response rate), and medical consultation data were available for 275. The number of bodily symptoms was associated with both outcomes in linear fashion ($P<.001$), and this was independent of anxiety and depression. Similar associations were found in people with or without symptoms due to demonstrable structural abnormalities. Health anxiety was associated only with health-related quality of life in patients with symptoms explained by demonstrable abnormalities. Conclusion , The number of bodily symptoms and degree of health anxiety have different patterns of association with outcome, and these need to be considered in revising the diagnoses of somatization and hypochondrias (Jackson ,2006) .

in this study to examine the relation between exposure to trauma events which followed Beet hanoun crisis and the Psycho somatic disorders among Palestinian adults from three places in the Northern governorate of Gaza. 451 adolescents was exam end by using Psycho somatic questionnaire, the result of the study shows the following findings: there is high percentage of Psycho somatic problems among Beet hanoun adolescents than other places, and the results of the study show that females from Beet hanoun are higher than males. And adolescents who was exposed personally to traumatic events or noticed other people exposed in front of them are more psychosomatically problem than other people (Abu Hein ,2007) .

In this study to examine the relation ship between somatoform symptoms and traumatic experiences. a sample of 892 patients consecutively admitted to a psychotherapy outpatient clinic were evaluated for psychological symptoms in general, for somatoform symptoms and for history of traumatizations, He used standardized questionnaires Any severe lifetime trauma

was reported in 67.8% of the total sample. Somatoform symptoms were notably more prevalent in traumatized patients when compared with non traumatized patients. Descriptive data analysis revealed specific elevations of symptom frequencies for pseudo neurological symptoms and for symptoms associated with discomfort or dysfunction in sexual organs.(Sack et al, 2007).

In this study examined whether anger, which is related to many psychosomatic diseases, is a psychosocial factor associated with first-onset. primary spontaneous pneumothorax Method: He administered the State-Trait Anger Expression Inventory, Stress Response Inventory, Coping Scale, Beck Depression Inventory and Global Assessment of Recent Stress to 91 patients with first-onset primary spontaneous pneumothorax and to 77 patients with recent minor trauma as controls. The result was , The scores on anger-in, anger-out, state anger and trait anger were significantly higher in the PSP group than in the control group. Logistic regression analysis revealed that low body mass index and trait anger could be associated with PSP. Conclusion was,; the researcher hypothesize that anger could play a role in the path physiology of PSP.(Lee et al,2008).

In this study is to investigate the frequency and reactions to trauma such as PTSD and general mental health, then examining resilience from the perspective of decreased vulnerability to PTSD and mental health problems in reaction to trauma. Method: The study sample consisted of 386 children from total of 400 children targeted as study population with respond rate of 96.5%, 201 of children were boys (52.07%) and 185 were girls (47.93%). Children age ranged from 7-18 years with a mean age of 13.44 years. Children were interviewed using Gaza Factional Fighting and Israelis Aggression Trauma Scales, Child Mental Health, UCLA-PTSD, and Resilience Scale. . The results showed that there was no statistically significant difference in number of traumatic events due to exposure to Israelis aggression and factional fighting between boys and girls. Interestingly, no age's difference in exposure to Israelis aggression, but older age children reported more traumatic events due to factional fighting. This could be due to the collective traumatic events and repeated continuous trauma inflicted in Palestinian children in the Gaza Strip. (Thabet et al, 2007a, 2007b, 2008 in press).

In this study to examine the relationships between certain common psychosomatic symptoms and sources of stress in Hong Kong teachers. Methods: A total of 261 teachers (134 males and 127 females) from 13 high schools in different regions of Hong Kong responded to the Teacher

Stress Inventory (TSI) , which included items related to sources of stress in the context of Hong Kong education system, psychosomatic symptoms in the form of stress arousal, and global stress. Results: Confirmatory factor analysis identified six distinct teacher stress sources: students, others curriculum, non teaching duties, teaching workload, and recognition. These stress sources were positively correlated with a global teacher stress measure, supporting their construct validity Structural equation models showed that each stress source was positively related to teachers' psychosomatic symptoms, to which the path coefficient from teaching workload was the highest (Jin et al ,2008).

In this study to investigated the relationships of self-esteem with social support and psychosomatic symptoms in cross-lagged longitudinal data with two measurement points and a time lag of 6 years, Two hundred thirteen participants were drawn from the ongoing Jyva"skylä" Longitudinal Study of Personality and Social Development, Finland. The present study focused on data collected by questionnaires at ages 36 and 42. The cross-lagged analyses of Structural Equation Modeling (SEM) indicated that high self-esteem at age 36 predicted high social support 6 years later and simultaneously, but to a lesser extent, high social support at age 36 predicted high self-esteem at age 42. In addition, low levels of psychosomatic symptoms at age 36 were associated with high self-esteem 6 years later, but not vice versa.(Kinnunen et al.,2008).

In this study to determine whether patients with alopecia areata experience more childhood or total lifetime traumatic events, as measured by the Traumatic Experiences Checklist. Methods: Using a case-control study, data on 90 patients with alopecia areata and 91 control subjects were analyzed. Results: Significantly more patients with alopecia areata experienced total lifetime and early childhood traumatic events, with an odds ratio of 2.46 (95% confidence interval 1.15-5.28; P = .017) and 2.16 (1.15-4.06; P = .016), respectively. In patients with AA, the global impact score related to their traumatic experiences was significantly higher than in control subjects (P \.001). In addition, patients with AA experienced significantly more emotionally and physically traumatic events. Limitation: This case-control study is susceptible to recall bias and to confounding factors associated with stress caused by alopecia areata outbreaks or by a traumatic childhood history. Conclusion: Our study documents an increased history of childhood trauma in patients with alopecia areata compared with control subjects . (Willemsen, et,al , 2008) .

In this study aimed to examine the relative contributions to physical health of combat trauma exposure and posttraumatic stress disorder (PTSD), which have both been implicated separately in poorer physical health but whose unconfounded effects have not been teased out. Methods: Data from an epidemiological study of Australian Vietnam veterans, which used personal interviews and standardized physical and psychiatric health assessments, provided the means to assess the independent and joint effects of psychological trauma exposure and PTSD on a wide range of self-reported measures of physical health. Trauma exposure was measured by published scales of combat exposure and peritraumatic dissociation. Logistic regression modeling was used to assess the relative importance of trauma exposure and PTSD to health while controlling for a set of potential confounders including standardized psychiatric diagnoses. Results: Greater health service usage and more recent health actions were associated more strongly with PTSD, which was also associated with a range of illness conditions coded by the World Health Organization International Classification of Diseases, 9th Edition (asthma, eczema, arthritis, back and other musculoskeletal disorders, and hypertension) both before and after controlling for potential confounders. In contrast, combat exposure and peri traumatic dissociation were more weakly associated with a limited number of unconfounded physical health outcomes. Conclusions: This study provided evidence that PTSD, rather than combat exposure and peri traumatic dissociation, is associated with a pattern of physical health outcomes that is consistent with altered inflammatory responsiveness. (Brian, Stanley. 2008)

2.4 Summary of the previous studies:

The researcher will discuss previous studies in three axis , the first is samples were used in these studies , the second is tools of the studies , and the third concern about the results of the previous studies .

2.4.1 Samples of the previous studies:

In the previous studies , the study samples were ranged between small samples as study of Naboulsi (1991) among 24 adults Lebanese age between 20-25 years old whom witness face to face the car expulsion , Willemsen, et,al (2008) among 90 patients with alopecia areata ,Lee , et al (2008) among 91 patients with first-onset primary spontaneous pneumothorax and to 77 patients with recent minor trauma as controls , Goldberg, Pachas, Keith , (1999) among 92 patients with chronic pain .Abu Hein (1993) among 127 political prisoners in Gaza strip ,

Thabet (2008) among 100 families, with 200 parents and 197 children aged 9–18 years. However the medium samples in the studies of Thabet (2001) among 286 Palestinian children from Gaza strip, Jin et al (2008) among 261 teachers (134 males and 127 females), Kinnunen et al.(2008) among 213 participants, Thabet (2007) among 386 children from total of 400 children targeted as study population, Sack (2007) among 892 patients with somatoform symptoms and history of traumatizations, Eltala,a (2000) among 450 Palestinian prisoners in Gaza strip. While, some studies have large samples as studies of Maksoud (1992) among 2220 Lebanese adolescents, Abdel-Khalek (1997) among 2083 Kuwaiti children and adolescents, Sandro, et al (2002) among 1008 adults, Smith, et al (2002) among 2,976 children aged between 9 and 14 years.

2.4.2 Tools of the previous studies:

Thabet (2002), EL-Majdalawi (2004) and, Abu Laila (2003) used Gaza Traumatic Check list, While Willemsen, et,al (2008) used Traumatic Experiences Checklist, Jin et al ,(2008) used The questionnaire consisted of three measures: sources of teacher stress (27 items), psychosomatic symptoms (10 items), and global stress (1 item).,Lee ,et al ,(2008) used State-Trait Anger Expression Inventory, Stress Response Inventory, Coping Scale, Beck Depression Inventory, Thabet (1991, 2001) used Gaza Traumatic Events Checklist, Impact of Events Scale (children), and general Health Q questionnaire (mothers), Tala,a (2000) used psychosomatic questionnaire, Sack (2007) used standardized questionnaires for somatoform symptoms and for history of traumatizations, Davidson trauma Scale, Hopkins Symptoms check list and Beck Depression Inventory, Abu Hein(2007) used Psycho somatic questionnaire, Yucel ,et al(2002) used Dissociative Experiences Scale (DES), the Somatoform Dissociation Questionnaire (SDQ), and the Childhood Abuse and Neglect Questionnaire, while Jackson (2006) used Illness Perception Questionnaire (IPQ), the Health Anxiety Questionnaire (HAQ), and the Hospital Anxiety and Depression Scale (HADS).

2.4.3 Results of the previous studies:

Studies of Thabet et al (2007) and EL-Majdalawi (2004) found that the most common traumatic events children reported was watching mutilated bodies and wounded people on TV (98.5), (96.5).respectively.

The prevalence of psychosomatic disorders in the previous studies were Naboulsi,(1991), Abu Hein, (1993), EL-Tala,a (2000), Abu Hein (2007), Jin et al(2008), Kinnunen ,(2008),

Baker,(1990) , Rayhida et al,1986 and Farhood et al (1993). Many of studies found positive correlation between traumatic events and psychosomatic disorders such as studies of ELtala,a ,(2000) , Brian, Stanley. (2008) , Willemsen , et al , (2008) , Sack et al, (2007) , Abu Hein ,(2007) , Yucel et al,(2002).

Baker, (1990) point out that exposure to political and military violence associated with conduct and psychosomatic problems ,The same study showed that, conduct and psychosomatic problems among children were more severe within the refugee camps, than in urban or rural areas . Abu Hein (1993) found that 46% of study sample complained of paranoia , 32% psychosomatic disorders , , 17% depression and 8%obsesive of study sample , While Goldberg, Pachas, Keith , (1999) found that history of physical, sexual and verbal abuse is more likely to occur in a chronic pain group than in a control group of hospital employees. However Yucel, et al (2002) revealed that ; There were no significant differences between the headache and low back pain groups in terms of prevalence of history of neglect; abuse; or sexual, physical, and emotional abuse separately. Willemsen, et,al , (2008) found that increased history of childhood trauma in patients with alopecia areata compared with control subjects

Chapter 3

Methodology

Chapter 3: Methodology

3.1 Introduction

In this chapter the main methodological parts will be indicated by the researcher . they include; study design, study sample (study population , sample size, sampling process), study place, ethical consideration, study instruments, (description of both trauma and psychosomatic questionnaires) , data collection procedures and data analysis procedures

3.2 Study design

In the current study, the researcher used descriptive analysis design , which tries to answer the study questions about the prevalence of psychosomatic disorder among traumatized Palestinian adolescents living in the Gaza strip . The researcher adopted the selection of descriptive analysis design because this type of studies is useful for descriptive purposes. The descriptive analysis design are relatively easy and economically to perform , which is needed in the present study which is limited by time and resources , since there is no institutional fund for such a study because it performed for academic purposes.

3.3 Study population

The study population includes all the students in the secondary schools (10th class, 11th class, and 12th class) between the ages of 15-18 years old that equal (57. 205) adolescents; males 47.89 % (27.396), females 52.11 % (29. 809). The researcher calculate the sample size By using EPL-6. program. (Figure 2)

3.4 Study sample

The population frame for this study consisted of male and female pupils in the secondary schools living in there governorates of Gaza Strip which are North Gaza, Gaza, Mid zone, Rafah and KhanYounis schools, the target was the pupils in secondary schools that belong to ministry of education . The researcher selected as study sample , 380 adolescents; 182 (48%) males and 198 (52%) females aged 15-18 years (Figure 2).

3.5 Sampling method

The researcher selected the study sample by using stratified cluster random sample. The researcher selected randomly by using sampling frame two schools from each governorate; (one males schools and one female schools) and three classes (10th , 11th, 12th) from each school. (Figure 3) . The researcher took in to consideration to select all subject randomly and to ensure confidentiality of data through ignoring the personal details. The sample selection was multi-stages random selection; the first was cluster random selection included all governmental secondary schools in North Gaza, Gaza, Mid zone, Rafah, and KhanYounis schools. The researcher select two secondary school in each governorate, one of them male and the other was female, The second stage was stratified cluster selection of classes, the researcher select randomly one class , and consider all pupils in this class as subject and invite all pupils in this class to participate in the study, The researcher tries to avoid the influence of the class teachers in selection of pupils to ensure anonymity and convenience of sampling.

