Haigazian University

Post-traumatic Stress Disorder Level and Coping Strategies of Youth (ages 13-19) Living in South of Lebanon

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POST-TRAUMATIC STRESS DISORDER LEVEL AND COPING STRATEGIES OF YOUTH (AGES 13-19) LIVING IN SOUTH OF LEBANON

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KAREN LEON TCHENNOZIAN

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ABSTRACT

The purpose of the following study was to assess the level of Post-traumatic Stress Disorder (PTSD) and to assess the type of coping strategies (problem solving, seeking social support, avoidance) while under stress among a sample of youth (ages 13-19) who were living in the South of Lebanon during the Israeli occupation of the South. The sample included 150 youth (74 male and 76 female) ages 13-19 (X= 15.83). The Penn Inventory For Post Traumatic Stress Disorder (Melvyn, 1990) and the Coping Strategies Indicator (Amirkhan, 1993) were administered. Results showed that age and PTSD level are inversely related; female participants scored a higher PTSD level than male participants. ANOVA results showed that coping strategies differ across age groups; however, no significant results were obtained across gender.

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Many individuals have helped me write the pages that follow. I would like to thank all those who never gave up on me while I was writing this thesis. When I gave up on myself, those close to me didn't. Instead, they raised me up in prayer and gave me daily to the Lord.

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Thank You, Lord, for all that You always give me. You never stop being my loving, caring Father and Shepherd. Thank You, for giving me the joy of finalizing this thesis. I owe it all to You.

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Dedication

I spent many hours looking into research on trauma and its related issues. Every time I found some interesting statistical results: percentages, correlations, casual relationships, in a research, I would get excited and be eager to go on reading more and more about PTSD and trauma. Yet, it dawned on me later, that each "number" really is a representation of a person- a human being. It is a scary thought to know that all those people and many others we do not know of are under such horrendous pressures due to a trauma or traumas they have faced. It is a mystery to me that other people's pain is the topic of my study, a study which brings me joy. This study is dedicated to those "numbers" in this study. I wish I could do more than just write about you. My prayer is that all those who simply represent a number on paper will one day find true inner Peace and Eternal Love.

CHAPTER I

INTRODUCTION

Post-traumatic Stress Disorder Level and Coping Strategies of Youth (ages 13-19) Living in South of Lebanon

Statement of the Problem

Stressful life events are distinguished by their specific overwhelming characteristics and profound, far reaching effects. Stressful life events may be seen as promoting personal growth, but they also have to be considered as possible risk factors, posing a threat to the individual's mental and physical well being. A recent study by Stein, McQuaid, Pedrelli, Lenox, & McCahill (2000), has shown that post-traumatic stress disorder (PTSD) is more prevalent than originally believed. PTSD is not a new disorder. There are written accounts of similar symptoms that go back to ancient times, and there is clear documentation in the historical medical literature starting with the American Civil War, when a PTSD-like disorder was known as "Da Costa's Syndrome." There are particularly good descriptions of posttraumatic stress symptoms in the medical literature on combat veterans of World War II and on Holocaust survivors. PTSD was mainly studied among soldiers who had been exposed to the horrors and destruction of war. Recently, PTSD has been

studied in the light of other traumas, not necessarily pertaining to war casualties. For PTSD to be diagnosed, a person must have experienced an emotional stress that was of a magnitude that would affect almost anyone, such as combat experiences, natural catastrophes, assault, rape, and serious injuries, illnesses, or accident (Sadock, Kaplan and Grebb, 1994). According to A. Fleming (1984), "No event is universally stressful." However, some stressors, such as that of the exposure to war, leave few untouched, thus leading to a traumatic experience. Stress has its many manifestations and forms; many people react to stressful events in different manners. Almost any kind of stressful stimuli can become a traumatic experience provided it is of significant intensity, duration, or frequency, which is essentially the disruption of the balance within the body (Barrow & Prosen, 1981). A study that documented a relation between exposure to crime and violence and distress symptoms done by Fitzpatrick and Boldizar (1993) involved a sample of not only children but also adolescents. Specifically, participants were low-income African-American youth (ages = 7 to 18 years; N = 221). More than 70% of the children and adolescents reported being victims of at least one violent act. Similar to Richters and Martinez (1993), participants were more likely to have witnessed violence than to have been victimized, with close to 85% having witnessed at least one violent act and 43.4% having witnessed a murder. In addition, of those who had been exposed either as witness or victim, 89% met at least one of the DSM III-R criteria

for PTSD, with the average number of symptoms being five. Boys reported significantly more exposure to violence than girls, but girls reported more PTSD symptoms than boys. Many other studies indicate the effects of trauma on children and youth. In light of all the investigation done on other populations, Lebanon is a site were many traumas were experienced. Research in the area of South Lebanon will be a valuable asset.

Coping

South Lebanon has been the target and site of terrors and traumas that the circumstances of war forced upon those living in the territory it infects. War and its effects do not leave anyone out of the consequences. Everyone who experiences war and the stress it inflicts, is affected in one manner or another. The elderly, adults, young adults, youth, teenagers, young children have all been affected one way or another. What effect has the Israeli occupation and force had on the youth in the South of Lebanon? How have they been coping with the stressors? Is coping a crucial factor? Today's youth, are faced with so many stressful events and a lot of pressure. Yet, it is expected for them to deal with these stressors and grow to be healthy adults. Stressors are many and can not be avoided, yet when one is equipped to deal with the stress in a rational and productive manner, then the person grows to become as healthy as he/she can be. Hence, coping and coping

strategies are essential for a person's survival. Coping is defined by many researchers as a response to stress. It also refers to a person's behavioral and cognitive attempt to manage (reduce, minimize, master, or tolerate) both internal and external demands of the person. According to Folkman, Lazarus, Dunkel- Shatter, De Longis and Gruen (1986), coping is of two types, regulating stressful emotions (non-cognitive) and dealing with the problem causing stress (cognitive). Coping with stress is essential for healthy functioning. Many life stressors cannot be avoided; dealing with and managing stressful situations are issues that all face at one time or another in their lives. The stress of war and violence is undoubtfully a topic for concern. Knowing how people deal with this stress is vital to provide means and measure for a better psychological well being.

Social Aspect of Coping with Death

Village life in the South of Lebanon is one which is based on a closely knit society. Everyone knows everyone else. Social support and relations are of great importance to the people. The extended family is as important, if not more, than the nuclear family. Neighbors are a part of the family as well.

When a person dies, the whole village mourns in respect for the deceased and the family. There is a spirit of unity and care for the family. The women in the household of the deceased scream out in grief and

agony. This is the sign and indication that someone has died. Then the death toll is tolled on the church bell. Women sit around the dead body, crying and praying; while men sit alone in another room, usually in the neighbor's home and stay awake all night. Work and businesses stop in a moment of silence during the funeral. This paves the way for people who have personal problems and vendettas to reconcile with one another. They believe that death can take them any day, so they should hold no grudges against anyone while they are alive. Everyone in the village and neighboring villages have to fulfill their "waijib" (their social duty) by attending the funeral and offering their condolescences. If the deceased is young, then the village poet comes and recites poems speaking of the young person, while the scouts marching band march around the village square and playing a processional. Women and men outwardly show that they are in a period of grief when the women wear black clothing and men do not shave their beards for forty days. The social aspect of the grieving process is taken into great account. However, we do now really know how people cope with death and losing those close to them. What goes on on the inside, we really do not know.

Purpose of the Study

The purpose of this study is to assess the level of PTSD among a sample of youth (Ages 13-19) who were living in the South of Lebanon

during the Israeli occupation of the South, and to assess their coping strategies when dealing with stressors.

This study is to attempt to answer the following:

1. Do youth in South Lebanon have a high level of PTSD?
2. What coping strategies do youth in South Lebanon use to successfully cope with stress?
3. Do older youth (16-19) and younger youth (13-15) differ in their level of PTSD? Do older youth (16-19) and younger youth (13-15) differ in their coping skills?
4. Is there a gender difference in the coping strategies? Is there a gender difference and level of PTSD?

Need for the Study

The need for the study stems from the fact that any stressor or traumatic event affects a person; if so, have not the youth in South Lebanon been affected from the trauma of war with the Israelis? For years, people living in the South of Lebanon have had to endure the hardships of military forces and witness many horrific events. No significant study has been carried out on PTSD in the South of Lebanon. How people have been coping has not been a concern. Considering all the stress people faced during the war and the aftermath of surviving the war itself, not much research has been done concerning the implications of the war on the

people. They have been busy with picking up with their lives and hoping for a better future. What psychological implications have resulted after experiencing trauma? What coping skills and strategies have been used? The outcome of the study can provide diagnostic and predictive uses in helping in the raising of awareness for the need to provide trained professionals in aiding people deal with post-war affects. It is important to know the extent of PTSD level among the youth in particular, who are the leaders of tomorrow. It would also be of value for social work organizations in developing community preventive programs in educating society how to cope with stress by learning proper coping strategies. Awareness of PTSD and coping should be raised and proper curative aid should be catered to victims. Children exposed to disasters are at risk for a number of mental health related problems. The type and severity depend on the nature and extent of disaster trauma, the influence of family and community, the resilience or vulnerability of the child, and symptom onset and duration. Levels of functioning and cross-cultural differences also play an important part in coping with stress.

Culture in South Lebanon

The make up of villages in the South of Lebanon is mainly of an agricultural type. People own land and they plant crops on their land in order to make a living from the sales of their produce. Till this day, many of the activities that the youth are involved in and enjoy immensely are

work and chores they have out on the fields, whether it is planting, reaping, or the like.

Father Shoucairallah Choufani (1996) writes in his account of the history of the South about how life has changed throughout the years. Due to the migration of people to other countries and cities, after the 1970's, many have left their villages and their land and have taken a risk at making a "better" life elsewhere. As a result, many have lost interest in taking care of land and planting. Many workers who made their living by working for crop owners lost their jobs and their income slowly started to decline. Moreover, for a number of years, there was a drought, caused by a major decline of rainfall. This also led people to leave for the city. There was no capital investment in learning new methods of agriculture and no one was interested in learning, since agricultural innovations and new methods were no longer taught. Production was scarce and workers fewer. Anyone who had the means, financial or other, left the villages to start a different life. During the aggression between Israeli troops and Lebanese resistance, which took place on Lebanese soil, particularly in the South, many more people migrated to other areas. Hence, those who remain full time residents of the village are those who have no substantial means to leave the village. Those who belong to a better socio-economic status live mainly in the city- Beirut. The war has left its effects on the society and its economic status on a whole. Thus, there is

little unaffected (social, economic, psychological, etc...) by the aggression of casualties.

Hypotheses

The questions generated in this study may be translated into the following hypotheses:

H1: Older youth (ages 16-19) have lower level of PTSD than younger youth (ages 13-15).

H2: Older youth (ages 16-19) differ in the coping strategies they use from younger youth (ages 13-15).

H3: Female participants have a higher PTSD level than male participants.

H4: Male and female participants differ in coping strategies they use.

Assumptions

1. It is assumed that all participants have the proper skills in comprehending and completing questionnaires.

2. It is assumed that participants will answer truthfully and accurately.

Method

Participants

The research includes 150 youth (74 male and 76 female equally), ages 13-19, living in Marj-Aaioun, a South Lebanon village, which is located directly along the boarders of Lebanon and Israel. The sample of participants will be taken from the local public schools of the village. The participants should have been living in this area during the time of tension and casualty with Israeli forces. The majority of inhabitants of this area are Christian, mainly from the Maronite sect. With the purpose of controlling variables and maintaining reliability of results, the study has been confined to this group - Maronite youth living in South Lebanon.

Apparatus

All of the following assessment tools have been translated from the English language into Arabic language by qualified translators.

1. Penn Inventory for Post Traumatic Stress Disorder (1990), by Melvyn Hammarberg
2. Coping Strategy Indicator (CSI) (1993), by James H. Amirkhan
3. Data Sheet

Procedure

Participants were given the inventories mentioned above in a group setting. They were told that this is a part of a study on youth and their ways of thought. Thus, they were assessed according to the scale and criterion of the apparatus mentioned above. After scores on the scales are produced, high scores and low scores were chosen and statistical assessments were performed on these ranges.

Limitation

1. There may be a limitation in the use of apparatus used in the study (questionnaires and scales) as the youth in Lebanon are not accustomed to filling out forms and questionnaires.

Definition of Terms

1. Post-traumatic Stress Disorder (PTSD):

Re-experiencing the trauma in memories and dreams, avoiding anything reminiscent of the event, memory loss, emotional numbing, sleep disturbance, anxiety

2. Stress:

Psychological and physical strain or tension generated by physical, emotional, social, or economic, or occupational circumstances, events, or experiences that are difficult to manage or endure

3. Stressor:

A stimulus which produces great deal of discomfort to a person

4. Coping:

Dealing with stressors; action that enables one to adjust to the environmental circumstances

5. Coping Strategies:

Methods and techniques one uses to deal with stressful events

6. Depression:

Loss of hope, self-worth, motivation, or purpose in life; fatigue; decreased pleasure in previously enjoyed activities; changes in sleep and appetite; suicidal thoughts or actions

7. Psychosocial stressor:

Any life event or change that causes stress

CHAPTER II

LITERATURE REVIEW

The following section is designated for a review of available research in the field concerning post-traumatic stress disorder and the different aspects of coping and its strategies.

Post-traumatic Stress Disorder

Post-traumatic Stress Disorder (PTSD) is a psychiatric disorder that can occur following the experience or witnessing of life-threatening events such as military combat, natural disasters, terrorist incidents, serious accidents, or violent personal assaults like rape. People who suffer from PTSD often relive the experience through nightmares and flashbacks, have difficulty sleeping, and feel detached or estranged, and these symptoms can be severe enough and last long enough to significantly impair the person's daily life. PTSD is not a new disorder. There are written accounts of similar symptoms that go back to ancient times, and there is documentation starting with the American Civil War, when PTSD was known as "Da Costa's Syndrome." There are fine descriptions of post-traumatic stress symptoms in medical literature on combat veterans of World War II and on Holocaust survivors (Hobfoll, S. et al., 1989). Careful research and documentation of PTSD began mainly after the Vietnam War. Studies showed that the prevalence of PTSD in that group

was 15.2% at that time and that 30% had experienced the disorder at some point since returning from Vietnam. PTSD has subsequently been observed in all veteran populations that have been studied, including World War II, Korean conflict, and Persian Gulf populations, and in United Nations peacekeeping forces deployed to other war zones around the world. There are remarkably similar findings of PTSD in military veterans in other countries. For example, Australian Vietnam veterans experience many of the same symptoms that American Vietnam veterans experience. PTSD is not only a problem for veterans, however. Although there are unique cultural- and gender-based aspects of the disorder, it occurs in men and women, adults and children, Western and non-Western cultural groups, and all socioeconomic strata. A national study of American civilians conducted in 1995 (Kessler, R. et al.) estimated that the lifetime prevalence of PTSD was 5% in men and 10% in women. Most people who are exposed to a traumatic, stressful event experience some of the symptoms of PTSD in the days and weeks following exposure. Available data suggest that about 8% of men and 20% of women go on to develop PTSD, and roughly 30% of these individuals develop a chronic form that persists throughout their lifetime. The course of chronic PTSD usually involves periods of symptom increase followed by remission or decrease. Some older veterans, who report a lifetime of only mild symptoms, experience significant increases

in symptoms following retirement, severe medical illness in themselves or their spouses, or reminders of their military service.

Characteristics of those who develop PTSD

In attempt to find a definition for PTSD and characteristics of those who develop PTSD there have been certain characteristics which determine whether a person who experiences a trauma will actually develop PTSD or not. Some of the characteristics are the following:

1. Those who experience greater stressor magnitude and intensity, unpredictability, uncontrollability, sexual (as opposed to nonsexual) victimization, real or perceived responsibility, and betrayal
2. Those with prior vulnerability factors such as genetics, early age of onset and longer-lasting childhood trauma, lack of functional social support, and concurrent stressful life events
3. Those who report greater perceived threat or danger, suffering, upset, terror, and horror or fear.
4. Those with a social environment that produces shame, guilt, stigmatization, or self-hatred.

Response to Trauma

There is a wide range of emotional and physiological reactions that children may display following disaster. From previous research, we know that more severe reactions are associated with a higher degree of exposure (i.e., life threat, physical injury, witnessing death or injury,

hearing screams, etc.), closer proximity to the disaster, a history of prior traumas, being female, poor parental response, and parental psychopathology. (Goenjian, AK, et al., 1997)

Age Level Characteristics

Every age group has its ways of reacting to certain stimuli. The pre-adolescent and adolescent years form significant years in a person's life. Hence, they have their own ways of reacting to stressors and trauma that other age groups would react differently to. The following age level characteristics of reactions to trauma have been taken from C. Monahon's guide on children and trauma.

Pre-adolescents and Adolescents (12-18 years)

* Self-consciousness
* Life-threatening reenactment
* Rebellion at home or school
* Abrupt shift in relationships
* Depression and social withdrawal
* Decline in school performance
*Trauma-driven acting out, such as with sexual activity and reckless risk taking
* Effort to distance oneself from feelings of shame, guilt, and humiliation
* Excessive activity and involvement with others, or retreat from others in order to manage inner turmoil

*Accident proneness

*Wish for revenge and action-oriented responses to trauma

*Increased self-focusing and withdrawal

* Sleep and eating disturbances, including nightmares

The above symptoms are normal reactions to trauma and do not necessarily mean that a child has acquired a disorder. Children, who lost a friend or relative in the Oklahoma City bombing, were more likely to report immediate symptoms of PTSD than non-bereaved children. Arousal and fear presenting seven weeks after the bombing were significant predictors of PTSD (Pfefferbaum et al., 1999). Two years after the bombing, 16% of children who lived approximately 100 miles away from Oklahoma City reported significant PTSD symptoms related to the event (Pfefferbaum et al, 2000). This is an important finding because these youths were not directly exposed to the trauma and were not related to people who had been killed or injured.

No study specifically reported on rates of PTSD in children following the bombing. However, studies have shown that as many as 100% of children who witness a parental homicide or sexual assault, 90% of sexually abused children, 77% of children exposed to a school shooting, and 35% of urban youth exposed to community violence develop PTSD.

Earthquakes and PTSD

Carr et al. (1997) estimated that Posttraumatic Stress Disorder occurs in 32% to 60% of the adult survivors and 26% to 95% of the child and adolescent survivors who have been evaluated after earthquakes and such traumas. Persistent or recurring disruptions from the earthquake substantially contribute to continued mental-health problems. General psychological distress levels following an earthquake appear to stabilize after about 12 months, but posttraumatic stress reactions do not stabilize until 18 months after the earthquake. Coping with stress by using avoidance measures (e.g., withdrawal from the situation, isolation, trying to avoid further stressors) appears to contribute to continued distress and posttraumatic stress (Carr et al, 1997). Also at risk are (1) rescue workers with high levels of catastrophic exposure and (2) individuals who, in reaction to the earthquake, tend to "dissociate," or become "numb," and have a sense of being detached from their emotions and bodily experiences for a prolonged period of time (Marmar et al, 1999).

Consequences of Traumatic Stress

Immediate consequences of trauma, affecting the majority of people who experience severe stress, include:

- Emotional symptoms: shock, intense fear, tearfulness, anger, shame, helplessness, nervousness, numbness

- Mental symptoms: confusion, disorientation, unwanted memories, decreased concentration
- Physical symptoms: bodily injury, muscular tension, fatigue, edginess, change in sleep and appetite, gastrointestinal problems, racing heart, bodily aches and pains

Long-term consequences of severe stress can be complex and severe, including marked interpersonal changes such as apathy, anger, and isolation.