3.6 Period of the study

The study performed in the second trimester of the scholastic year 2009 ; this will ensure that data will be available about the adolescence . The estimate duration of the study approximately 3 months .

3.7 Place of study

The study is designed to be performed among secondary schools in five different area of Gaza Strip that belong to ministry of education . Schools were chosen randomly to represent secondary governmental schools taking into consideration different setting and localities to be covered in 5 different area of Gaza Strip governorates. (North Gaza , Gaza , Middle zone, Khan younis , and Rafah).

3.8 Eligibility criteria

3.6.1 Inclusion criteria

The inclusion criteria of the study were pupils between 15-18 years old who study in governmental secondary schools that belong to Palestinian of ministry of education at (10th , 11th , 12th classes) at the time of the study were eligible for the study.

3.6.2 Exclusion criteria

there were no significant excluding criteria in this study except for pupils in secondary schools were not belong to Palestinian of ministry of education .

Figure 2 : Distribution of the sample according to place of resident and gender

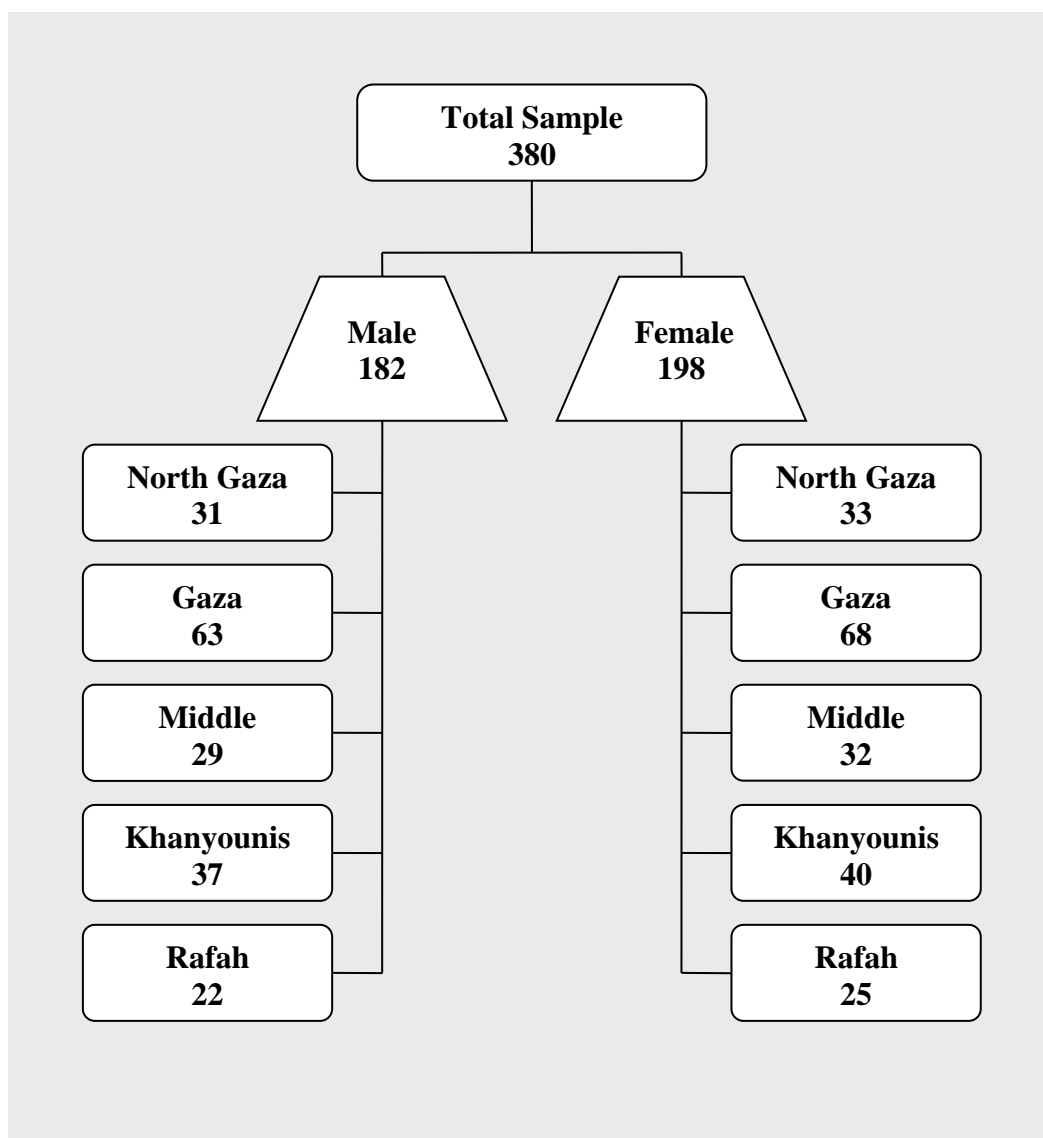
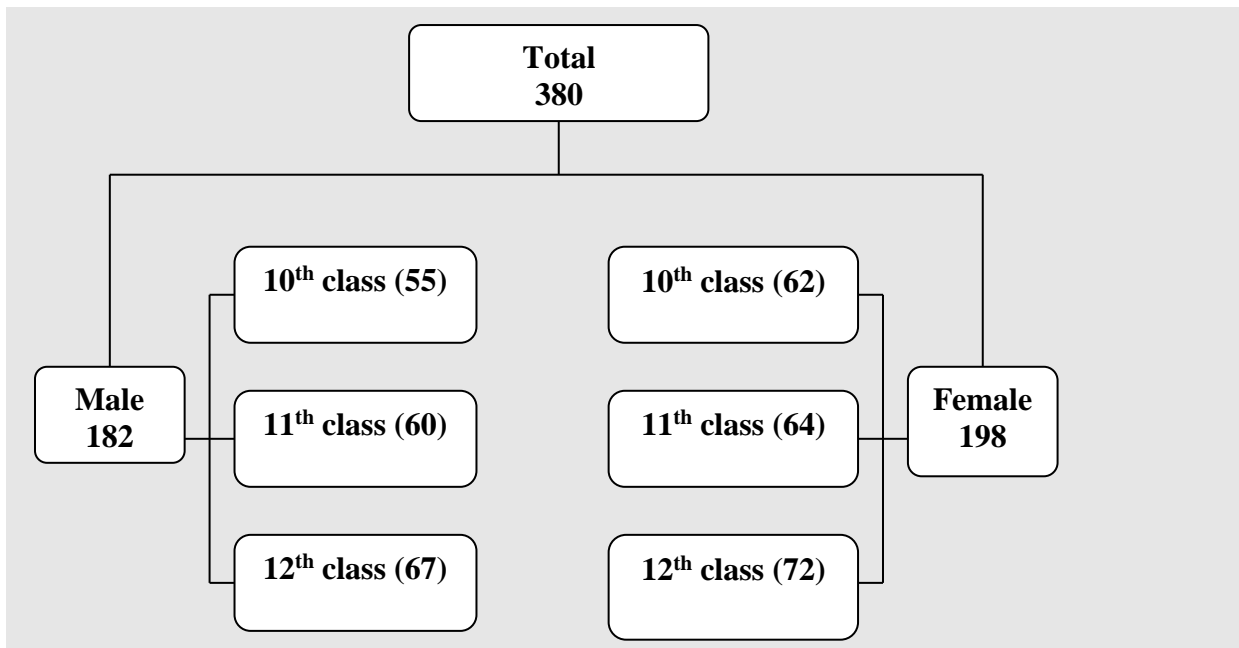


Figure 3: Distribution of the sample according to gender and educational class



3.9 Ethical considerations

The ethical consideration and procedures are very important conditions in applying the research or performing any medical procedures, all of the ethical procedures have to be followed perfectly without ignorance any of them, some of these important ethical procedures are,

- An official letter of approval to conduct the study will be obtained from the Helsinki Committee in the Gaza Strip, which allow the researcher to carryout the study directly after that day (Annex 2)
- an official letter will obtained from the General Director of Ministry of Education in order to conduct the study in governmental secondary schools and facilitate the process of data collection (Annex 3).

- Every subject in the study will have an explanatory letter about the study, the researcher explained to all adolescents that , participation is optional and emphasis confidentiality, ethical concept, respect for trust, and respect for people have been considered.

3.10 Data collection

The data should be collected directly from the adolescent by using of structured questionnaire .Detailed information about the study was given to the students using their own Arabic language , before consent to participate was obtained .

3.11 Instruments of the study

In order to conduct a research study , and to get good and fruitful results, one of the most important roles to achieve that mission is to use the most suitable instrument.

Several features should be taken in consideration when choosing an instrument ; mainly, the acceptability, applicability, procedural adequacy, reliability, and validity. In the current study the researcher used the measurement that were design and reformed to meet the goals of the study.

- The Socio -Demographic status questionnaire
- War On Gaza Traumatic Events Check list for
- Psychosomatic Disorders Check list.

3.11.1 Socio-demographic status (developed by the researcher)

This was gathered from adolescents by questionnaire includes sex , age , place of residence , type of housing , number of sibling , father education and mother education , father work , mother work , and family income etc. (Annex 4).

3.11.2 War on Gaza traumatic events checklist (Thabet et al , 2009)

This checklist consist of 30 items covering different types of traumatic events that adolescence may have been exposed to in the particular circumstances during war on Gaza . This checklist cover three domains of trauma. The first domain cover witness acts of violence such as the killing of relatives, home demolition , bombardment , and injury of others . The second domain covers hearing experiences such as hearing to the killing or injury of friends or relatives . The third domain covers personal traumatic events such as being shot, or beaten. Trauma was classified to three levels, mild, moderate and severe according to war on Gaza Traumatic

Chick list , if adolescent have 0-9 traumatic events consider mild trauma , 10-19 items consider as moderate trauma , more than 20 items consider as severe trauma .

The checklist can be completed by children aged 6-16 ('yes' or 'no') . In this study the reliability of the scale using Cronbach's alpha was 0.92 and split half was 0.86 . (Annex 5).

3.11.3 Psychosomatic disorders check list (EL-Bana , 1987)

The researcher found it would be helpful to study the total picture of prevalence of Psychosomatic disorders. It is a chick list contained of 128 items covering of different type of disorders, This checklist cover nine domains of Psychosomatic disorders. The first domain cover Gastrointestinal system such as peptic ulcer, The second domain covers Cardiovascular disorders such as coronary heart disease, The third domain covers respiratory system such as Asthma, The fourth domain covers Neuromuscular system such as spasmodic, The fifth domain covers dermatological disorders such as neurodermatitis , The sixth domain covers Urogenital system such as nervous polyuria, The seventh domain covers psychological disorders, The eighth domain covers endocrine and metabolic disorders diabetes mellitus ,while the last one is other disorders such as malignant tumor. In this study the reliability of the scale using cronbach,s alpha was 0.97 and split half was 0.84 (Annex 4).

This scale was validated in Arabic culture (Egypt) by Abu Tara in Egypt(1989). internal consistency of the Arabic version of the scale was satisfactory (Cronbach's alpha = 0.98) and split half was 0.98 , Also this scale was validated by Abu Zaina (1994) ,(Cronbach's alpha = 0.86) and split half was 0.86 , This was used previously in Gaza Strip by El-Tala,a (2000) and showed that the internal consistency of the Arabic version of the scale was satisfactory (Cronbach's alpha = 0.98) and split half was 0.98.

3.12 Data entry and statistical analysis

The collected data have to be processed and analyzed under the supervision of the academic supervisor and the statisticians.

Data was entered by the statistical Package for Social Sciences (SPSS) computer program for the data entry and analysis. This statistical program has a variety of options that is optimal for use in thus studies. Were data can be entered, labeled, coded and recorded as different variables, and tested in many kinds of statistical tests that are available in this program; including, Differences between sex and age and variables were analyzed using independent samples t-tests. For differences between more than two groups we used. one way ANOVA, and least statistical differences

Chapter 4

Results

Chapter 4: Results

4.1 Introduction

In this chapter the researcher clarified the main results of the study after data collection and analysis by using statistical tools of sample of 380 adolescents. The researcher used SPSS program for data entry and analysis . The researcher used many statistical test like descriptive statistics, frequencies, percentages, means and standard deviation . In addition to differences between study variables using t- independent test and one –way ANOVA test .

4.2 Demographic results of the study sample :

The following table shows the demographic results of the study sample, which described the study sample according to sex , educational level, place of residence, type of residence, number of siblings, mother& father educational level, mother &father work, and monthly income. The sample consisted of 380 adolescents, 182 were males (47.9%) and 198 were females (52.1%) between the ages of 15-18 years old, Their mean age was 16.6 years (SD= 0.08). A adolescents coming from North Gaza were (17.4%) , from Gaza were (33.4%) , from middle area (16.8 %) ,from Khan Younis were (20%) and from Rafah (13.4 %) . According to place of residence, (46.1%) of the study sample live in cities, (33.7%) live in refugee camps, and (20.3 %) live in villages. According to educational level, were (34.2%) in10th class, (43.4%)in 11th class and (22.4%) in12th class . According to family monthly income , were (33.9%) of adolescents had family income less than 600 NIS, (22.6%) family income was from 601 – 1200 NIS, (26.8%) of adolescents were from 1201 – 2500 NIS , (16.6%) were more than 2500 NIS

Table (1) : Demographic characteristics of the study sample (N=380)

Sex	No	%
Male	182	52.1
Female	198	47.9
total	380	100.0
Educational classes		
10 th class	130	34.2
11 th class	165	43.4
12 th class	85	22.4
Total	380	100.0
Place of residence		
North Gaza	66	17.4
Gaza	123	32.4
Middle area	64	16.8

Khan Younis	76	20.0
Rafah area	51	13.4
total	380	100.0
Type of residence		
City	175	46.1
Village	77	20.3
Camp	128	33.7
Total	380	100.0
Mother Education		
Primary	38	10.0
Preparatory	63	16.6
Secondary	191	50.3
Diploma	33	8.7
University	55	14.5
Total	380	100.0
father Education		
Primary	40	10.5
Preparatory	67	17.6
Secondary	115	30.3
Diploma	28	7.4
University	130	34.2
Total	380	100.0
Mother job		
House wife	340	89.5
Employee	40	10.5
Total	380	100.0
Father job		
Employee	157	41.3
Worker	46	12.1
Unemployed	129	33.9
Skill maker	48	12.6
Total	380	100.0
Family income by "NIS"		
600 and less	129	33.9
601 - 1200	86	22.6
1201 - 2500	102	26.8
More than 2500	63	16.6
Total	380	100.0

4.3 The prevalence and frequencies

4.3.1 The frequencies of traumatic events :

The following frequency table (table 2) describe the most traumatic events due to war on Gaza and its frequency among study sample . the researcher found that (92.3%) of the study sample watching mutilated bodies and wounded people on TV, (89.2%) hearing shelling of the area by artillery, and (89.2%) hearing the sonic booms from jetfighters. While the lowest traumatic events were physical injury due to bombardment of your home (21.9%) .

Table (2) : Frequency of traumatic events due to war on Gaza

No	Traumatic events	Yes	%
1	Watching mutilated bodies in TV	350	92.3
2	Hearing shelling of the area by artillery	339	89.4
3	Hearing the sonic sounds of the jetfighters	338	89.2
4	Witnessing the signs of shelling on the ground	336	88.7
5	Witnessing firing by tanks and heavy artillery at neighbors homes	265	69.9
6	Witnessing assassination of people by rockets	261	68.9
7	Hearing of arrest of someone or a friend	242	63.9
8	Forced to leave your home during the war	235	62.0
9	Hearing killing of a friend	235	62.0
10	Witnessing of a friend home demolition	235	62.0
11	Deprivation from water or electricity during detention at home	234	61.7
12	Hearing killing of a close relative	216	57.0
13	Threaten by shooting	198	52.5
14	Being detained at home during incursion	159	42.0
15	Witnessing killing of a friend	136	35.9
16	Witnessing firing by tanks and heavy artillery at own home	128	33.8
17	Witnessing of own home demolition	128	33.8
18	Destroying of your personal belongings during incursion	127	33.5
19	Threaten of family member of being killed	121	31.9
20	Witnessing shooting of a friend	120	31.7
21	Witnessing shooting of a close relative	115	30.3
22	Witnessing killing of a close relative	115	30.3

23	Deprivation from going to toilet and leave the room at home where you was detained	114	30.1
24	Exposure to burn by bombs and phosphorous bombs	100	26.4
25	Beating and humiliation by the army	100	26.4
26	Threatened to death by being used as human shield to arrest your neighbors by the army	97	25.6
27	Shooting by bullets, rocket, or bombs	89	23.5
28	Threaten of being killed	89	23.5
29	Being arrested during the last incursion	83	21.9
30	Physical injury due to bombardment of your home	83	21.9

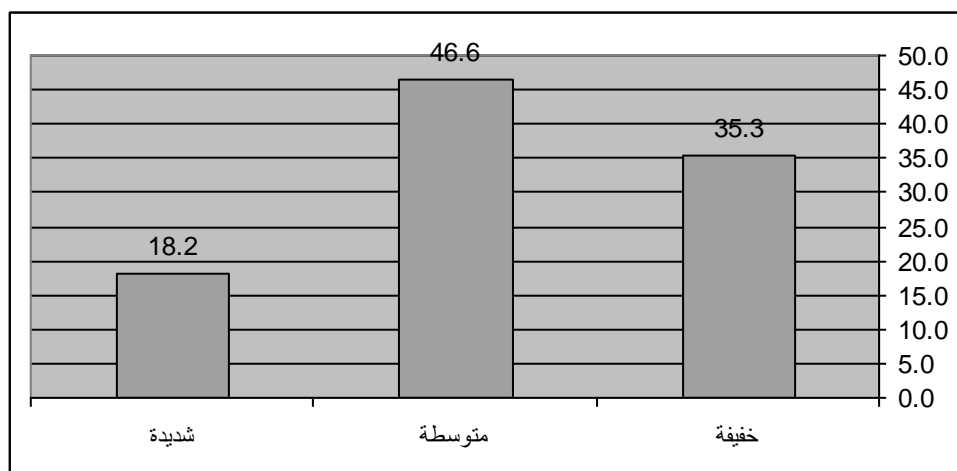
4.3.2 The prevalence of traumatic events of the study sample

The following table shows that 134 of study sample have mild traumatic events due to war on Gaza (35.3%) , while 177 of study sample have moderate traumatic events (46.6%), and 69 of study sample have sever traumatic events (18.2%) .

Table(3) The prevalence of traumatic events due to war on Gaza:

Variables		frequency	percent
		N	%
Traumatic events	Mild	134	35.3%
	Moderate	177	46.6%
	Sever	69	18.2%
Total		380	100.0

(mild = 0-9 , moderate =10-19 , sever = 20+)



4.3.3 The frequency of psychosomatic disorders among adolescents

The following frequency table describe the prevalence of psychosomatic disorders and its frequencies, the result found that 29.5% of study sample experienced from psychosomatic disorders, The most frequently reported psychological disorders (mean = 100.6 ; SD=43.2), cardiovascular disorders (mean = 30.3 ; SD= 16.3), while the lowest disorders were Urogenital disorders x (mean = 4.4 ; SD=3.5)

Table (9) Standard deviation and weighted mean of psychosomatic disorders, N=380

Variables	Item	Total	Mean	SD	Weighted Mean	N
Other disorders	5	20	7.1	3.9	35.6	1
Psychological disorders	71	284	100.6	43.2	35.4	2
metabolic disorder	13	52	16.9	7.6	32.4	3
Skeletal disorders	5	20	6.2	4.0	30.9	4
Cardiovascular disorders	27	108	30.3	16.3	28.1	5
Gastrointestinal disorders	31	124	29.3	15.1	23.7	6
Respiratory disorders	9	36	7.9	6.1	22.1	7
Urogenital disorders	5	20	4.4	3.5	22.0	8
Skin disorders	13	52	10.0	7.5	19.3	9
Total	128	512	151.1	151.1	29.5	

** P<0.01 *P<0.05 // P>0.05

4.4 Traumatic events and demographic variables

4.4.1 Traumatic events and sex of the study sample

In order to test the sex difference among the study sample, the researcher performed t-independent test . as shown in the following table ; the result found significant differences in traumatic events according to sex with actual probability (t-test = 2.19 ,P-value <0.05) in favor to males .

Table(4) Independent t- test comparing means of traumatic events according to sex

Traumatic events	Males N=182		Females N=182		T-value	Significant level
	Mean	SD	Mean	SD		
	15.02	6.28	13.47	7.41		

** P<0.01 *P<0.05 // P>0.05

4.4.2 Traumatic events and type of residence of the study sample

By using one –way ANOVA analysis, the following table shows that there were significant differences between the means of traumatic events according to type of residence (city – camp – village) with actual probability ($F=11.6$, $p\text{-value}=0.01$)

Table(5):One –way ANOVA comparing traumatic events according to type of residence

Variables	Source of variance	Sum of Squares	d f	Mean Square	F	Significant Level.
Traumatic events	Between Groups	355.6	2	177.82	3.76	0.02*
	Within Group	17833.5	377	47.30		
	Total	18189.2	379			

** P<0.01 *P<0.05 // P>0.05

Post –hoc analysis using LSD statistical test was done and indicated ; the means of traumatic events according to type of residence (city, camp, village) as shown in the following table. there were significant differences between traumatic events and type of residence (city, camp, village) toward the group who live in village . that means the study sample who live in village had significantly greater level of traumatic events other than two group which live in city and camp during war on Gaza .

Table(6): Means of traumatic events according to type of residence

Variables	Type of residence	Mean	City	Camp	Village
Traumatic events	city	14.73	1	0.03*	0.48
	camp	12.08		1	0.01**
	Village	16.57			1

** P<0.01 *P<0.05 // P>0.05

4.4.3 Traumatic events and place of residence of the study sample

By using one –way ANOVA analysis, the following table shows that :there were significant differences between the means of traumatic events according to place of residence with actual probability ($F=3.57$, $p\text{-value}=0.01$).

Table(7):One –way ANOVA comparing traumatic events according to type of residence

Variables	Source of variance	Sum of Squares	d f	Mean Square	F	Significant Level.
Traumatic events	Between Groups	667.36	4	166.84	3.57	0.01**
	Within Group	17521.80	375	46.72		
	Total	18189.16	379			

** P<0.01 *P<0.05 // P>0.05

Post –hoc analysis using LSD statistical test was done and indicated ; the means of traumatic events according to place of residence, as shown in the following table . there were significant differences between traumatic events and place of residence toward the group who live in North Gaza. that means the study sample who live in North Gaza had significantly greater level of traumatic events other than other groups which live in other places in (Gaza –Middle area –khan younis – Rafah).

Table(8): Means of traumatic events according to type of residence

Variables	Place of residence	Mean	North Gaza	Gaza	Middle area	Khan Younis	Rafah
Digestive disorders	North Gaza	16.6	1	0.03*	0.001**	0.03*	0.01**
	Gaza	14.4		1	0.06	0.79	0.34
	Middle area	12.3			1	0.13	0.45
	Khan Younis	14.1				1	0.51
	Rafah	13.3					1

** P<0.01 *P<0.05 // P>0.05

4.4.4 Traumatic events according to monthly income of the study sample

By using one –way ANOVA analysis, the following table shows that :there were significant differences between the means of traumatic events according to monthly income (less than 600NIS , 600- 1200 , 1201- 2500 , and more than 2500 NIS), at level of significant (F=3.23 , p-value=0.02)

Table(9):One –way ANOVA comparing traumatic events according to monthly income

Variables	Source of variance	Sum of Squares	d f	Mean Square	F	Significant Level.
Traumatic events	Between Groups	457.0	3	152.35	3.23	0.02**
	Within Group	17732.1	376	47.16		
	Total	18189.2	379			

** P<0.01 *P<0.05 // P>0.05

Post –hoc analysis using LSD statistical test was done and indicated ; the means of traumatic events according to monthly income, as shown in the following table . there were significant differences between traumatic events and monthly income at level of significant (F=3.23 , p-value=0.02) toward less than 600 NIS

Table(10): Means of traumatic events according to monthly income

Variables	Income	Mean	Less than 600 NIS	6001-1200 NIS	1201-2500NIS	More than 2500NIS
Traumatic events	Less than 600	14.3	1	0.21	0.05*	0.63
	6001-1200NIS	15.5		1	0.003**	0.55
	1201-2500NIS	12.5				0.03*
	Morethan2500	14.8				1

** P<0.01 *P<0.05 // P>0.05

4.5 Psychosomatic disorders and demographic variables

4.5.1 Psychosomatic disorders and sex of the study sample

In order to differentiate between total psychosomatic disorders reported by adolescents among study sample, t independent test was conducted in which total number of psychosomatic disorders was entered as dependent variable. As shown in the following table. The results showed that there were significant differences in psychological and other disorders according to sex with an actual probability (t-test = -3.26,P-value<0.015) in favor to females, while there were no statistically significant difference in the rest of psychosomatic disorders (digestive disorders, respiratory disorders, skeletal disorders, skin disorders Urogenital disorders and Endocrine disorders) according to sex .