Traumatic Events Civilians Experience During War

Typically when we think about being exposed to traumatic events during a war, we think about what soldiers experience (e.g., being fired upon, becoming a prisoner of war, sustaining an injury, or witnessing serious injury or death). However, civilians who are not directly involved in the war effort are also frequently confronted with war related stressors. Some typical civilian stressors include life threat; being bombed, shot at, threatened, or displaced; being confined to one's home; losing a loved one or family member; suffering from financial hardships; and having restricted access to resources such as food, water, and other supplies. Particularly horrific stressors experienced by some civilians during war include torture, beatings, rape, forced labor, witnessing sexual abuse of or violence toward a family member, and mock execution.

Effects of War-zone Stressors on Civilians

Most of the research on the effects of war on civilians has been conducted on refugee samples and people who were displaced as a result of war. Compared to other war-exposed civilians, these individuals' experiences may be more traumatic not only because of the situations that led to their exile but also because of stressors experienced in refugee camps and during the process of resettlement. In general, refugees exhibit high rates of PTSD and depression as well as other psychiatric problems, particularly if they were tortured (de Jong, Scholte, Koeter, & Hart, 2000). For example, in a survey of Bosnians from a refugee camp in Croatia who experienced on average more than six traumatic events, approximately one third had depression and one quarter had PTSD. Twenty percent met criteria for both disorders. Refugees with both depression and PTSD were five times more likely to report being physically disabled than refugees with no psychiatric symptoms (Mollica et al., 1999).

PTSD and other problems are prevalent in non-refugee samples as well. A study reported on PTSD in survivors of war or mass violence in four low-income countries (de Jong, et al., 2001). Rates of PTSD were 37.4% in Algeria, 28.4% in Cambodia, 17.8% in Gaza, and 15.8% in Ethiopia. These rates are considerably higher than the U.S. rate of 8% PTSD level among survivors of mass trauma (Kessler, Sonnega, Bromet, & Nelson,

1995). One suggested explanation for the significantly higher rate in Algeria is that the terrorist attacks were still ongoing when PTSD was assessed. Overall, several risk factors for PTSD were identified, including torture and the experience of trauma after the age of 12. Results from studies of refugees and impoverished countries may be difficult to generalize to Western cultures. However, findings from more industrialized settings such as Israel and Lebanon may be more relevant. Studies from the Gulf War suggest that, during the early weeks of the war, there was a marked rise in stress for people of all ages. However, the stress level dropped off within a few weeks (Milgram, 1994). Data were collected on all casualties that arrived in the emergency departments of 12 local hospitals after actual missile attacks and false alarms. Almost 75% of admissions were for stress reactions or unjustified atropine (poisonous drug used to relieve spasm) injections. The highest number of psychological casualties occurred during the first two missile attacks, after which the numbers declined (Bleich, Dycian, Koslowsky, Solomon, & Weiner, 1992). Another study found that while approximately half of the participants in a study sample reported sleep problems during the war, there was significant improvement 30 days after the war ended (Askenasy & Lewin, 1996). Similar results were found in a study following the 1982 Lebanon-Israel war. Almost 12,000 Israelis (civilians) were interviewed regarding their mood on eleven different occasions between 1979 and 1984. Outbreak of war coincided

with an increase in depression. Incidence of depressed moods peaked at the time of the Palestinian massacre at the Sabra and Shatilla refugee camps in Lebanon, and then it dropped below baseline even though conflict continued. Thus, many civilians respond to prolonged war with various stress symptoms, but as time passes people seem to recover and stress levels return to normal (Askenasy & Lewin, 1996).

Long-term Effects for Civilians Exposed to War Stress

Although most civilians who are exposed to war stress will not develop long-term mental-health problems, some will, particularly if they have been exposed to severe stressors. Much research on this topic has been conducted with Holocaust survivors. In a study of 124 Jewish Holocaust survivors, 46% met criteria for PTSD. In a community sample of Israelis age 75 and older, 27% of male and 18% of female Holocaust survivors met criteria for PTSD as compared to 4% percent of males and 8% of females who did not experience the Holocaust (Landau & Litwin, 2000). These statistics make it clear that PTSD symptoms will persist throughout Holocaust survivors' lifetimes. Similarly, data from a long-term follow-up study of civilians in Holland 50 years after World War II indicate that 4% of the population exposed to a war related event has PTSD. Only 1.5% of nonexposed individuals in this same category have PTSD (Bramsen & van der Ploeg, 1999).

Physical Health Problems Associated with Exposure to War

There is accumulating evidence that PTSD is associated with long-term physical health problems. In terms of research on civilians exposed to war, there is evidence from an epidemiological study of civilians in Beirut that exposure to war events is associated with higher mortality rates. Men exposed to five or more traumas were more than twice as likely to die sooner than non-exposed men while women exposed to five or more traumas were almost three and a half times as likely to die earlier than non-exposed women (Sibai, Fletcher, & Armenian, 2001). In a previous study on heart disease and wartime stressors, it was found that people with heart disease were five times more likely to have crossed the "green-line" (demarcation lines that divide the capital of Beirut into two sectors and separate the belligerent parties) than patients without heart disease. This suggests that there is a relationship between heart disease and wartime stress (Sibai, Armenian, & Alam, 1989). There is also evidence that war may affect the immune system, as evidenced by a sample of displaced women from Croatia who had altered psychological, hormonal, and immunological activity (Sabioncello et al., 2000). Most research on the effects of prolonged stress on civilians has been carried out on adult samples. The literature suggests that children are also affected but that the majority will not suffer from long-term consequences. Following the period of SCUD missile attacks on Israel during the Gulf War, children ages 10-15 were asked to describe what

they thought life would be like for children their age next year. Their dominant perception was positive (73%), although children who reported greater postwar reactions held more pessimistic views (Schwarzwald, Weisenberg, Soloman, & Waysman, 1997). Several months after the war, children ages 10-15 reported that they were more concerned about traffic accidents, relations with friends, and their studies than about missile attacks (Greenbaum, Erlich, & Toubiana, 1993). A one-year follow-up of children showed that high school students from high-risk areas reported no war symptoms except sensitivity to loud noises, which was reported by about one out of five children (Klingman, 1995).

As is the case with adults, children living in refugee camps experienced more psychological problems than non-refugee children (Paardekooper, de Jong, & Herman, 1999).

Impact-phase

Most people respond appropriately during the impact of a disaster, they react to protect their own lives and the lives of others. This is a natural and basic reaction. A range of such behaviors can occur, and these may also need to be dealt with and understood in the post disaster period. After the fact, people may judge their actions during the disaster as not having fulfilled their own or others' expectations of themselves. During the impact phase, some people respond in a way that is disorganized and stunned, and they may not be able to respond appropriately to protect themselves. Such disorganized or apathetic behavior may be

transient or may extend into the post disaster period, so that people may be found wandering helpless in the devastation afterwards. These reactions may reflect cognitive distortions in response to the severe disaster stressors and may for some indicate a level of dissociation.

Several stressors may occur during impact, which may subsequently have consequences for the person:

- Threat to life and encounter with death
- Feelings of helplessness and powerlessness
- Loss (e.g., loved ones, home, possessions)
- Dislocation (i.e., separation from loved ones, home, familiar settings, neighborhood, community)
- Feeling responsible (e.g., feeling as though could have done more)
- Inescapable horror (e.g., being trapped or tortured)
- Human malevolence (It is particularly difficult to cope with a disaster if it is seen as the result of deliberate human actions.)

The different stressors and their intensity affect the response of a person during the impact phase of a disaster. When a person is faced with traumatic stressors, their own self expectations, their cognitive schema, and judgment of their actions is revealed in their response to the stressors.

Immediate Post Disaster Phase: Recoil and Rescue

This is the phase where there is recoil from the impact and the initial rescue activities commence. Initial mental-health effects may appear (e.g., people show confusion, are stunned, or demonstrate high anxiety levels). Emotional reactions will be variable and depend on the individual's perceptions and experience of the different stressor elements noted earlier. Necessary activities of the rescue phase may delay these reactions, and they may appear more as the recovery processes get under way.

Reactions may include:

- Numbness
- Denial or shock
- Flashbacks and nightmares
- Grief reactions to loss
- Anger
- Despair
- Sadness
- Hopelessness

Conversely, relief and survival may lead to feelings of elation, which may be difficult to accept in the face of the destruction the disaster has wrought.

PTSD Among Youth and Children

A study that documented a relation between exposure to crime and violence and distress symptoms done by Fitzpatrick and Boldizar (1993) involved a sample of not only children but also adolescents. Specifically, participants were low-income African-American youth (ages = 7 to 18 years; N = 221) who were involved in a federally funded summer camp program within a large, southern central city. More than 70% of the children and adolescents reported being victims of at least one violent act. Similar to Richters and Martinez (1993), participants were more likely to have witnessed violence than to have been victimized themselves, with close to 85% having witnessed at least one violent act and 43.4% having witnessed a murder. In addition, of those who had been exposed either as a witness or a victim, 89% met at least one of the DSM III-R criteria for PTSD, with the average number of symptoms being five. Boys reported significantly more exposure to violence than girls, but girls reported more PTSD symptoms than boys.

In a study by Jenkins & Bell (1994), 203 African American students (ages = 13 to 18 years) from a public high school on Chicago's south side in a high violent crime district were assessed on exposure to crime and violence. Almost two-thirds of the youth indicated that they had seen a shooting and almost one-half had been shot at themselves. Forty-five percent reported that they had seen someone killed. Of those who had

witnessed severe violence, 36% reported that the victim was a friend and 34% reported that the victim was a family member. Although being personally victimized was similarly correlated with psychological distress symptoms for boys (r=.25) and girls (r=.22), witnessing violence was more highly correlated with psychological distress symptoms for girls (r=.33) than boys (r=-.07). Overall, girls reported more distress symptoms than boys, and boys reported more high risk behaviors (e.g., weapon carrying, substance use, and fighting) than girls.

A survey by Schwab-Stone et al. (1995) was designed to assess positive school and community involvement as well as high risk behaviors in large sample of youth (N=2,248; sixth, eight, and tenth graders) in New Haven, Connecticut. Of particular relevance to this present research are the students' responses to the question: "During the past year, how many times have you seen someone get shot or stabbed?" In addition this question, four questions about feelings of personal safety. To the question about exposure to violence, more than 40% of the youth reported exposure to a shooting or stabbing in the past year. To the questions about feelings of personal safety, 74% reported feeling unsafe in one or more common settings (e.g., home, neighborhood, school). Exposure to violence was found to be associated with increased willingness to use physical aggression, diminished perception of risk, lowered personal expectations for the future, dysphoric mood, antisocial activity, alcohol use, and diminished academic achievement.

Kliewer, Lepore, Oskin, and Johnson (1998) reported that among 99 children (ages = 8 to 12 years; 96% African-American) who lived in high crime and violence areas in Richmond, Virginia. Results showed that 88% of the children had heard gunfire near home, 25% had seen someone shot, and 17% had seen someone killed. Based on children's and parents' ratings on several questionnaires, exposure to community violence was found to be significantly associated with internalizing symptoms of depression and anxiety.

Social support also was assessed in this study and was found to be inversely related to levels of internalizing symptoms of depression and anxiety, and to moderate the relation between violence exposure and intrusive thoughts.

As a result of exposure to trauma, many youth show symptoms of disorders other than PTSD, such as depression, anxiety, antisocial behavior, substance abuse, failure to thrive, among others.

Responses of Disaster Victims in Other Cultures

Whereas physical health risks and injuries sustained as the result of a disaster are generally similar across cultures, the psychological responses to disasters, loss and surrounding stressors tend to be different among cultures (Lechat, 1990). PTSD, depression and anxiety appear to be the most common reactions to severe crises and disasters.

There are a number of clinical and epidemiological studies of natural and man-made disasters in various countries. Studies of victims and survivors of disasters provide data about these responses. de la Fuente's (1990) study on the psychological impact of the 1985 Mexican earthquakes reported that 32% of the victims displayed PTSD, 19% had generalized anxiety and 13% had depression.

Zhang & Zhang (1991) examined the long-term psychological effects of the 1976 Tangshan earthquake in China. Results suggested the presence of long-term psychological effects. The authors suggest that the after-effects of earthquakes should be considered not only as physical disasters, but also with reference to the psychological shock caused by the earthquake.

In a study exploring the role of primary care workers in providing mental health services to adult victims following a volcanic eruption in Armero (Colombia) and earthquakes in Imbabura (Ecuador), Lima et al (1990) found that twelve months following the disaster results showed the frequency of emotional disorders among disaster victims was proportional to the magnitude of the catastrophe. Victims from different disasters showed similar profiles. Lima and Pai (1992-1993) summarized the findings of the Colombian and Ecuadorian projects. A high prevalence of emotional distress was reported at the baseline surveys (55%-40%). This was 3-4 times greater than the rates seen in ordinary

clinical situations. This distress corresponded to well-defined psychiatric disorders, mostly PTSD and major depression.

Joh (1997) studied disaster stress resulting from the 1995 Kobe earthquake in Japan. He examined the mental and physical stress disorders among 748 victims (aged 4-88) in the first month after the earthquake. These were analyzed according to refugee conditions, gender, age/generation, and degree of housing damage. Results showed that:

1. people sheltered in public or private shelters felt more severe stress than people sheltered in other places;
2. women in their sixties felt more severe mental and physical stress than other people;
3. victims suffering completely collapsed housing and partially collapsed housing had higher stress degrees than the victims in housing needing repairs.

Guarnaccia (1993), in the first community based study of ataques de nervios (attacks of nerves), discussed the issue of categorizing it as a culture-bound syndrome. He conducted a psychiatric epidemiology survey using 912 subjects between the ages of 17-68 in Puerto Rico. This study was performed in 1987 to measure the psychosocial effects of a disaster (earthquake) which occurred on the island in 1985. Guarnaccia identified stressful situations surrounding ataques. They

were correlated with other psychiatric diagnoses and it was found that subjects who reported ataques de nervios were more likely to meet criteria for depression, dysthymia, generalized anxiety disorder, panic disorder, and PTSD. Guarnaccia suggests that the term "popular illness" is a better descriptive term for the syndrome than is "culture-bound syndrome".

In summary, it appears that the most common symptoms displayed across the cultures sampled in the above studies of victims of various disasters were those associated with the diagnoses of depression, anxiety and PTSD. They manifest themselves in different ways within cultures, but the symptoms tend to fit the general diagnostic criteria for depression, anxiety disorders and PTSD.

Biological consequences associated with PTSD

PTSD is associated with a number of distinctive neurobiological and physiological changes. PTSD may be associated with stable neurobiological alterations in both the central and autonomic nervous systems, such as altered brainwave activity, decreased volume of the hippocampus, and abnormal activation of the amygdala. Both the hippocampus and the amygdala are involved in the processing and integration of memory. The amygdala has also been found to be involved in coordinating the body's fear response. Psychophysiological alterations associated with PTSD include hyper-arousal of the

sympathetic nervous system, increased sensitivity of the startle reflex, and sleep abnormalities. People with PTSD tend to have abnormal levels of key hormones involved in the body's response to stress. Thyroid function also seems to be enhanced in people with PTSD. Some studies have shown that cortisol levels in those with PTSD are lower than normal and epinephrine and norepinephrine levels are higher than normal. An important finding is that the neurohormonal changes seen in PTSD are distinct from, and actually opposite to, those seen in major depression. The distinctive profile associated with PTSD is also seen in individuals who have both PTSD and depression (Kolb, LC, 1987). PTSD is associated with the increased likelihood of co-occurring psychiatric disorders. In a large-scale study, 88 percent of men and 79 percent of women with PTSD met criteria for another psychiatric disorder. The co-occurring disorders most prevalent for men with PTSD were alcohol abuse or dependence (51.9 percent), major depressive episodes (47.9 percent), conduct disorders (43.3 percent), and drug abuse and dependence (34.5 percent). The disorders most frequently comorbid with PTSD among women were major depressive disorders (48.5 percent), simple phobias (29 percent), social phobias (28.4 percent), and alcohol abuse/dependence (27.9 percent). PTSD also significantly impacts psychosocial functioning, independent of comorbid conditions. For instance, Vietnam veterans with PTSD were found to have profound and pervasive problems in their daily lives. These

included problems in family and other interpersonal relationships, problems with employment, and involvement with the criminal justice system. Headaches, gastrointestinal complaints, immune system problems, dizziness, chest pain, and discomfort in other parts of the body are common in people with PTSD. Often, medical doctors treat the symptoms without being aware that they stem from PTSD (Litz, BT, Keane, T.M., 1989).

For more than a century, ever since people's responses to overwhelming experiences were first systematically explored, it has been noted that the psychological effects of trauma are expressed as changes in the biological stress response (van der Kolk, BA, van der Hart, O, 1991). In 1889, Pierre Janet, postulated that intense emotional reactions make events traumatic by interfering with the integration of the experience into existing memory schemes. Intense emotions, Janet thought, cause memories of particular events to be dissociated from consciousness, and to be stored, instead, as visceral sensations (anxiety and panic), or as visual images (nightmares and flashbacks). Janet also observed that traumatized patients seemed to react to reminders of the trauma with emergency responses that had been relevant to the original threat, but that had no bearing on current experience. He noted that victims had trouble learning from experience: unable to put the trauma behind them, their energies were absorbed by keeping their emotions under control at the expense of paying attention to current exigencies. They became

fixated upon the past, in some cases by being obsessed with the trauma, but more often by behaving and feeling like they were traumatized over and over again without being able to locate the origins of these feelings (Grinker, R., Speigel, J., 1995).

Therefore, trauma does have a long term effect on a person. On the mental health level, it affects the cognitive functioning of a person as well as their emotional wellbeing.

Symptomatology of PTSD

In an apparent attempt to compensate for chronic hyperarousal, traumatized people seem to shut down: on a behavioral level, by avoiding stimuli reminiscent of the trauma; on a psychobiological level, by emotional numbing, which extends to both trauma-related, and everyday experience. Thus, people with chronic PTSD tend to suffer from numbing of responsiveness to the environment, punctuated by intermittent hyperarousal in response to conditional traumatic stimuli. Thus, people with PTSD suffer both from generalized hyperarousal and from physiological emergency reactions to specific reminders (Litz, BT, Keane, T.M., 1989). The loss of affective modulation that is so central in PTSD may help explain the observation that traumatized people lose the capacity to utilize affect states as signals. Instead of using feelings as cues to attend to incoming information, in people with PTSD arousal is likely to precipitate flight or fight reactions. Thus, they are prone to go immediately from stimulus to response without making the necessary

psychological assessment of the meaning of what is going on. This makes them prone to freeze, or, alternatively, to overreact and intimidate others in response to minor provocations (van der Kolk, BA, Duncey, DP, 1989).

Psychophysiology

Abnormal psychophysiological responses in PTSD have been demonstrated on two different levels: 1) in response to specific reminders of the trauma and 2) in response to intense, but neutral stimuli, such as acoustic startle. The first paradigm implies heightened physiological arousal to sounds, images, and thoughts related to specific traumatic incidents. A large number of studies have confirmed that traumatized individuals respond to such stimuli with significant conditioned autonomic reactions, such as heart rate, skin conductance and blood pressure. The highly elevated physiological responses that accompany the recall of traumatic experiences that happened years, and sometimes decades before, illustrate the intensity and timelessness with which traumatic memories continue to affect current experience (Pitman, Orr, & Shavel, 1993).