Table (11):

Independent t –test comparing means of psychosomatic disorders according to sex

Variables	Males		Females		t	P-value
	M	STD	M	STD		
Gastrointestinal disorders	29.0	15.4	29.7	14.8	-0.49	0.63//
Cardiovascular disorders	29.5	16.3	31.1	16.3	-0.96	0.34//
Respiratory disorders	8.1	5.8	7.8	6.3	0.58	0.56//
Skeletal disorders	6.4	4.0	6.0	4.0	0.90	0.37//
Dermatological disorders	10.8	7.7	9.3	7.3	1.90	0.06//
Urogenital disorders	4.6	3.7	4.3	3.3	0.89	0.37//
Metabolic disorders	16.1	7.7	17.6	7.5	-1.89	0.06//
Other disorders	6.6	4.0	7.6	3.8	-2.57	0.01**
Psychological disorders	93.1	42.7	107.4	42.6	-3.26	0.001**
Total	144.6	68.9	157.1	67.2	-1.79	0.07//

** P<0.01 *P<0.05 // P>0.05

4.5.2 Psychosomatic disorders and educational classes of the study sample

In order study the differences between psychosomatic disorders according to the educational classes (10th class, 11th class, 12th class), one –way ANOVA analysis was used, The following table show that there were no significant differences between the means of psychosomatic disorders according to the educational classes(10th class, 11th class, 12th class)

Table(12): One –way ANOVA comparing type of psychosomatic disorders according to Educational classes

Variables	Source of variance	Sum of Squares	D f	Mean Square	F	Significant Level.
Digestive disorders	Between Groups	27.7	2	13.87	0.06	0.94//
	Within Group	85923.1	377	227.91		
	Total	85950.9	379			
Cardiovascular disorders	Between Groups	330.5	2	165.27	0.62	0.54//
	Within Group	100376.2	377	266.25		
	Total	100706.7	379			
Respiratory disorders	Between Groups	28.8	2	14.42	0.39	0.68//
	Within Group	13945.4	377	36.99		
	Total	13974.3	379			
Skeletal disorders	Between Groups	11.6	2	5.80	0.36	0.70//
	Within Group	6078.3	377	16.12		
	Total	6089.9	379			
Skin disorders	Between Groups	15.1	2	7.54	0.13	0.87//
	Within Group	21140.6	377	56.08		
	Total	21155.6	379			
Psychological disorders	Between Groups	2788.6	2	1394.31	0.75	0.47//
	Within Group	703295.2	377	1865.50		
	Total	706083.8	379			
Endocrine disorders	Between Groups	10.1	2	5.05	0.09	0.92//
	Within Group	22064.2	377	58.53		
	Total	22074.3	379			
Other disorders	Between Groups	10.4	2	5.22	0.34	0.71//
	Within Group	5711.5	377	15.15		
	Total	5722.0	379			
Total	Between Groups	3231.4	2	1615.71	0.35	0.71//
	Within Group	1761038.9	377	4671.19		
	Total	1764270.3	379			

** P<0.01 *P<0.05 // P>0.05

4.5.3 Psychosomatic disorders and type of residence of the study sample

By using one –way ANOVA analysis, the following table shows that :there were no significant differences between psychosomatic disorders (cardiovascular disorders, skeletal disorders, skin disorders, respiratory disorders, endocrine disorders, psychological disorders, and other disorders) according to type of residence (city – camp – village).

Table(13) :

One – way ANOVA comparing psychosomatic disorders according to type of residence

Variables	Source of variance	Sum of Squares	D f	Mean Square	F	Significant Level.
Cardiovascular disorders	Between Groups	469.3	2	234.64	0.88	0.41//
	Within Group	100237.4	377	265.88		
	Total	100706.7	379			
Respiratory disorders	Between Groups	108.5	2	54.25	1.47	0.23//
	Within Group	13865.8	377	36.78		
	Total	13974.3	379			
Skeletal disorders	Between Groups	49.1	2	24.54	1.53	0.22//
	Within Group	6040.8	377	16.02		
	Total	6089.9	379			
Skin disorders	Between Groups	248.3	2	124.14	2.24	0.11//
	Within Group	20907.4	377	55.46		
	Total	21155.6	379			
Psychological disorders	Between Groups	8715.6	2	4357.81	2.36	0.10//
	Within Group	697368.2	377	1849.78		
	Total	706083.8	379			
Endocrine disorders	Between Groups	50.0	2	143.63	2.49	0.08//
	Within Group	5671.9	377	57.79		
	Total	5722.0	379			
Other disorders	Between Groups	50.0	2	25.01	1.66	0.19//
	Within Group	5671.9	377	15.04		
	Total	5722.0	379			
Urogenital disorders	Between Groups	103.7	2	51.87	4.28	0.01**
	Within Group	4565.7	377	12.11		
	Total	4669.4	379			
Digestive disorders	Between Groups	1697.8	2	848.88	3.80	0.02**
	Within Group	84253.1	377	223.48		
	Total	85950.9	379			
Total	Between Groups	25701.9	2	12850.97	2.79	0.06//
	Within Group	1738568.4	377	4611.59		
	Total	1764270.3	379			

** P<0.01

*P<0.05

// P>0.05

Post –hoc analysis by using LSD statistical test was done and indicated , the results show that there were significant differences between digestive disorders according to type of residence at levels of significant (F=3.80,p-value= 0.02) toward city and Village, this means that the study sample who live in city and Village complain of digestive disorders more than who live

in camps.. Also the results show that there were significant differences between urogenital disorders according to type of residence at levels of significant ($F=4.28, p\text{-value}=0.01$) toward city and Village, this means that the study sample that living in city and Village complain of digestive disorders more than who live in camps.

Table(14) : Means of psychosomatic disorders according to type of residence

Variables	Type of residence	Mean	City	Camp	Village
Digestive disorders	Village	30.35	1	0.03*	0.48
	camp	26.48		1	0.01**
	city	31.81			1
Urogenital disorders	Village	4.71	1	0.01**	0.67
	camp	3.68		1	0.01**
	city	4.92			1

** P<0.01 *P<0.05 // P>0.05

4.5.4 Psychosomatic disorders and place of residence of the study sample

By using one –way ANOVA analysis, the following table show that there were no significant differences between cardiovascular disorders according to place of residence (North Gaza , Gaza, middle area, Khan Younis and Rafah at level of significant ($F=1.40, p\text{-value}=//0.23$), There were no significant differences between respiratory disorders and place of residents at level of significant ($F=0.69, p\text{-value}=//0.60$), also there were no significant differences between other disorders and place of residents at level of significant ($F=1.68, p\text{-value}=//0.15$) and there were no significant differences between skin disorders according to place of residence ($F=2.28, p\text{-value}=//0.06$)

Table (15)

One – way ANOVA comparing psychosomatic disorders according to place of residence

Variables	Source of variance	Sum of Squares	df	Mean Square	F	Significant Level.
Digestive disorders	Between Groups	2227.8	4	556.94	2.49	0.04**
	Within Group	83723.1	375	223.26		
	Total	85950.9	379			
Skeletal disorders	Between Groups	177.8	4	44.44	2.82	0.03**
	Within Group	5912.1	375	15.77		
	Total	6089.9	379			
Urogenital disorders	Between Groups	199.4	4	49.84	4.18	0.001**
	Within Group	4470.0	375	11.92		
	Total	4669.4	379			
	Between Groups	21118.9	4	5279.74	2.89	0.02**

Psychological disorders	Within Group	684964.9	375	1826.57		
	Total	706083.8	379			
Endocrine disorders	Between Groups	1008.5	4	252.13	4.49	0.001**
	Within Group	21065.8	375	56.18		
	Total	22074.3	379			
Cardiovascular disorders	Between Groups	1478.4	4	369.60	1.40	0.23//
	Within Group	99228.3	375	264.61		
	Total	100706.7	379			
Respiratory disorders	Between Groups	102.7	4	25.67	0.69	0.60//
	Within Group	13871.6	375	36.99		
	Total	13974.3	379			
Skin disorders	Between Groups	501.9	4	125.47	2.28	0.06//
	Within Group	20653.8	375	55.08		
	Total	21155.6	379			
Other disorders	Between Groups	100.8	4	25.21	1.68	0.15//
	Within Group	5621.2	375	14.99		
	Total	5722.0	379			
Total	Between Groups	50856.6	4	12714.15	2.78	0.03**
	Within Group	1713413.7	375	4569.10		
	Total	1764270.3	379			

** P<0.01 *P<0.05 // P>0.05

Post –hoc analysis by using LSD statistical test was done and indicated , the result show that there were significant differences between the digestive disorders and place of residence (north Gaza, Gaza, middle area, Khan Younis and Rafah) at level of significant (F=2.49, p-value=0.04) toward Gaza and north Gaza , there were significant differences between the skeletal disorders and place of residence at level of significant (F=2.82 , p-value=0.03) , there were significant differences between the urogenital disorders and place of residence at level of significant (F=4.18,p-value=0.01), there were significant differences between the psychological disorders and place of residence at level of significant (F=2.89 , p-value=0.02). and there were significant differences between the endocrine and metabolic disorders and place of residence at level of significant (F=4.49 , p-value=0.01)

Table(16) : Means of psychosomatic disorders according to place of residence

Variables	Place of residence	Mean	North Gaza	Gaza	Middle area	Khan Younis	Rafah
Digestive disorders	North Gaza	32.56	1	0.36	0.001**	0.25	0.06
	Gaza	30.47		1	0.02*	0.71	0.21
	Middle area	25.04			1	0.07	0.41
	Khan Younis	29.67				1	0.40
	Rafah	27.37					1
	North Gaza	7.54	1	0.01**	0.01**	0.06	0.001**
	Gaza	6.00		1	0.49	0.61	0.40

Skeletal disorders	Middlearea	5.58			1	0.29	0.86
	KhanYounis	6.30				1	0.24
	Rafah	5.45					1
Urogenital disorders	North Gaza	5.31	1	0.55	0.001**	0.03	0.01**
	Gaza	4.99		1	0.001**	0.06	0.01**
	Middlearea	3.47			1	0.33	0.92
	KhanYounis	4.05				1	0.42
	Rafah	3.54					1
Psychological disorders	North Gaza	110.13	1	0.53	0.01**	0.09	0.02*
	Gaza	106.06		1	0.02*	10.2	0.04*
	Middlearea	90.53			1	0.3	0.93
	KhanYounis	98.00				1	0.38
	Rafah	91.25					1
Endocrine disorders	North Gaza	19.11	1	0.29	0.001**	0.03*	0.001**
	Gaza	17.91		1	0.01**	0.17	0.01**
	Middlearea	14.68			1	0.18	0.94
	KhanYounis	16.40				1	0.23
	Rafah	14.78					1
Total	North Gaza	166.60	1	0.44	0.01**	0.12	0.03*
	Gaza	158.59		1	0.02*	0.32	0.08
	Middle area	133.43			1	0.18	0.67
	KhanYounis	148.85				1	0.41
	Rafah	138.78					1

** P<0.01 *P<0.05 // P>0.05

4.5.5 Psychosomatic disorders according to monthly income of the study sample

By using one –way ANOVA analysis, the following table shows that there were no significant differences between the means of (respiratory disorders and skeletal disorders) according to the monthly income .while there were significant differences in psychosomatic disorders according to the monthly income (less than 600NIS , 600- 1200 , 1201- 2500 , and more than 2500 NIS)

Table(17)

One way ANOVA comparing psychosomatic disorders according to monthly income

Variables	Source of variance	Sum of Squares	D f	Mean Square	F	Significant Level.
Digestive disorders	Between Groups	2893.2	3	964.41	4.37	0.001**
	Within Group	83057.6	376	220.90		
	Total	85950.9	379			
Cardiovascular disorders	Between Groups	2114.8	3	704.93	2.69	0.05**
	Within Group	98591.9	376	262.21		
	Total	100706.7	379			
Respiratory disorders	Between Groups	159.2	3	53.07	1.44	0.23//
	Within Group	13815.1	376	36.74		
	Total	13974.3	379			
Skeletal	Between Groups	108.6	3	36.19	2.27	0.08 //

	Within Group	5981.3	376	15.91		
	Total	6089.9	379			
Skin disorders	Between Groups	561.5	3	187.17	3.42	0.02**
	Within Group	20594.1	376	54.77		
	Total	21155.6	379			
Urogenital disorders	Between Groups	132.6	3	44.18	3.66	0.01**
	Within Group	4536.8	376	12.07		
	Total	4669.4	379			
Psychological disorders	Between Groups	17988.0	3	5996.02	3.28	0.02**
	Within Group	688095.8	376	1830.04		
	Total	706083.8	379			
Endocrine disorders	Between Groups	653.5	3	217.83	3.82	0.01**
	Within Group	21420.8	376	56.97		
	Total	22074.3	379			
Other disorders	Between Groups	140.9	3	46.97	3.16	0.02**
	Within Group	5581.1	376	14.84		
	Total	5722.0	379			
Total	Between Groups	43364.0	3	14454.67	3.16	0.02**
	Within Group	1720906.4	376	4576.88		
	Total	1764270.3	379			

** P<0.01 *P<0.05 // P>0.05

Post –hoc analysis by using LSD statistical test was done and indicated , the result show that there were significant differences between the digestive disorders and monthly income at level of significant ($F=4.37$, $p\text{-value}=0.001$) toward "less than 600 NIS " , there were significant differences between the cardiovascular disorders and monthly income at level of significant ($F=2.69$, $p\text{-value}=0.05$) toward "less than 600 NIS " , there were significant differences between the skin disorders and monthly income at level of significant ($F=3.42$, $p\text{-value}=0.02$) toward "less than 600 NIS " , there were significant differences between the urogenital disorders and monthly income at level of significant ($F=3.66$, $p\text{-value}=0.01$) toward "less than 600 NIS " , there were significant differences between the psychological disorders and monthly income at level of significant ($F=3.28$, $p\text{-value}=0.02$) toward "less than 600 NIS " , there were significant differences between the Endocrine and metabolic disorders and monthly income at level of significant ($F=3.82$, $p\text{-value}=0.01$) toward "less than 600 NIS " , Also , the result show that there were significant differences between other disorders and monthly income at level of significant ($F=3.16$, $p\text{-value}=0.02$) toward "less than 600 NIS "