Developmental Level and Psychobiological Effects of Trauma

While most studies on PTSD have been done on adults, particularly on war veterans, in recent years a small prospective literature is emerging

that documents the differential effects of trauma at various age levels. Anxiety disorders, chronic hyperarousal, and behavioral disturbances have been regularly described in traumatized children (Cole PM & Putnam, FW, 1991). In addition to the reactions to discrete, one time, traumatic incidents documented in these studies, intrafamilial abuse is increasingly recognized to produce complex post-traumatic syndromes, which involve chronic affect dysregulation, destructive behavior against self and others, learning disablities, dissociative problems, somatization, and distortions in concepts about self and others (Terr, LC., 1991). The Field Trials for DSM IV showed that these conglomerations of symptoms tended to occur together and that the severity of this syndrome was proportional to the age of onset of the trauma and its duration (Herman, JL, 1992).

Consequently, on a physical health level, trauma leaves traces of biological dysfunctions. These physical symptoms, such as gastrointestinal complaints, headaches may not be obvious reactions to exposure to trauma, yet they are as real as symptoms such as reliving the trauma and being emotionally disturbed.

COPING

Coping is defined by many professionals as a response to stress. It also refers to a person's behavioral and cognitive attempt to manage (reduce, minimize, master, or tolerate) both internal and external demands of the person. According to Folkman, Lazarus, Dunkel- Shatter, De Longis and Gruen (1986), coping is mainly of two types, regulating stressful emotions (non-cognitive) and dealing with the problem causing stress (cognitive). Coping with stress is essential for healthy functioning.

According to Seyle (cited in Barrow & Prosen, 1981), an organism responds to stressors in three different stages. First, in the alarm stage, known as the 'flight or fight' response; second comes the resistance or adaptation stage, wherein a response is initiated, bringing the individual's dominant defenses into play; third, is the exhaustion stage which usually follows resistance. This stage is characterized by the inability of the organism to cope in a stressful encounter. It is at this stage that the physical and/or psychological malfunctioning can appear. At this stage coping skills and strategies are of great value.

Coping is critical in competency/vulnerability models of child and adolescent psychopathology (Rutter, 1979; 1990). In these models, coping is viewed as a process that may serve as a protective factor that helps to buffer individuals' responses to stressful life events. Thus, exposure to crime and violence challenges the victim/witness' capacity to generate adaptive coping responses, and promotes the use of

maladaptive coping responses. These might include self-blame, anger, withdrawal, blaming others, etc., (Schepple & Bart, 1983). These maladaptive coping responses, moreover, if sufficiently intense, may facilitate the intrusive memories and avoidance reactions associated with posttraumatic stress (Resick & Schnicke, 1992), and interfere with successful emotional processing during the exposure-based exercise.

Albert Ellis states that many of us hold irrational beliefs about our own behavior and the way others treat us. We assume that we should have love and approval all the time from all people who are significant to us. We feel we must be competent, adequate, and successful all the time; and we think it is terrible when things do not go the way we want them to. Just as self- defeating logic is maladaptive form of coping, other forms of emotion focused coping, such as seeking social support, escape avoidance, expression of feelings, escapist fantasy and fatalism also fail to help individuals cope adequately with stressful situations and non-cognitive strategies (Schepple & Bart, 1983).

An important role in coping with stressful events is played through a moderating factor, approached from a functional perspective namely, cognitive coping strategies- active problem solving. When an individual employs cognitive coping strategies, problem solving strategies, it indicates that the person is constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are

appraised as taxing or exceeding the person's resources. The use of a particular coping strategy in a stressful situation and not another may, to a large extent, predict levels of stress. This notion was investigated by Gibson, Westwood, Ishiyama, and William (1991) who conducted a study in which the examined what 3820 adults (47% male; 53% female) from different socio-economic classes perceived to be their most stressful encounter and what they did to cope. Results showed that in spite of the severity of stressors, individuals who tried harder or planned for a solution (problem solving coping) were those who had low level of stress; however, individuals who suffered from the same severity and used non-cognitive coping strategies were the ones who had the high levels of stress. Holohan and Moos (1987) examined the effects of level of stress on coping styles and mental health in a longitudinal study of 50 adults. Subjects completed stress and coping measures. Findings showed that problem focused coping was employed by low stressed individuals and was more adaptive than escape avoidance (non-cognitive strategy) which high stressed individuals used as a means of coping. In accordance with this study Holohan and Moos (1987) further examined the predictors of problem focused and non-cognitive coping strategies in a community sample of over 400 adults. Results indicated that low stressed individuals were more likely to rely on problem focused coping and less likely to use avoidance coping- which was typical of high stressed individuals. In light of the studies mentioned above, there has

been evidence that high and low stressed adults employ a combination of coping strategies. Harlovic and Keenan (1991) have found that both high and low stressed adults employed a combination of cognitive and non-cognitive coping strategies. Moreover, results indicated that cognitive coping strategies were more likely to be invoked than non-cognitive ones by low stressed adults.

Coping and Family Support

Holohan and Moos (1987) assessed coping and family support as predictors to psychological adjustment to stress. Results of their study with families demonstrated that disclination to use avoidance coping, use of active-problem solving and availability of family support operate jointly as buffers against stress. However, it is of great importance that perceived social support in the absence of cognitive focused strategies could reduce levels of stress only minimally. Family support and the support of those close to the person experiencing loss plays a major role in healthy survival of stressful encounters. The contribution of home factors contribution to children's ability to cope disaster highlights the importance of caregiver communication. The explanatory value of the extent children were upset or distressed by talk about trauma at home was particularly salient. Results by Ronan (1997) supported findings that the extent to which children are able to cope with stressful events is

often dependent on communication from caregivers, initially and over time.

Firth-Cozens and Field (1991) investigated the relationship between coping strategies and death situations. In their longitudinal study of medical students in their junior year, they found high scores on measures of stress, as a result of someone close being dead, over a period of one year between the first and second administration of the scale. Assessment showed that strategies used by students to cope with patient's death showed that passive acceptance through escape avoidance and fatalism, which essentially is non-cognitive coping strategies, induce further stress. On the other hand students who employed active problem solving coping strategies were able to cope competently. Hence, it can be said that cognitive coping strategies, mainly problem solving, is of greater use in coping than other non-cognitive strategies.

Coping in Children and Adolescences

Children and adolescents are believed to be exceptionally vulnerable to the effects of trauma due to their underdeveloped cognitive coping mechanisms (Gibbs, 1989) and their reliance on adults (Atkins, 1991). In terms of perceived coping ability, adults have the advantage of incorporating skills attained through life experience and have more control over their external environment (Ryan-Wagner, 1992). In support

of this developmental progression, Atkins (1991) has shown that increased age is positively related to more active modes of coping in the face of traumatic stressors. In addition, children have less control over environmental contingencies found helpful for reducing stress compared to adults (Atkins, 1991). As a consequence of these individual and ecological factors, children are often more limited than adults in their flexibility for coping with the environment.

However, while coping style has been examined, the extent to which such factors impact upon a child's ability to cope after disaster strikes has not (Compas & Epping, 1993, cited in Vernberg et al., 1996). They may not react or attempt to cope with trauma in the same manner that adults do, yet youth and children do use coping strategies to cope with stressors. How children and youth manage to cope with stressors of trauma needs more investigation and research.

In the following study, three different strategies of coping are investigated: problem solving, seeking social support, and avoidance.

CHAPTER III

METHOD

Sample and Population

This study focuses on population of an agricultural society, based on the traditional culture of Lebanese villages. The society under study is made up of middle-low class socio economic status. In order to avoid confounding variables, the study focuses on a particular group of people, of Christian religion and Maronite sect, living in Marj-Aaioun. All the participants have lived in the South of Lebanon their whole life and have witnessed many of the happenings and results of the aggression between Lebanon and Israel during the occupation of Israeli troops in the South area of Lebanon.

The sample for this study includes 150 participants (74 male; 76 female), ages 13-19 ($\underline{x}$= 15.83). Participants are residents of a village in the South of Lebanon and attend local public schools. The English language is taught as the second language, while Arabic is the spoken language. Although, English is taught, many of the subjects studied at local public schools are learned in the Arabic language. The participants are of similar socio-economic status- mainly middle low class. This specific population was selected for the study due to the availability of sources in this particular geographic location. Considering the nature of the study

being descriptive the sample in this study is sufficient for the investigation in question.

Procedure

Permission was obtained by local public schools, who allowed the distribution of the scales/questionnaires in their school during class sessions. Participants were asked to take part in a study dealing with youth and their ways of thought. The Penn Inventory for Post Traumatic Stress Disorder (26 items) and the Coping Strategy Indicator (CSI) (33 items) were administered in classroom settings. The two scales along with a data sheet were given to each participant. Instructions were given to participants to fill out the questionnaires as accurately as possible. Students were allowed fill in the questionnaires at their own pace, but not exceeding 30 minutes. They were asked to read the questions accurately and give honest and clear answers. To ensure anonymity, participants were not required to state their names on the questionnaire.

Description of the Instruments

The instruments utilized in this study are scales which have been found to be valid and reliable instruments. Original scales are in English. For the purpose of this study, the scales were translated into Arabic to avoid any potential problems of misunderstanding.

Post-traumatic Stress Disorder Scale

The Penn Inventory for Post Traumatic Stress Disorder (1990), by Melvyn Hammarberg was used in this study. The scale is a measure of the severity of PTSD. It can be used as a screening tool in settings of high prevalence to measure the severity of PTSD. It is a self-administered scale, comprised of 26 items. Each item is comprised of four sentences. The meaning of the sentences measures the prevalence of PTSD symptoms. The degree, frequency, and intensity of symptoms of PTSD are measured as well. In scoring and interpreting the Penn Inventory uses an interval scale in relation to the DSM III-R criteria. The inventory is scored by the summing of the circled values for items 1 through 26. Where the values are letters, then A=0, B=1, C=2, D=3. The summary score ranges from 0 to 78. It measures the strength or intensity of PTSD, given the determination of a traumatic stressor event in the person's history. A cutoff score of 35 or above was used to estimate diagnostic accuracy. Research done by the author of the scale indicates that 95% of those diagnosed with PTSD were correctly identified by a Penn Inventory score of 35 or above. Also found was that 89% of those undiagnosed or diagnosed with a disorder other than PTSD had a score less that 35. The Penn Inventory has demonstrated very good reliability, with internal consistency coefficient yielding 0.92 (Hammarberg, 1992).

(See Appendix B for the Penn Inventory for Post Traumatic Stress Disorder)

Coping Strategies Scale (CSI)

The CSI, devised by James H. Amirkhan (1993) is a 33 item, 3 point self-report rating scale designed to assess three basic modes of coping (avoidance, seeking social support, & problem solving). Participants select a stressful event from their lives and briefly describe it. This event must have occurred within the past six months and must be considered important. Keeping that event in mind, participants must respond to the 33 questions. Three rating options are provided: 1. a lot; 2. a little; 3. not at all. For each response a numerical value was assigned. **A Lot** was assigned a score of 3; **A Little** was assigned a score of 2; **Not At All** was assigned a score of 1. Responses indicate whether participants cope with stress by problem solving, seeking social support, or avoiding the event. Three separate scores are obtained. The scores for each coping strategy will indicate which coping strategy is used for stressful events. Depending on which coping style each participant scored highest determines the coping strategy he/she preferred to use during a stressful situation. Items # 2, 3, 8, 9, 11, 15, 16, 17, 20, 29, 33 measure **problem-solving** coping strategy; items # 1, 5, 7, 12, 14, 19, 23, 24, 25, 31, 32 measure **seeking social support** coping strategy; items # 4, 6, 10, 13, 18, 21, 22, 26, 27, 28, 30 measure **avoidance** coping strategy. Scored are added and the score which is highest determines the preferred

coping strategy. The summary score ranges from 14 to 42. The CSI has demonstrated sufficient reliability scores. The internal consistency has yielded a value of 0.78 for problem solving strategies, 0.65 for seeking social support as a coping strategy, and 0.72 for avoidance as a coping strategy (Amirkhan, 1994) (See Appendix D for the Coping Strategies Scale)

Data Sheet

A data sheet requiring the age, religion, religious sect, and the dates of years lived in the village was attached to the questionnaires.

Hence, each participant, upon the completion of the Penn Inventory and the CSI will yield four scores:

1. **PTSD** level
2. score for **Problem solving** as a coping strategy
3. score for **seeking social support** as a coping strategy
4. score for **avoidance** as a coping strategy

CHAPTER IV

RESULTS

General data summarization and analysis of the level of PTSD, coping strategies (problem solving, seeking social support, avoidance) and their interactions will be dealt with in this chapter. In addition, the results of hypotheses testing will be reported.

Hypothesis #1 states that older youth (ages 16-19) have lower level of PTSD than younger youth (ages 13-15). To test this hypothesis, an independent group t-test was conducted on the participants' PTSD scores in the two age groups (older youth, younger youth). Results revealed a significant difference in the group mean scores, where $t = 2.64$, $df = 148$, at $p < 0.05$. Specifically, younger youth had a higher mean score on PTSD level than the older youth. In fact, the younger youth mean PTSD score exceeds that of the older youth by 4.188 points. Summary of results are presented in table 1.

Table 1

Independent Group t-test Older/Younger Age Group and PTSD level

	Mean	SD	t	Sig.
Older Youth	23.182	9.065	2.64	0.0092
Younger Youth	27.370	10.360		

A regression analysis was conducted on age and PTSD level to check the variation of age in relation to the variation in the level of PTSD. At a 95% confidence level, results showed that age and PTSD level are only slightly related. That is, age is not a strong predictor of PTSD level; for, the variation in age explains only a 3.3% of the variation in the PTSD level. The regression equation is as follows:

PTSD = 39.9696 – 0.9319 (Age)

This shows that there is a negative relation between PTSD level and age. Specifically, for every one additional year of age, the PTSD level will decrease by 0.9319 on average. This result is inline with the expectation of hypothesis #1 that older youth have a lower PTSD level than younger youth. The following table, table 2, displays results on regression analysis.

Table 2

Regression Analysis

				Change Statistics				
R	R Square	Adjusted R Square	Std. Error	R Square Change	F Change	df1	df2	Sig.
.183	.033	.027	1.91505	.033	5.104	1	148	.025

Hypothesis #2 states that older youth (ages 16-19) differ in the coping strategies they use from younger youth (ages 13-15).

In order to test the above hypothesis, a 2X3 factor analysis of variance was conducted with age (older and younger youth) and coping strategies (problem solving, seeking social support, and avoidance) being the two factors. The results obtained yielded two main effects and an interaction: Age, $F(1, 432) = 4.736188$, at $p < 0.05$ and coping, $F(2, 432) = 3.388$, at $p < 0.05$. Results of interaction between age and coping strategies was significant with $F(2, 432) = 3.37$ at $p<0.05$. These results are in line with the hypothesis stating that older youth differ from younger youth in the coping strategies they use. The table, table 3, below shows a summary of the results obtained.

Table 3

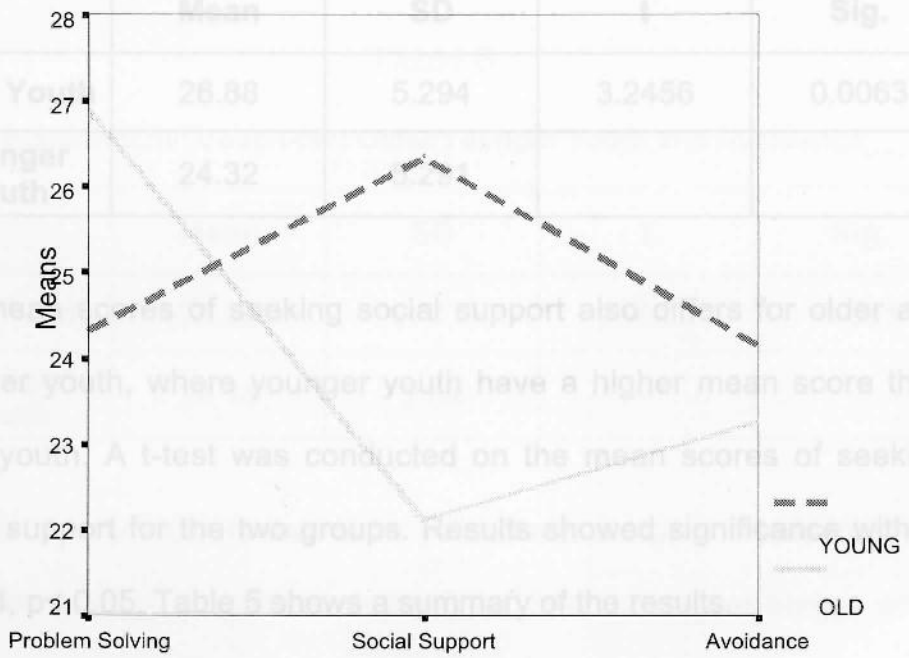
Two Factor ANOVA Summary Table for Age and Coping

Source of Variation	*SS*	*df*	*MS*	*F*	*Sig*
Age (A)	65.98174	1	65.98174	**4.736188**	0.0299
Coping (B)	163.4292	2	81.71461	**3.388613**	0.0346
A X B	17.97717	2	81.98858	**3.372746**	0.0382
Within	10417.45	432	124.1144		
Total	10664.84	437			

Mean scores for each coping strategy of younger and older youth are plotted on figure 1. This figure shows that younger youth have a higher mean score for seeking social support as their coping strategy, than the mean scores of problem solving and avoidance. Furthermore, it shows that older youth have a higher mean score for problem solving, than mean scores for seeking social support and avoidance.

Figure 1

Means of Coping Strategies for Old and Young Youth



According to figure 1, the mean scores for problem solving differ for older youth and younger youth; where, older youth have a higher mean score than older youth. A t-test was conducted on the mean scores of problem solving for the two groups. Results showed significance with t= 3.2456, $p < 0.05$. Table 4 shows a summary of the results.

Table 4

Independent Group t-test Older/Younger Youth and Problem Solving

	Mean	SD	t	Sig.
Older Youth	26.88	5.294	3.2456	0.0063
Younger Youth	24.32	5.291		

The mean scores of seeking social support also differs for older and younger youth, where younger youth have a higher mean score than older youth. A t-test was conducted on the mean scores of seeking social support for the two groups. Results showed significance with t= 5.2154, p< 0.05. Table 5 shows a summary of the results.

Table 5

Independent Group t-test Older/Younger Youth and Social Support

	Mean	SD	t	Sig.
Older Youth	22.12	3.76	5.2154	0.0051
Younger Youth	25.33	4.56		

The mean scores of avoidance also differ for older and younger youth; where younger youth have a higher mean score than older youth. A t-test was conducted on the mean scores of avoidance for the two groups.

Results showed no significance with t= 2.0230. Table 6 shows a summary of the results.

Table 6

Independent Group t-test Older/Younger Youth and Avoidance

	Mean	SD	t	Sig.
Older Youth	23.25	2.478	2.0230	0.061
Younger Youth	24.14	2.04		

Results clearly indicate that older youth have a higher mean score for problem solving (cognitive method) as their coping strategy, while younger youth have a higher mean score for seeking social support (non-cognitive method) as their coping strategy.