Table(18) : Means of psychosomatic disorders according to monthly income

Variables	Income	Mean	Less than 600 NIS	6001-1200 NIS	1201-2500NIS	More than 2500NIS
Digestive disorders	Less than 600	33.0	1	0.01**	0.01**	0.04*
	6001-1200NIS	26.2		1	0.43	0.39
	1201-2500NIS	27.9			1	0.39
	Morethan2500	28.3				1
Cardiovascular disorders	Less than 600	33.4	1	0.02*	0.09	0.02*
	6001-1200NIS	28.2		1	0.5	0.8
	1201-2500NIS	29.8			1	0.38
	Morethan2500	27.5				1
skin disorders	Less than 600	11.6	1	0.02*	0.04*	0.01**
	6001-1200NIS	9.2		1	0.73	0.48
	1201-2500NIS	9.6			1	0.29
	Morethan2500	8.3				1
Urogenital disorders	Less than 600	5.2	1	0.04*	0.01**	0.01**
	6001-1200NIS	4.1		1	0.66	0.47
	1201-2500NIS	3.9			1	0.74
	Morethan2500	3.7				1
Psychological disorders	Less than 600	108.4	1	0.01**	0.19	0.11
	6001-1200NIS	90.0		1	0.08	0.26
	1201-2500NIS	101.0			1	0.66
	Morethan2500	98.0				1
Endocrine disorders	Less than 600	18.4	1	0.01**	0.09	0.03*
	6001-1200NIS	15.1		1	0.14	0.52
	1201-2500NIS	16.7			1	0.48
	Morethan2500	15.9				1
Other disorders	Less than 600	7.8	1	0.01**	0.06	0.17
	6001-1200NIS	6.2		1	0.25	0.21
	1201-2500NIS	6.9			1	0.8
	Morethan2500	7.0				1
Total	Less than 600	164.9	1	0.01**	0.08	0.06
	6001-1200NIS	137.4		1	0.24	0.5
	1201-2500NIS	149.0			1	0.71
	Morethan2500	145.0				1

** P<0.01 *P<0.05 // P>0.05

4.5 Relationship between trauma and psychosomatic disorders

In order to find the relationship between traumatic events and psychosomatic disorders subscales (cardiovascular disorders, digestive disorders, urogenital disorders, skin disorders, Respiratory disorders, Endocrine& metabolic disorders, psychological disorders, and other disorders), a correlation coefficient Spearman test was done. The results showed in the following table, that total scores of psychosomatic was significant correlated positively with trauma among study sample ($r= 0.16$ p-value<0.01,) , This mean that increase incidence of

traumatic events will lead to increasing of psychosomatic disorders., while there were significant differences between other disorders and traumatic events ($r = 0.09$. $p = // 0.08$).

Table (19):

Pearson Correlation Coefficient test between trauma and psychosomatic disorders

Variables	Person correlation	p-value
digestive disorders	0.17	0.001**
Cardiovascular disorders	0.17	0.001**
Respiratory disorders	0.16	0.001**
Skeletal disorders	0.14	0.001**
Skin disorders	0.22	0.001**
Urogenital disorders	0.16	0.001**
Psychological disorders	0.13	0.001**
Metabolic disorders	0.14	0.001**
Other disorder	0.09	0.08//
Total	0.16	0.001**

** P<0.01

*P<0.05

// P>0.05

Chapter 5
Implications and
Recommendations

Chapter 5 : Implication and Recommendations

5.1 Introduction

This chapter introduced the main results that achieved in chapter 4 and its discussion on the light of the previous studies. Furthermore , its important here to clarify the results and its relation with other studies that may be helpful in supporting our finding. However, the researcher will put on the hand some of implication and recommendations regarding psychosomatic disorders, trauma, and adolescence . that are likely to be taken in consideration in the application of the further building . Also, recommendations for further researches will be provided on the basis of the results of the current study.

5.2 Main results

This study showed that Palestinian adolescents still reported a variety of traumatic events as a result of the repeated incursions of the Gaza Strip by the Israelis in which each adolescent reported mean 14.2 traumatic events, and standard deviation were 6.9 of the study sample. The most traumatic events due to war on Gaza was 92.3% of study sample "Watching mutilated bodies and wounded people in TV " 89.4% " Hearing shelling of the area by artillery" and 89.2% "Hearing the sonic sounds of the jetfighters " . While the lowest traumatic events were" Physical injury due to bombardment of your home" 21.9% , and "Threaten of being killed "23.5%." The prevalence of traumatic events was: mild (35.3%) , moderate (46.6%), and sever (18.2%) among study sample ..

- The prevalence of psychosomatic disorders mean were 29.5% among study sample . psychological disorders (mean=100.6 ;SD=43.3),other disorders (mean=7.1;SD=3.9) digestive disorders (mean=29.3 ;SD=15.1), cardiovascular disorders (mean=30.3 ;SD=16.3), respiratory disorders (mean=7.9 ;SD=6.1), skeletal disorders (mean=6.2 ;SD=4.0), skin disorders (mean=10.0 ;SD=7.5) , Urogenital disorders (mean=4.4 ;SD=3.5), and Endocrine and metabolic disorders (mean=16.9 ;SD=7.6) . from these results is clear that the most disorder which adolescent experience from it were other disorder (Wm=35.6) , psychological disorder (WM=35.4), and Endocrine disorder (WM=32.4). While the lowest disorder was skin disorder (WM=19.3) and cardiovascular disorder (WM=28.1) .

The study found significant differences in traumatic event according to sex with an actual probability (t-test = 2.19 ,P-value <0.05) in favor to males, which means that males of study sample exposed to traumatic events more than females .

There were significant differences in traumatic events according to type of residence (city–camp–village) toward the group who live in village . that means the study sample who live in village had significantly greater levels of traumatic events, than other two groups which live in city and camps among study sample .

There were significant differences in traumatic events according to place of residence (North Gaza –Gaza – Middle area –Khan younis – Rafah) toward the group who live in North Gaza . That means the study sample who live in North Gaza had significantly greater level of traumatic events, than other four group which live in Gaza, Middle area, Khan younis and Rafah among study sample .

- There were positive significant correlation between psychosomatic disorders such as (Cardiovascular disorders, digestive disorders, Urogenital disorders, Skin disorders, Respiratory disorders, Endocrine and metabolic disorders, Psychological disorders, skeletal disorders) and traumatic events, While there were significant differences between other disorders and traumatic events.

-The study found that there were no statistically significant differences in psychosomatic disorders such as (digestive disorders , respiratory disorders, skeletal disorders, skin disorders , Urogenital disorders and Endocrine disorders) according to sex, (t-test=-1.79, P-value >0.05) , which means both girls and boys experience of. psychosomatic disorders at the same level . While there were significant differences in psychological disorders and other disorders according to sex (t-test = -3.26 ,P-value<0.015) toward to female , which mean that females experience of psychological disorders and other disorders more than males .

-There were no significant differences between the means of psychosomatic disorders subscales according to the Educational classes (10th class , 11th class , 12th class) .

- There were no significant differences between psychosomatic disorders such as (cardiovascular disorders, skeletal disorders, skin disorders, respiratory disorders, endocrine and metabolic disorders, psychological disorders , and other disorders) according to type of residence (City– Camp– Village) .while there were significant differences between digestive disorders according to type of residence (F=3.80,p-value= 0.02) toward city and village, this means that the study sample that living in city and village complain of digestive disorders more than the study sample that live in camps. also there were significant differences between urogenital disorders according to type of residence (F=4.28,p-value=0.01) toward city and village, that means the study sample that living in city and village complain of urogenital disorders more than study sample that live in camps .

- There were significant differences between psychosomatic disorders according to place of residence (North Gaza, Gaza, Middle area, Khan Younis and Rafah), ($F=2.78$, $p\text{-value}=0.03$). while there were significant differences between the digestive disorders and place of residence ($F=2.49$, $p\text{-value}=0.04$) . That means, study sample that living in Gaza and North Gaza experience of digestive disorders more than the study sample that living in.

also, there were significant differences between the skeletal disorders and place of residence ($F=2.82$, $p\text{-value}=0.03$), That means study sample that living in Gaza and North Gaza experience of skeletal disorders more than study sample that living in other areas, however there were significant differences between the urogenital disorders and place of residence($F=4.18$, $p\text{-value}=0.01$).That means, study sample that living in Gaza and North Gaza experience of urogenital disorders more than the study sample that living in other areas .also there were significant differences between the psychological disorders and place of residence ($F=2.89$, $p\text{-value}=0.02$). That means , samples that living in Gaza and North Gaza experience of psychological disorders more than the samples that living in other areas . also there were significant differences between the endocrine and metabolic disorders and place of residence at level of significant ($F=4.49$, $p\text{-value}=0.01$) . That means, samples that living in Gaza and North Gaza experience of endocrine and metabolic disorders more than the samples that living in Middle area, Khan Younis and Rafah . while there were no significant differences between other psychosomatic disorders (cardiovascular , respiratory , skin and other disorders) according to place of residence (North Gaza , Gaza , Middle area , Khan Younis and Rafah).

- There were significant differences between means of psychosomatic disorders according to monthly income ($F=3.16$, $p\text{-value}=0.02$) .toward "less than 600 NIS ".,

-There were significant differences between the digestive disorders and monthly income ($F=4.37$, $p\text{-value}=0.001$) toward "less than 600 NIS " .. That mean the samples with monthly income less than 600NIS experience of digestive disorder more than the samples with monthly income more than 600 NIS.

- There were significant differences between the cardiovascular disorders and monthly income ($F=2.69$, $p\text{-value}=0.05$) toward "less than 600 NIS " , That mean the samples with monthly income less than 600NIS experience of cardiovascular disorder more than the samples with monthly income more than 600NIS.

- There were significant differences between the skin disorders and monthly income ($F=3.42$, $p\text{-value}=0.02$) toward "less than 600 NIS " , That mean the samples with monthly income less than 600NIS experience of skin disorder more than the samples with monthly income more than 600NIS.

- There were significant differences between the urogenital disorders and monthly income ($F=3.66$, $p\text{-value}=0.01$) toward "less than 600 NIS " , That mean the samples with monthly income less than 600NIS experience of urogenital disorder more than the samples with monthly income more than 600NIS.
- There were significant differences between the psychological disorders and monthly income ($F=3.28$, $p\text{-value}=0.02$) toward "less than 600 NIS ". That mean the samples with monthly income less than 600NIS experience of psychological disorder more than the samples with monthly income more than 600NIS.
- There were significant differences between the Endocrine and metabolic disorders and monthly income ($F=3.82$, $p\text{-value}=0.01$) toward "less than 600 NIS " . That mean the with monthly income less than 600NIS experience of Endocrine and metabolic disorder more than the samples with monthly income more than 600NIS.
- There were significant differences between other disorders and monthly income ($F=3.16$, $p\text{-value}=0.02$) toward "less than 600 NIS " . That mean the samples with monthly income less than 600NIS experience of other disorder more than the samples with monthly income more than 600NIS.among study sample, while there were no significant differences between the means of (respiratory disorders and skeletal disorders) according to the monthly income .
- The study found there were significant correlation between psychosomatic disorders and traumatic events among study sample , which means the high incidence of traumatic events will combined with high incidence of psychosomatic disorders

5.3 Discussion

The results of our research showed that Palestinian adolescents still experienced a variety of traumatic events as a result of the repeated incursions of the Gaza Strip by the Israelis in which each adolescent reported mean 14.2 traumatic events, These findings were similar to our findings in previous studies conducted in the area (Thabet et al., 2001, 2002, 2004,2006). The researcher interpret these findings , that Palestinian adolescents are living constantly under potentially traumatizing conditions. Supposedly, there is an effect of habituation to some kinds of trauma. The American psychiatric Association (APA, 1994), has defined trauma as an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others. If an individual has experienced, witnessed, or been confronted with such events, his responses may include intense fear, helplessness, or horror. In children, this may be expressed instead through disorganized or agitated behaviors (DSM – IV,1994)

The result showed that the most traumatic events that affect the study sample was "watched mutilated bodies on TV (92.3)" While the lowest traumatic events were " Physical injury due to bombardment of your home" 21.9% , These results were consistent with our previous research Thabet et al , (2007) and EL-Majdalawi , (2004) found that the most common traumatic events children reported was watching mutilated bodies on TV,(98.5), (96.5).respectively, while (Maksoud, 1992) determined the most common traumatic experience were faced by Lebanese adolescents were Exposure to shelling or combat, displacement, extreme poverty and witnessing violent acts, and lowest common experience were involvement in military activities, being a victim of violent acts, and suffering from serious physical injuries. This finding reflect the importance of the media and its effects on our community , all of us listen and watch TV daily especially daily news.