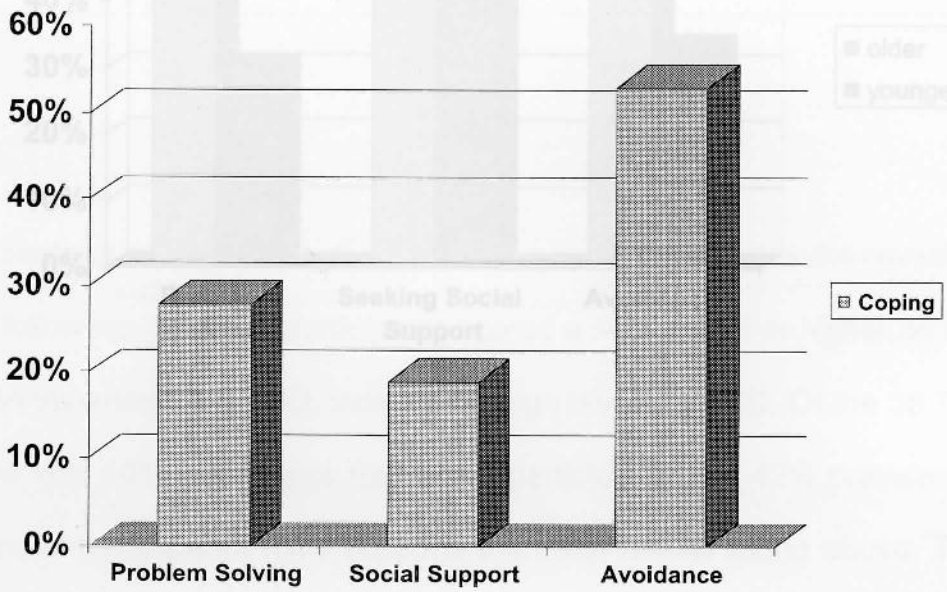
Therefore, in line with the hypothesis stated above, it can be said that older and younger youth do differ in the use of their preferred coping strategy, specifically in problem solving and seeking social support; where older youth prefer problem solving and younger youth prefer seeking social support.

Percentage of prevalence of each coping strategy for all the participants was calculated and the following results were obtained: 28% of participants preferred problem solving as their coping strategy, 19% preferred seeking social support as their preferred coping strategy, and

53% preferred avoidance as their coping strategy. The following chart, chart 1, presents the proportions.

Chart 1

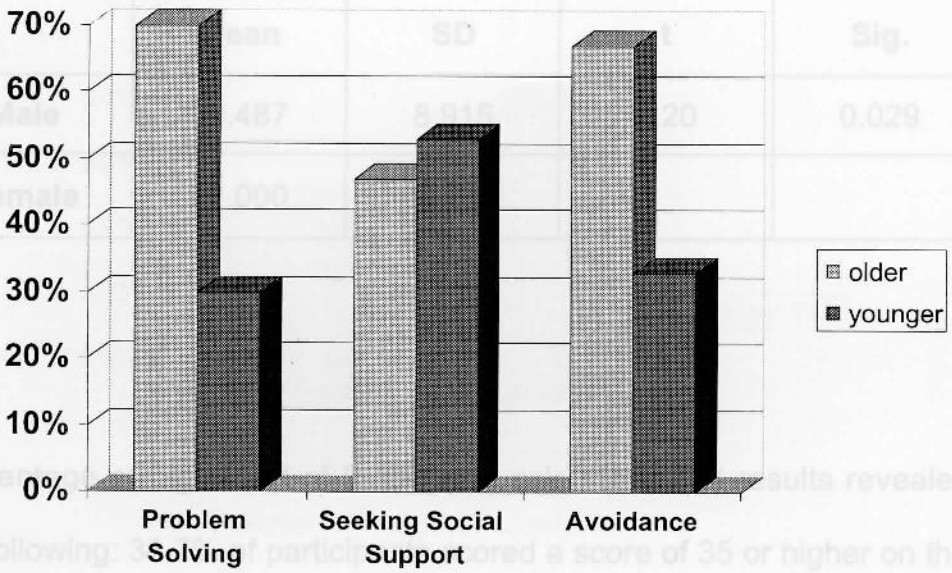
Percentage of Coping Strategies



Among the 53% who preferred avoidance, 67% were younger youth (13-15) and 33% were older youth (16-19). Among the 19% who preferred seeking social support as their coping strategy, 53% belonged to the younger youth and 47% belong to the older youth. Among the 28% who preferred problem solving as their preferred coping strategy, 30% belonged to the younger youth and 70% belonged to the older youth. The following chart, chart 2 summarizes the results.

Chart 2

Percentages of Age and Coping Strategy



Hypothesis # 3 states that female participants have a higher PTSD level than male participants. In order to test the hypothesis mentioned, an independent group T-test was conducted on gender (Male, Female) and PTSD level. With a 95% confidence level with t= 2.199, df= 148, enough evidence has been found to state that the female PTSD level is higher than the male PTSD level by 3.513 points on average. Summary of results are presented in table 7.

Table 7

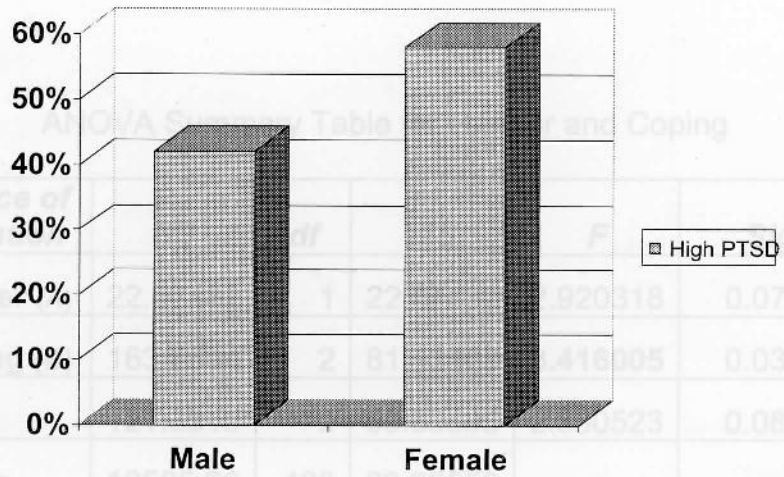
Independent Group t-test Gender and PTSD level

	Mean	SD	t	Sig.
Male	23.487	8.915	2.20	0.029
Female	27.000	10.602		

Percentage of high level of PTSD was calculated and results revealed the following: 38.7% of participants scored a score of 35 or higher on the Penn Inventory for PTSD, indicated a high level of PTSD. Of the 38.7%, there was 58% prevalence for female participants and 42% prevalence for male participants. This supports the t-test results found above. The following chart, chart 3, presents the ratios. Results are in line with the hypothesis, that female participants have a higher PTSD level than male participants.

Chart 3

Percentage of high PTSD level



Hypothesis # 4 states that there is a difference in coping strategies and gender. In order to test this hypothesis, a 2 x 3 factor analysis of variance was conducted to investigate the interaction of the means of the use of different coping strategies (problem solving, seeking social support, avoidance) by different genders (male, female). Results obtained yielded the following:

Gender, $F(1, 438) = 2.9074$ has no significant value and coping, $F(2, 438) = 3.416005$, is significant at $p < 0.05$. There is no significant interaction between coping and gender. Table 8 shows a summary of the results.

Table 8

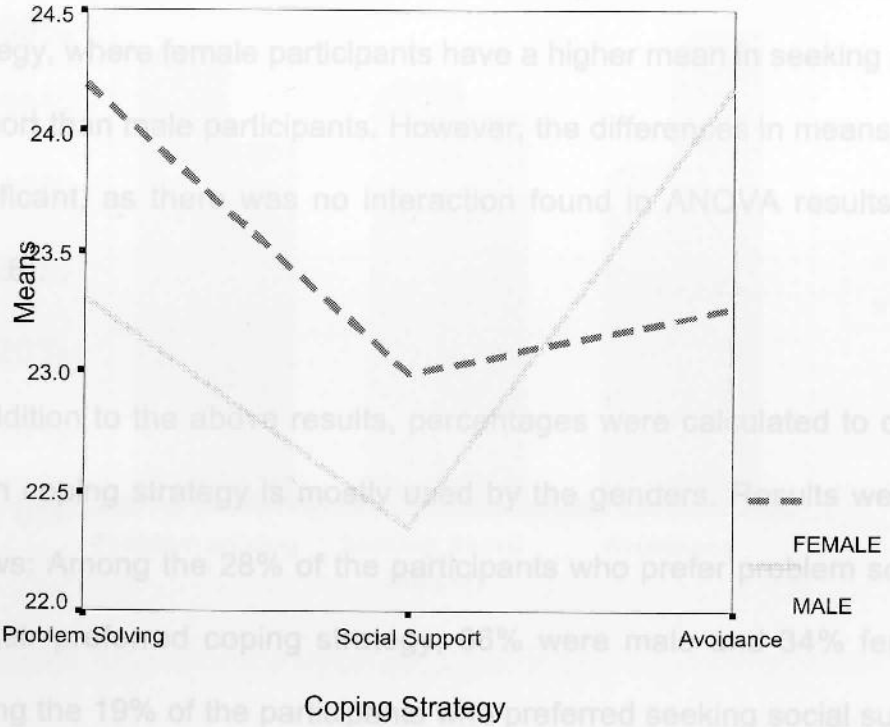
ANOVA Summary Table for Gender and Coping

Source of Variation	*SS*	*df*	*MS*	*F*	*Sig.*
Gender (A)	22.07432	1	22.07432	2.920318	0.0784
Coping (B)	163.8694	2	81.93468	**3.416005**	0.0337
A X B	121.3919	2	60.69595	2.530523	0.0807
Within	10505.66	438	23.98553		
Total	10813	443			

Means of scores for each coping strategy was calculated for male and female participants. Figure 2 shows the mean scores of coping strategies of male and female participants.

Figure 2

Means of Coping Strategies for Male and Female Participants



This figure shows that female participants have a higher mean score for problem solving as their coping strategy, than the mean scores of seeking social support and avoidance. Furthermore, it shows that male participants have a higher mean score for avoidance, than mean scores for seeking social support and avoidance (see figure 2).