The prevalence of traumatic events was :mild (35.3) , moderate(46.6) , and sever (18.2) , the prevalence of traumatic events (mild , moderate , and sever) appeared to be consistent with each others, the study of EL-Majdalawi, (2004) found that (19.7.4%) of study sample exposed to mild traumatic events ,(72.4%) moderate, and (7.9%) of study sample exposed to sever trauma, that appeared to be inconsistent with our current study result .

The results showed that there was statistically significant difference in number of traumatic events according to gender in favor to males. this means that males of study sample exposed to traumatic events more than females, Interestingly,. Our results are consistent with the results of Thabet et al. (2001) found that boys were significantly more often exposed to high traumas than girls were. They interpreted this finding as resulting from the socialization of girls in contemporary Palestinian society. At their homes, girls are under stricter surveillance and protection, whereas boys are rather participating in the activities and events of violence. According to the Arabian culture, girls are expending their time at home helping their mothers in homework, so they are exposed to less traumatic events than boys . Presence of gender differences in exposure to traumatic events is in consistent with other previous studies ,

Qouta et al. (1995). found no differences between boys and girls in their reaction to exposure to traumatic events. the researcher hypothesized that these results related to exposure to traumatic events , since males were more prone to traumatic events that occur surround them, this will expose them to different types of traumatic events, while female according to social habits in our society, families make over constrictions on females to go out, and stay at homes all the time .

We found that the highest level of severe trauma recorded in north Gaza which was, more than the other Gaza governorates Proximity to traumatic events in this areas was found in previous studies Thabet et al ,(2001, 2004). and Abu Hein (2007) .

However our result show that who live in village had significantly greater levels of traumatic events , than those who live in city and camps., Some general comments concerning the possible significance of these findings are in order. Our results are consistent with the results of Thabet et al. (2001) found that children living in an urban area were significantly more likely to have high exposure levels to traumatic events than children living in camps or in rural areas, Thabet et al (2001) findings are quite opposite to Abu Nada's (2003) and our result.

Our findings differ from results of Abu Nada (2003) putting to the fore that the type of residency plays a role in the level of traumatic events exposure. Children from a rural area were significantly more likely to have high exposure levels to traumatic events than children living in camps or an urban area., The researcher hypothesized that people who live in village were more exposed to traumatic events during the last current war on Gaza , since they in exposed more to acts of aggression and bombardments These findings could be to the closeness of these areas to Israeli settlement, which consider contact points for conflict and daily clashes. And many Israeli military incursion happened in North Gaza, all these reasons affect on the results.

Our results show that 29.5% of the adolescents' suffer from psychosomatic disorders, Our results veer toward results of a number of studies from various war zones in different culture these findings are corroborated by incidence of psychosomatic disorders studies in the literature, Naboulsi ,(1991) , Abu Hein, (1993) , EL-Tala,a (2000) , Abu Hein (2007) , Jin et al (2008), Kinnunen ,(2008) , Baker,(1990) , Rayhida et al,1986 and Farhood et al (1993).. Baker, (1990), Rayhida et al, (1986). found in other non-western traumatized populations such as Lebanese children, 58% of whom suffered from somatoform disorders four years after the Israeli invasion of Lebanon, Farhood et al (1993) found high rates of Somatization among Lebanese children and parents. Abu Hein et al (1993) found that 25% had conversion fits

Another interesting side issue is worthy of mention simply that The study found there were positive significant correlation between traumatic events and psychosomatic disorders, which means the high incidence of traumatic events will combined with high incidence of psychosomatic disorders, Our findings were congruent with those of previous studies (ELtala,a ,(2000), Brian, Stanley. (2008), Willemsen, et,al , (2008), Sack et al, (2007), Abu Hein ,(2007)

, Yucel et al,(2002) , Goldberg, Pachas, Keith , (1999) , Baker (1990) ,Jackson (2006), Watson et al (2006)

our study found that there were no statistically significant differences in psychosomatic disorders such as (digestive disorders, respiratory disorders, skeletal disorders, skin disorders Urogenital disorders and Endocrine disorders) according to sex, which means both girls and boys experience of. psychosomatic disorders at the same level . While there were significant differences in psychological disorders and other disorders according to sex in favor of female , which mean that females experience of psychological disorders and other disorders more than males ,This is consistent with previous studies which showed that boys reported more behavioural problems and girls showed more emotional problems (Thabet et al, 1998, 2006). And agree with Abu Hein (1993) indicated that children suffer from many psychological problems due to traumatic events and that females affected more than males in these situations, also our result were consistent with study of Abu Hein (2007) found that females are higher percentage of Psycho somatic problems than males. The researcher hypnotized that ,This may also be related to Palestinian culture and religion, in which girls are considered as weak and sensitive persons. They have the right to express their fears and worries more openly than boys. also female affected emotionally more than males

There were significant differences between psychosomatic disorders according to place of residence (North Gaza , Gaza , Middle area , Khan Younis and Rafah), while There were significant differences between the (digestive , Skeletal disorders, Urogenital disorders, psychological disorders, Endocrine and metabolic disorders) and place of residence. That means , study sample that living in Gaza and North Gaza experience of psychosomatic disorders more than the study sample that living in other governorates. This is congruent with previous studies which showed that: there were high percentage of Psycho somatic problems among Beet hanoun adolescents than other places, (Abu Hein ,2007) ..

There were no significant differences between psychosomatic disorders such as (Cardiovascular disorders, skeletal disorders, Skin disorders , Respiratory disorders, Endocrine and metabolic disorders , Psychological disorders , and Other disorders) according to type of residence (City – Camp – Village) . While there were significant differences between (digestive disorders , urogenital disorders) according to type of residence in favor of city and Village, this means that the study sample that living in city and Village complain of digestive and urogenital disorders more than the study sample that live in camps. the current result was consistence with the previous studies of (ELtala,a ,2000) found that there were significant

differences comparing psychosomatic disorders according to type of residence toward camp and village, While the study was inconsistent with Baker, (1990) indicate that, psychosomatic problems among children were more severe within the refugee camps, than in urban or rural areas .

There were significant differences between psychosomatic disorders due to traumatic events according to monthly income. toward "less than 600 NIS "., this means the adolescents with low monthly income were had highest level of psychosomatic disorders due to exposure to traumatic events and the high monthly income were associated with lowest level of psychosomatic disorders, Palestinian Central Bureau of Statistics reports that 70% of Palestinian people are living under poverty line. Most families income level is less than 200 \$ monthly (Palestinian Central Bureau of Statistics reports, April 2003). the researcher attribute that hardship of the socioeconomic situation of the Palestinian families in the Gaza Strip with the unemployment level of fathers .

In agree with Thabet et al .(2007) that revealed that children coming from families with monthly income less than 271\$ reported more traumatic events .

5.4 Recommendation

- Group cognitive-behavioural therapy would offer a more efficient to manage psychosomatic disorders and trauma than individual treatment.
- Family therapy- programmes working with people living with multiple problems and physical and psychological diagnoses.
- Detection of psychosomatic symptoms which help in the development of different chronic diseases such as asthma, hypertension, coronary heart disease, inflammatory bowel disease, diabetes, dermatitis and chronic arthritis.
- Need for more long acting and new methods of intervention for adolescents living in area of war and conflict such as cognitive behavioural therapy and social skills training to enable adolescents cope with trauma and stress.
- Early intervention using a psychological debriefing format is effective in preventing psychological and physical distress among adolescents.

- Using school based counseling setting in time of war and trauma could improve adolescent's mental health.
- Working in communities and schools bringing appreciation and opportunities to adolescents , their families, friends, teachers and professionals.
- Educational programmes and courses such as problem solving skills to assist the adolescents in confronting the various traumatic events .
- Through mass media , programmes working with individuals creating better lives from within their struggles and attempts to live affirming lives and as model for people especially for adolescents .

Further researches

- Prevalence of psychosomatic disorders among traumatized adults .
- Coping strategies among traumatized adolescents during war on Gaza .
- Association between trauma and dissociative disorders among adolescents
- Effect of trauma on mental health among families of traumatized adolescents
- Symptoms of Peritraumatic and Acute Traumatic Stress Among Victims of current war in Gaza strip .
- Associations between trauma and psychosis: an exploration of cognitive and dissociative factors .

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ANNEXES

Annex 1 The Gaza Strip, 2000



**Palestinian Academic Society for the Study of International Affairs
(PASSIA)**

Annex 2

Palestinian National Authority
Ministry of Health
Helsinki Committee



السلطة الوطنية الفلسطينية
وزارة الصحة
لجنة هلسنكي

التاريخ 2009/6/3

Name:

الاسم: نظمية عبد المجيد ابو سنيدة

I would like to inform you that the committee
has discussed your application about:

نفيدكم علماً بأن اللجنة قد ناقشت مقترح دراستكم
حول:-

**"Prevalence of psychosomatic disorder
among traumatized Palestinian adolescents in
Gaza strip "**

In its meeting on June 2009
and decided the Following:-

و ذلك في جلستها المنعقدة لشهر 6 2009

To approve the above mention research study.

و قد قررت ما يلي:-

الموافقة على البحث المذكور عاليه.

Signature

توقيع

Member

Member

عضو

د. هشور
3/6/09.

عضو



Conditions:-

- ❖ Valid for 2 years from the date of approval to start.
- ❖ It is necessary to notify the committee in any change in the admitted study protocol.
- ❖ The committee appreciate receiving one copy of your final research when it is completed.

Annex 3

Ministry of Education & Higher Education Approval Letter

Palestinian National Authority
Ministry of Education & Higher Education
General Directorate of Educational Planning



السلطة الوطنية الفلسطينية
وزارة التربية والتعليم العالي
الإدارة العامة للتخطيط التربوي

الرقم: ٢٩١ / مذكرة داخلية

التاريخ: 2009/3/8

السادة / مدير التربية والتعليم - محافظات غزة
مفضلهم الله
السلام عليكم ورحمة الله وبركاته

الموضوع: تسهيل مهمة بحث

يقوم الطالب/ة: نظمية أبو سنيدي، والمسجلة لدرجة الماجستير، في جامعة القدس كنيحة
الصحة العامة، تخصص صحة نفسية مجتمعية، بعمل بحث بعنوان " Prevalence of
psychosomatic disorder among traumatized Palestinian adolescents in Gaza
strip"

يرجى من سيادتكم التكرم بمساعدة الطالبة بتطبيق أداة الدراسة وهي استبانة مقياس الخبرات
الصادمة، واستبانة الاضطرابات النفس جسمية على عينة من طلبة الصف العاشر، والحادي عشر،
والثاني عشر، وذلك حسب الأصول.

وتفضلوا بقبول فائق الاحترام،،،

د. زياد ثابت

وكيل الوزارة المساعد للشئون التعليمية



نسخة * وزير التربية والتعليم العالي

* وكيل الوزارة

* وكيل الوزارة المساعد لشئون الإدارة والتطوير

* الرئف

غزة. هاتف (11-2861409-2865909) فاكس (08-2865909) (08-2865909) غزة (08-2861409-2849311) Fax: (08-2865909)

E-MAIL: MOEHE@GOV.PS

Annex 4 Socio-demographic status Questionnaire

عزيزي الطالب/ عزيزتي الطالبة:

تقوم الباحثة بإعداد رسالة ماجستير في الصحة النفسية المجتمعية بعنوان "مدى انتشار الاضطرابات النفسجسمية لدى المراهقين الذين تعرضوا لصدمة نفسية في قطاع غزة" و ترحو منك الباحثة أن تجيب على فقرات الاستبانة التالية بالكامل علما بان جميع الإجابات صحيحة ما دامت تعبر عن وضعك و رأيك الشخصي, و أن البيانات التي سيتم جمعها لن تستخدم إلا لأغراض البحث العلمي فقط:

الباحثة

أولاً: استبيان الحالة الاجتماعية و الاقتصادية:

1. العمر:
2. الصف: العاشر الحادي عشر الثاني عشر
3. الجنس: ذكر أنثى
4. مكان السكن: شمال غزة غزة الوسطى خان يونس رفح
5. نوع السكن: مدينة مخيم قرية
6. عدد الإخوة:
7. سنوات تعليم الأم:
8. سنوات تعليم الأب:
9. عمل الأم: ربة بيت موظفة عاملة أخرى حدد
10. عمل الأب: لا يعمل موظف عامل صانع مزارع تاجر أخرى حدد
11. دخل الأسرة الشهري: من 1201-2500 شيكل اقل من 600 شيكل من 601-1200 شيكل من 2501-3000 شيكل

Annex 5 War on Gaza Traumatic Events Checklist

ثانياً: مقياس الخبرات الصادمة الناجمة عن الحرب على غزة

أمامك مجموعة من البنود التي توضح الخبرات الصادمة (الأحداث المؤلمة) التي يتعرض لها أي إنسان في الظروف الصعبة مثل الاحتلال و الحروب و التي قد تشمل بعض ما تعرضت له خلال فترة الحرب الأخيرة على غزة، نرجو أن تضع علامة (X) في الخانة الموجودة أمام السؤال بما يتفق مع رأيك:

لا	نعم	الحدث أو الخبرة الصادمة	
		سماعك لاستشهاد صديق لك	1
		سماعك لاستشهاد أب أو أخ أو أخت أو قريب لك	2
		سماعك للقصف المدفعي للمناطق المختلفة من قطاع غزة	3
		سماعك لأصوات الطائرات الحربية عند اختراقها لحاجز الصوت	4
		سماعك لاعتقال أو خطف أحد الأشخاص	5
		مشاهدة استشهاد صديق لك أمامك	6
		مشاهدة استشهاد أب أو أخ أو أخت أو قريب لك أمامك	7
		مشاهدة إصابة صديق لك أمامك بالرصاص	8
		مشاهدة إصابة أب أو أخ أو أخت أو قريب لك أمامك بالرصاص	9
		مشاهدة بيتكم و هو يهدم ، و يدمر من القصف أو الجرافات	10
		مشاهدة بيت جيرانكم و هو يهدم ، و يدمر من القصف أو الجرافات	11
		مشاهدة بيوت الجيران و هي تقصف بالمدفعية الثقيلة والرشاشات، و الطائرات.	12
		مشاهدة بيتكم وهو يقصف بالمدفعية الثقيلة، والرشاشات، والرشاشات، و الطائرات	13
		مشاهدة صور الجرحى و الأشلاء والشهداء في التلفزيون	14
		مشاهدة عمليات الاغتيالات لرجال المقاومة من قبل الطائرات أو القصف المدفعي	15
		مشاهدة الآثار الناتجة عن القصف المدفعي على قطاع غزة	16
		تعرضك للإصابة بشظية قنبلة أو صاروخ أو الرصاص	17
		تعرضك للإصابة الجسدية نتيجة لقصف منزلك	18
		تعرضك للاحتجاز في البيت	19
		تعرضك للضرب والإهابة	20
		تعرضك للحرمان من الماء و الأكل و الكهرباء	21
		تعرضك لإطلاق النار بقصد التخويف	22
		تعرض إغراضك الشخصية للتدمير و التكسير والنهب	23
		تعرضك للتهديد شخصياً بالقتل	24
		تعرضك للتهديد بقتل أحد أفراد الأسرة	25

لا	نعم	الحدث أو الخبرة الصادمة	
		تعرضك للخطر الشديد باستخدام كدرع بشري للقبض على جار لكم	26
		تعرضك للحرمان من استخدام دورة المياه ومنعك من الخروج من الغرفة التي حجزت فيها	27
		تعرضك للحرق بالقنابل العادية و الفسفورية	28
		تعرضك للاعتقال من الجيش أثناء الاجتياح	29
		تعرضك للتهجير مع عائلتك وأقاربك	30

هل تعرضت لخبرات أخرى

1. هل شعرت بأنك آمن في البيت نعم لا
- 2- هل كنت قادرا على حماية نفسك نعم لا
- 3- هل كنت قادرا على حماية أهلك نعم لا
- 4- هل تعتقد بأن الآخرين كانوا قادرين على حمايتك نعم لا

Annex 6 Psychosomatic Questionnaire

ثالثاً: مقياس الأمراض السيكوسوماتية

تقوم الباحثة ببحث عملي والمرجو منك قراءة كل موقف من المواقف المتداولة في هذا المقياس ووضع علامة x أمام كل موقف وتحت العمود المناسب حسب كل موقف وتحت العمود المناسب حسب انطباق الحالة عليك وسوف تلاحظ وجود خمسة احتمالات أمام كل موقف:

مسلسل	الحالة	دائماً	كثيراً	أحياناً	نادراً	أبداً
1	أشعر بزيادة الحموضة في المعدة.					
2	أشعر بحرقان في فم المعدة.					
3	أشعر بألم وعدم ارتياح في بطني.					
4	بتصيب العرق مني.					
5	أعاني من ضعف الشهية.					
6	أعاني من الإمساك .					
7	أشعر بالألم في الصدر والرقبة أو الكتفين أو أعلى البطن.					
8	ألاحظ ظهور بقع حمراء على أجزاء من جسمي مع رغبة في الحكه.					
9	أحس بسرعة ضربات قلبي.					
10	تنتابني أفكار بالانتحار أو الموت .					
11	أشعر بالغثيان واضطراب المعدة .					
12	أعاني من الإسهال .					
13	أشكو من ضيق في التنفس مع الزفير.					
14	أحسن بأنني عصيباً و أهتز من الداخل.					
15	أحس بان أفكارني مشوشة .					
16	أشعر بالخجل واحمرار الوجه مع الجنس الآخر.					
17	أعاني من تقلص العضلات .					
18	أحس بالغثيان والدوخة.					
19	أحس بقله طاقتي و الضعف.					
20	أحس بوجع في عضلاتي.					
21	أحس بخذلان وعدم الحس ووخز في أجزاء جسمي .					

مسلسل	الحالة	دائما	كثيرا	أحيانا	نادرا	أبدا
22	أشعر بالضعف في أجزاء جسمي .					
23	أشعر بعدم الأمل في المستقبل .					
24	ألاحظ أن وزني يقل .					
25	أشكو من اضطرابات في تذكر الأشياء .					
26	أحس بالضيق والإثارة بسهولة .					
27	أبكي بسهولة .					
28	يمكن إيذاء مشاعري بسهولة .					
29	أحس بألم في فم المعدة بعد ربع ساعة من تناول الطعام وحتى ساعتين					
30	أشعر بأن نفسي مسدودة عن الأكل .					
31	أحس بالألم في القلب أو الصدر .					
32	أشعر بالضيق عند أخذ النفس .					
33	أشعر بوجود كتلة في حلقي .					
34	أعاني من وجود تعنية " الرغبة في التبرز دون القيام به"					
35	أشعر برغبة شديدة في الحكمة بدون وجود شواهد على البشرة					
36	الشعور بالرغبة في حك الجلد .					
37	أحس بنوبات من الحرارة والبرودة في جسمي .					
38	أعاني من الزغطة (التجشؤ) .					
39	تزداد مرات التبول لدي خلال النوم .					
40	الصعوبة في بدء النوم أو الاستمرار فيه .					
41	أحس بطنين في الأذن .					
42	أشعر بألم أسفل الظهر .					
43	أشعر بثقل في الأذرع والأرجل .					
44	أشعر بالعطش بصورة غير طبيعية .					
45	أحس بتخفيف الحموضة بعد تناول اللبن أو القهيء .					
46	أشعر بان نفسي مفتوحة للأكل .					
47	أشمئز من القاذورات والإهمال والأعمال الطائشة .					
48	أؤنب نفسي على أي شئ .					

مسلسل	الحالة	دائما	كثيرا	أحيانا	نادرا	أبدا
49	تصيبني نوبات إسهال وإمساك .					
50	أحس بزيادة غير عادية في ضربات القلب .					
51	ألاحظ ظهور مكان أكثر خالي من الشعر في الرأس أو الحاجب أو الذقن .					
52	أشعر بأنني غير قادر على التخلص من الأفكار السيئة .					
53	تحدث وفاة لبعض الأقارب بسبب مرض القلب .					
54	أشعر بأنني واقع في فخ أو أن أحدا يمسكني .					
55	أشعر بالوحدة .					
56	أشعر بالرغبة في أن أكون منفردا .					
57	أتجنب أشياء معينة وأماكن أو أنشطة لأنها تخيفني .					
58	أشعر بأنني مشدود ومقيد بمفاتيح .					
59	أشعر بصوت يشبه حفيف الأشجار في صدري .					
60	أشعر بحرقان في البول عند التبول .					
61	أشعر بعدم الاتزان.					
62	أجد صعوبة في الكلام عندما يثيرني أحد .					
63	أشعر بالقلق على بعض الأمور .					
64	أعاني من اضطرابات في التركيز.					
65	أذهب كثيرا إلى دورة المياه ليلا .					
66	أحس بألم أسفل المعدة بعد ساعتين من تناول الطعام .					
67	أحس بأن نفسي تغم علي .					
68	أعاني من عسر الهضم والانتفاخ .					
69	أحس بالرعشة والارتجاف .					
70	أحس بدوخة والشعور بالدوار .					
71	ألاحظ ظهور طفح فقاعي والتهابات بأصابع اليدين .					
72	أشعر بكحة مع وجود بلغم ناشف .					
73	أشعر بأن نفسي مفتوحة على الأكل بصورة غير طبيعية					
74	أشعر بصعوبة في التبول .					
75	يختفي ألم الشعور بالحموضة عند تناول اللبن أو نقص المأكولات .					

					أحس برغبة متكررة في التكرير .	76
أبدا	نادرا	أحيانا	كثيرا	دائما	الحالة	مسلسل
					أحس بألم عند الضغط على أحد جانبي جسمي .	77
					أحس بإرهاق عام أو شعور بالضعف .	78
					أحس بزيادة الرغبة في الحك عند مواجهة موقف صعب	79
					أعاني من الأحلام الرديئة والمزعجة .	80
					أشعر بالفزع المفاجئ دون أي سبب .	81
					أشعر بالخوف .	82
					يوجد دم أسود في البراز .	83
					أحس بوجود انتفاخ في بطني .	84
					أشعر بعدم ارتياح أو ألم في الجانب الأيسر السفلي من البطن	85
					أعرض نفسي على طبيب أمراض للقلب .	86
					أحس بتقلصات بعضلات الساقين " السمانة" .	87
					ألاحظ وجود اكزيما حادة على الجلد مع احمرار شديد.	88
					أشعر بضيق في التنفس أكثر من اللازم .	89
					أحس أن كثيرا من الناس ينتقدونني .	90
					أحس أن الآخرين لا يفهمونني وأنتي غير متلائم المزاج	91
					أشعر أن الناس غير أصدقاء لي ولا يحبونني .	92
					أشعر أنني أقل شأنا من الآخرين .	93
					أحس بفقدان في الوزن .	94
					أعمل رسم قلب كهربائي بصورة متكررة .	95
					أحس بما يشبه الغصة في صدري .	96
					يزول ألم القولون بعد التبرز أو بعد التخلص من الغازات .	97
					أحس بعدم انتظام ضربات القلب	98
					ألاحظ اكزيما في جزء من الجلد مع خشونة وتلون ا لجلد عند الحكه	99
					أحس بأن نفسي مكروش .	100
					ألاحظ وجود زيادة في الوزن .	101
					أحس بوجود إمساك .	102
					أشعر بزعزعة في النظر وعدم وضوح الرؤية .	103

					أعاني من زيادة العرق باليدين وتحت الإبطن .	104
أبدا	نادرا	أحيانا	كثيرا	دائما	الحالة	مسلسل
					أحس بعدم ارتياح في مكان فم المعدة .	105
					أحس بنقص الكفاءة بالنسبة لبذل المجهود .	106
					أشعر بحكة في أحد أجزاء جسمي مع وجود خشونة في المكان	107
					أحس بجيشان عاطفي للمزاج لا أستطيع التحكم فيه .	108
					أشعر بالكآبة .	109
					تتنابني نوبات فقدان الوعي .	110
					أعاني من الصداع مع صعوبة في النوم .	111
					أشعر بحكة شديدة في المنطقة الشرجية .	112
					أحس بالعقبات والمواقف الحرجة عند انجاز العمل .	113
					أحس ببرودة في الأطراف .	114
					تتعرض بعض أجزاء جلدي للاحمرار مع وجود قشور عليها تتكرر حتى بعد إزالتها .	115
					أشعر برعشة في الأطراف .	116
					أشعر بحكة في الوجه حول الأنف .	117
					أعاني من ضعف في شهيتي .	118
					أعاني من الأرق وقلة النوم .	119
					أشعر بالصداع بصورة متكررة .	120
					أشعر بعدم الاهتمام بالأشياء .	121
					بعض الأقارب يحس بأمراض القلب .	122
					أعمل تحليلات وأشعة للقلب .	123
					أحس بضرورة سؤال الآخرين عما يجب عمله .	124
					أؤدي الأعمال ببطء شديد لأتأكد أنه قد تم تأديتها صحيحة	125
					أعمل على المراجعة مرة أخرى لكل عمل أؤديه .	126
					أحس بصعوبة في اتخاذ القرار .	127
					أشعر أن عقلي فاضي .	128

Annex 7

Diagnostic Classification of somatoform disorders according to DSM-IV-TR

Diagnostic criteria for Conversion Disorder

- A. One or more symptoms or deficits affecting voluntary motor or sensory function that suggest a neurological or other general medical condition.
- B. Psychological factors are judged to be associated with the symptom or deficit because the initiation or exacerbation of the symptom or deficit is preceded by conflicts or other stressors.
- C. The symptom or deficit is not intentionally produced or feigned (as in Factitious Disorder or Malingering).
- D. The symptom or deficit cannot, after appropriate investigation, be fully explained by a general medical condition, or by the direct effects of a substance, or as a culturally sanctioned behavior or experience.
- E. The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.
- F. The symptom or deficit is not limited to pain or sexual dysfunction, does not occur exclusively during the course of Somatization Disorder, and is not better accounted for by another mental disorder.

Diagnostic criteria for Hypochondriasis

- A. Preoccupation with fears of having, or the idea that one has, a serious disease based on the person's misinterpretation of bodily symptoms.
- B. The preoccupation persists despite appropriate medical evaluation and reassurance.
- C. The belief in Criterion A is not of delusional intensity (as in Delusional Disorder, Somatic Type) and is not restricted to a circumscribed concern about appearance (as in Body Dysmorphic Disorder).
- D. The preoccupation causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- E. The duration of the disturbance is at least 6 months.

F. The preoccupation is not better accounted for by Generalized Anxiety Disorder, Obsessive-Compulsive Disorder, Panic Disorder, a Major Depressive Episode, Separation Anxiety, or another Somatoform Disorder.

Diagnostic criteria for Somatization Disorder

A. A history of many physical complaints beginning before age 30 years that occur over a period of several years and result in treatment being sought or significant impairment in social, occupational, or other important areas of functioning.

B. Each of the following criteria must have been met, with individual symptoms occurring at any time during the course of the disturbance:

(1) four pain symptoms: a history of pain related to at least four different sites or functions (e.g., head, abdomen, back, joints, extremities, chest, rectum, during menstruation, during sexual intercourse, or during urination)

(2) two gastrointestinal symptoms: a history of at least two gastrointestinal symptoms other than pain (e.g., nausea, bloating, vomiting other than during pregnancy, diarrhea, or intolerance of several different foods)

(3) one sexual symptom: a history of at least one sexual or reproductive symptom other than pain (e.g., sexual indifference, erectile or ejaculatory dysfunction, irregular menses, excessive menstrual bleeding, vomiting throughout pregnancy)

(4) one pseudoneurological symptom: a history of at least one symptom or deficit suggesting a neurological condition not limited to pain (conversion symptoms such as impaired coordination or balance, paralysis or localized weakness, difficulty swallowing or lump in throat, aphonia, urinary retention, hallucinations, loss of touch or pain sensation, double vision, blindness, deafness, seizures; dissociative symptoms such as amnesia; or loss of consciousness other than fainting)

C. Either (1) or (2):

(1) after appropriate investigation, each of the symptoms in Criterion B cannot be fully explained by a known general medical condition or the direct effects of a substance (e.g., a drug of abuse, a medication)

(2) when there is a related general medical condition, the physical complaints or resulting social or occupational impairment are in excess of what would be expected from the history, physical examination, or laboratory findings

D. The symptoms are not intentionally feigned or produced (as in Factitious Disorder or Malingering).

Diagnostic criteria for Body Dysmorphic Disorder

A. Preoccupation with an imagined defect in appearance. If a slight physical anomaly is present, the person's concern is markedly excessive.

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

C. The preoccupation is not better accounted for by another mental disorder (e.g., dissatisfaction with body shape and size in Anorexia Nervosa).

Diagnostic criteria for Pain Disorder

A. Pain in one or more anatomical sites is the predominant focus of the clinical presentation and is of sufficient severity to warrant clinical attention.

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

C. Psychological factors are judged to have an important role in the onset, severity, exacerbation, or maintenance of the pain.

D. The symptom or deficit is not intentionally produced or feigned (as in Factitious Disorder or Malingering).

E. The pain is not better accounted for by a Mood, Anxiety, or Psychotic Disorder and does not meet criteria for Dyspareunia.

Pain Disorder Associated With Psychological Factors:

psychological factors are judged to have the major role in the onset, severity, exacerbation, or maintenance of the pain. (If a general medical condition is present, it does not have a major role in the onset, severity, exacerbation, or maintenance of the pain.) This type of Pain Disorder is not diagnosed if criteria are also met for Somatization Disorder.

Specify if:

Acute: duration of less than 6 months

Chronic: duration of 6 months or longer

Pain Disorder Associated With Both Psychological Factors and a General Medical Condition:

both psychological factors and a general medical condition are judged to have important roles in the onset, severity, exacerbation, or maintenance of the pain. The associated general medical condition or anatomical site of the pain is coded on Axis III.

Specify if:

Acute: duration of less than 6 months

Chronic: duration of 6 months or longer

Note: The following is not considered to be a mental disorder and is included here to facilitate differential diagnosis.

Pain Disorder Associated With a General Medical Condition:

a general medical condition has a major role in the onset, severity, exacerbation, or maintenance of the pain. (If psychological factors are present, they are not judged to have a major role in the onset, severity, exacerbation, or maintenance of the pain.) The diagnostic code for the pain is selected based on the associated general medical condition if one has been established or on the anatomical location of the pain if the underlying general medical condition is not yet clearly established--for example, low back (724.2), sciatic (724.3), pelvic (625.9), headache (784.0), facial (784.0), chest (786.50), joint (719.4), bone (733.90), abdominal (789.0), breast (611.71), renal (788.0), ear (388.70), eye (379.91), throat (784.1), tooth (525.9), and urinary (788.0).

Diagnostic criteria for Undifferentiated Somatoform Disorder

A. One or more physical complaints (e.g., fatigue, loss of appetite, gastrointestinal or urinary complaints).

B. Either (1) or (2):

(1) after appropriate investigation, the symptoms cannot be fully explained by a known general medical condition or the direct effects of a substance (e.g., a drug of abuse, a medication)

(2) when there is a related general medical condition, the physical complaints or resulting social or occupational impairment is in excess of what would be expected from the history, physical examination, or laboratory findings

C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The duration of the disturbance is at least 6 months.

E. The disturbance is not better accounted for by another mental disorder (e.g., another Somatoform Disorder, Sexual Dysfunction, Mood Disorder, Anxiety Disorder, Sleep Disorder, or Psychotic Disorder).

F. The symptom is not intentionally produced or feigned (as in Factitious Disorder or Malingering).

أرقام العبارات الخاصة بالأجهزة المختلفة في اختبار الاضطرابات النفسية:

- 1- اضطراب الجهاز الهضمي ويشمل الأرقام التالية:
(1 ، 2 ، 3 ، 5 ، 6 ، 11 ، 12 ، 18 ، 24 ، 29 ، 30 ، 33 ، 34 ، 38 ، 45 ، 46 ، 49 ، 66 ، 67 ، 77 ، 83 ، 84 ، 85 ، 94 ، 96 ، 97 ، 101 ، 102 ، 105 ، 111 ، 118 .)
- 2- اضطراب جهاز القلب والدورة الدموية ويشمل الأرقام التالية:
(4 ، 7 ، 9 ، 20 ، 31 ، 32 ، 37 ، 43 ، 50 ، 53 ، 61 ، 70 ، 78 ، 86 ، 87 ، 95 ، 98 ، 100 ، 103 ، 106 ، 111 ، 114 ، 116 ، 118 ، 120 ، 123 ، 124 .)
- 3- اضطراب جهاز التنفس ويشمل الأرقام التالية :
(13 ، 31 ، 32 ، 37 ، 38 ، 59 ، 72 ، 89 ، 100 .)
- 4- اضطراب الجهاز الهيكلي ويشمل الأرقام التالية:
(17 ، 20 ، 22 ، 42 ، 43 .)
- 5- الاضطرابات الجلدية وتشمل الأرقام التالية:
(8 ، 35 ، 36 ، 51 ، 79 ، 88 ، 99 ، 104 ، 107 ، 112 ، 115 ، 117 ، 119 .)
- 6- اضطرابات الجهاز البولي والتناسلي وتشمل الأرقام التالية :
(39 ، 60 ، 65 ، 74 ، 77 .)
- 7- الاضطرابات النفسية وتشمل الأرقام التالية :
(4 ، 5 ، 8 ، 9 ، 10 ، 11 ، 12 ، 14 ، 15 ، 16 ، 18 ، 19 ، 20 ، 21 ، 22 ، 23 ، 24 ، 25 ، 26 ، 27 ، 28 ، 30 ، 31 ، 32 ، 33 ، 35 ، 36 ، 40 ، 43 ، 47 ، 48 ، 51 ، 52 ، 54 ، 55 ، 56 ، 57 ، 58 ، 62 ، 63 ، 64 ، 69 ، 73 ، 78 ، 79 ، 80 ، 81 ، 82 ، 90 ، 91 ، 92 ، 93 ، 94 ، 98 ، 100 ، 104 ، 108 ، 109 ، 111 ، 113 ، 114 ، 116 ، 117 ، 118 ، 120 ، 121 ، 122 ، 125 ، 126 ، 127 ، 128 .)
- 8- اضطرابات السكر وتشمل الأرقام التالية :
(21 ، 24 ، 39 ، 44 ، 46 ، 65 ، 70 ، 73 ، 78 ، 94 ، 103 ، 106 ، 118 .)
- 9- الاضطرابات الأخرى وتشمل الأرقام التالية :
(40 ، 61 ، 70 ، 101 ، 103)

ورقة تصحيح اختبار الاضطرابات النفسية

الاحتمالي	الوزن	أبدا 0 X	الوزن	نادرا 1 X	الوزن	أحيانا 2 X	الوزن	كثيرا 3 X	الوزن	دائما 4 X	الاحتمالات اضطرابات الأجهزة
											اضطراب الجهاز الهضمي
											اضطراب القلب والدورة الدموية
											اضطراب الجهاز التنفسي
											اضطراب الجهاز الهيكلي
											الاضطرابات الجلدية
											اضطراب الجهاز البولي والتناسلي
											الاضطرابات النفسية
											اضطرابات السكر
											اضطرابات أخرى
											الإجمالي

العنوان: مدى انتشار الاضطرابات السيكوسوماتية لدى المراهقين الفلسطينيين الذين تعرضوا لصدمات نفسية في قطاع غزة

الإعداد: نظمية عبد المجيد أبو سنيدة

الإشراف: د . عبد العزيز موسى ثابت

ملخص الدراسة

الهدف: تهدف هذه الدراسة إلى معرفة مدى انتشار الاضطرابات السيكوسوماتية لدى المراهقين الفلسطينيين الذين تعرضوا لصدمات نفسية في قطاع غزة كما تهدف إلى التعرف إلى العلاقة بين الأحداث الصادمة والاضطرابات السيكوسوماتية .

ولتحقيق اهداف الدراسة فقد استخدمت الباحثة الادوات التالية : استبانة المعلومات الديمغرافية ، مقياس الحرب على غزة للخبيرات الصادمة ومقياس الاضطرابات السيكوسوماتية .

الطريقة: قامت الباحثة بتطبيق هذه الادوات على عينة الدراسة التي تكونت من 380 مراهق (182 ذكور ، و 198 إناث) من طلبة المرحلة الثانوية في محافظات قطاع غزة ، وكانت تتراوح أعمارهم بين 15 الى 18 سنة ، وقد تم اختيارهم بالطريقة العشوائية الطبقية حيث استخدمت الباحثة المنهج الوصفي التحليلي .

النتائج: أوضحت الدراسة أن متوسط التعرض للأحداث الصادمة عند الطلبة 14.2 حدث وقد لوحظ أن أكثر حدث تعرض له الطلبة هو (مشاهدة صور الجرحى والأشلاء والشهداء في التلفزيون) بنسبة 92.3% ويليه حدث (سماعهم للقصف المدفعي للمناطق المختلفة من قطاع غزة) بنسبة 89.4% .

كما تبين من خلال النتائج ان نسبة معاناة الطلبة من الاضطرابات السيكوسوماتية بلغت 29.5% في حين اشارت النتائج الى ان اعلى اضطراب يعاني منه الطلبة هو اضطرابات الاجهزة الاخرى فقد بلغ الوزن النسبي له 35.6% ، ويليه الاضطرابات النفسية جاءت في المرتبة الثانية وبوزن نسبي 35.4% ثم اضطرابات السكر وبوزن نسبي 32.4% ثم اضطرابات الجهاز الهيكلي بوزن نسبي 30.9% ، ثم اضطرابات جهاز القلب والدورة الدموية وبوزن نسبي 28.1% ، ثم اضطرابات الجهاز الهضمي بوزن نسبي 23.7% ثم اضطرابات الجهاز التنفسي بوزن نسبي 22.1% ، ثم اضطرابات الجهاز البولي التناسلي وبوزن نسبي 22% ، في حين احتلت الاضطرابات الجلدية المرتبة الاخيرة بوزن نسبي 19.3% .

كشفت الدراسة عن وجود علاقة طردية ذات دلالة إحصائية بين الأحداث الصادمة والاضطرابات السيكوسوماتية. أظهرت النتائج عدم وجود فروق جوهرية ذات دلالة إحصائية بين متوسطات افراد العينة حسب متغير الجنس باستثناء الاضطرابات النفسية والاضطرابات الاخرى حيث كانت الفروق لصالح الإناث

كما أشارت الدراسة إلى عدم وجود فروق جوهريّة ذات دلالة احصائية بين متوسطات افراد العينة حسب متغير أماكن الإقامة (مخيم ، قرية، مدينة) باستثناء اضطرابات الجهاز الهضمي واضطرابات الجهاز البولي التناسلي حيث كانت الفروق لصالح القرية والمدينة .

لم تظهر الدراسة وجود فروق جوهريّة بين أماكن السكن المختلفة بالنسبة للاضطرابات السيكوسوماتية باستثناء اضطرابات الجهاز الهضمي والجهاز الهيكلي والجهاز البولي التناسلي والاضطرابات النفسية واضطرابات السكر حيث كانت الفروق لصالح محافظتي غزة وشمال غزة .

كما بينت الدراسة فروق جوهريّة ذات دلالة احصائية بين مستويات الدخل الشهري المختلفة لاسر الطلبة بالنسبة للاضطرابات السيكوسوماتية لصالح الطلبة الذين مستوى دخل اسرهم اقل من 600 شيكل .