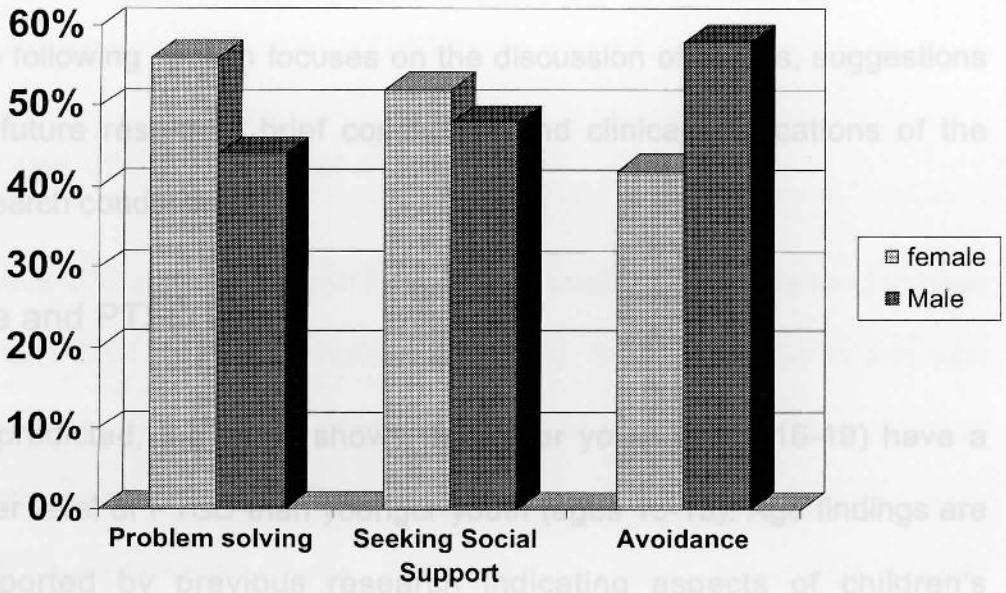
According to the mean scores, female participants have a higher mean in problem solving than male participants; whereas, male participants have a higher mean score in avoidance than female participants.

There is also a difference in means of seeking social support as a coping strategy, where female participants have a higher mean in seeking social support than male participants. However, the differences in means is no significant, as there was no interaction found in ANOVA results (see table 6).

In addition to the above results, percentages were calculated to detect which coping strategy is mostly used by the genders. Results were as follows: Among the 28% of the participants who prefer problem solving as their preferred coping strategy, 66% were male and 34% female. Among the 19% of the participants who preferred seeking social support as a coping strategy, 42% were male and 58% female. Among the 53% of participants who preferred avoidance as a coping strategy, 58% were male and 42% female. The following chart, chart 4, is a summary of the percentages.

Chart 4

Percentage of Gender and Coping Strategies



CHAPTER V

DISCUSSION

The following section focuses on the discussion of results, suggestions for future research, brief conclusion and clinical implications of the research conducted.

Age and PTSD level

As predicted, the study shows that older youth (ages 16-19) have a lower level of PTSD than younger youth (ages 13-15). Age findings are supported by previous research indicating aspects of children's responses to stressful events are impacted on by developmental level (Atkins, 1991). Older youth are more developed cognitively and can handle and understand chaotic situations more than younger youth, who are still more reliant on others for explanation and help. Lonigan et al. (1994) have shown that younger children are more likely to develop PTSD symptoms following a disaster. Pre-school aged children are reported to show lower levels of global psychological distress than older children, but a higher incidence of specific behavioral disturbance (e.g., instances of acting out). Younger children apparently are also more impacted by caretakers' reactions to the traumatic event. School-aged children typically begin to show the emergence of traditional PTSD symptoms: trauma-specific fears and anxieties, somatic concerns, sleep

disturbance and school problems, very possibly as a result of increased ability to understand the traumatic event (Green et al., 1991). That is age appears to impact on children's ability to cope and deal with stress following trauma.

Gender and PTSD level

Results in this study showed further that female participants tend to have higher PTSD level than male participants. Such results is in line with research by Richters and Martinez (1993) who stated that boys reported significantly more exposure to violence than girls, but girls reported more PTSD symptoms than boys. Jenkins & Bell (1994), found that, overall, girls reported more distress symptoms than boys, and boys reported more high risk behaviors (e.g., weapon carrying, substance use, and fighting) than girls.

Statistical findings in this study also noted that 38.7% of all participants do have high PTSD level. The inventory sets a cutoff point of 35 to indicate low or high PTSD level. Therefore, those who have scored 35 or higher on the Penn Inventory have a high level of PTSD. Among the 38.7 % participants who have a high score of PTSD level, 58% are female and 42% are male. That is to say, more female participants have a higher level of PTSD than male participants, which supports results obtained in line with hypothesis 1. Kessler, R. et al. (1995) found that among the American population who have undergone trauma, there is a

5% prevalence of PTSD in men and a 10% prevalence of PTSD in women. The overall occurrence of PTSD among American population who have encountered trauma is 8%. However other studies conducted in other parts of the world, yield different results. For example, de Long et al. estimated that PTSD rates in Algeria yield 37.4%; in Cambodia, 28.4%, in Gaza 17.8%. Gaza, in particular, is the site of many traumatic events where people are exposed to high rate of violence. The PSTD prevalence being 17.8% indeed constitutes a large portion of the population. It is also important to note that the findings in this present research were based on a population sample of N=150 participants. Finding that 38.7% of the sample has high PTSD level is quite considerable. This is a significantly high rate compared to prevalence rates in other areas of the world. This means that there is a noticeably large number of people who are suffering from PTSD in South Lebanon. Therefore, the prevalence of PTSD changes, depending on the severity of the trauma, and the cultural views of the trauma.

Coping and Age

Results obtained showed that there is a significant difference between age and coping strategies used. It was found that older youth have a higher mean score for problem solving, while younger youth have a higher mean score for seeking social support as their preferred coping strategy. Results also showed that among those who scored high on

avoidance as their preferred coping strategy, 67% were of the younger youth (ages 13-15) and 33% were of the older youth (ages 16-19); among those who scored high on seeking social support as their preferred coping strategy, 63% were of the younger youth and 37% were of the older youth; whereas, results for problem solving as a preferred coping strategy showed that 70% the older youth prefer this strategy while only 30% the younger youth prefer problem solving. The results show that, as predicted, younger and older youth differ in their use of coping strategies when faced with a stressor. Age is a factor when it comes to the use of different coping strategies. Younger youth tend to use non-cognitive coping strategies (seeking social support and avoidance), while older youth have a tendency to use cognitive strategies (problem seeking). Atkins (1991) has shown that increased age is positively related to more active modes of coping in the face of traumatic stressors. In addition, children have less control over environmental contingencies found helpful for reducing stress compared to adults. As a consequence of these individual and ecological factors, children are often more limited than adults in the flexibility afforded them for coping with their environment (Atkins, 1991).According to Gibbs (1989) younger youth are still developing in their cognitive coping mechanisms. Atkins (1991) also mentions that young adolescents are more reliant on others, mainly adults, who have an advantage having

better developed coping strategies and also have the advantage of having control over certain external environment.

Coping is critical in competency/vulnerability models of child and adolescent psychopathology (Rutter, 1990). In these models, coping is viewed as a process that may serve as a protective factor that helps to buffer individuals' responses to stressful life events. Research by Vernberg et al. (1996) has shown that children may have a continued preoccupation with a traumatic event(s) that may last for periods up to one year or more. Theory has additionally suggested that in the absence of effective coping, the meaning and impact of traumatic events may continue to play a role in the personality and psychological development of children (Vernberg et al., 1996).

The results obtained in this study are inline with previous research done on the coping strategies of younger and older youth.

Coping Strategies and their Prevalence

Interesting to discover was that 53% of participants in this study scored higher on avoidance (non-cognitive method) as their preferred coping strategy as opposed to problem solving or seeking social support. Findings also show that 28% of the participants scored high on problem solving (cognitive method) as their preferred coping strategy as opposed to seeking social support or avoidance. Based upon personal observation, culture plays a major role in coping strategies. Culturally,

the Lebanese have a different way of dealing with problems, trauma, and conflict than Western cultures. When conflict arises between two parties, it is the tendency to avoid further conflict. Instead of reasonably confronting one another, each party tends to avoid speaking about the issue at hand with the other party. However, they do talk about it with others. Confronting is viewed as rude and insolent. There is a social persona that has to be kept. People avoid confrontation unless there is a very fundamental issue at hand. Unless the issue is very important to one of the parties involved, such as a matter of pride, then confrontation is not likely to happen.

Hence, avoidance as a means of dealing with an issue is most often the case. Clearly, the present study reflects this tendency faithfully.

As mentioned earlier, village life in Lebanon is a closely knit one. The extended family is central in the lives of the people. Social life is of great importance. A person's family, nuclear and extended, along with friends and neighbors constitutes a significant part of their lives. Social support is not something they have to seek and look for, it is a part of the culture to be supportive to others during traumatic events. Therefore, it is of no surprise that only 19% of the participants in this study scored higher on seeking social support as their preferred coping strategy as opposed to problem solving and avoidance. Support is already there, they have no need to search for it. Everyone feels it is their social and moral duty to support an individual or a family who is in crisis. During hard times,

people gel together. It is also important to mention here (see introduction) that families who have lost a member have full support from the whole village.

Mourning as a Coping Strategy

As mentioned earlier, the society as a whole mourns the death of village members. Cultural beliefs can be resourceful in providing support for grieving families. Across cultures, people differ in what they believe and understand about life and death, what they feel, what elicits those feelings, the perceived implications of those feelings, the ways they express those feelings, the appropriateness of certain feelings, and the techniques for dealing with feelings that cannot be directly expressed. Historical studies have shown how individuals in western culture have mourned differently over time (Rubin, 1990). A cross-cultural perspective shows an infinite variety in people's responses to death, in how they mourn, and in the nature of their internalization of the lost object. Rather than being process-oriented, mourning is seen as an adaptive response to specific task demands arising from loss that must be dealt with regardless of individual, culture, or historical era. The primary mental health benefits of ritual are closely tied to the relational aspects of the ritual process. These act to validate and encourage the healthy expression of a wide range of human emotions. Rubin (1990) states that religious ceremony and ritual functions mitigate anxiety and deal

effectively with other problematic emotional states. Religious rites have a cathartic effect as emotions are released and expressed through attachment and connection to significant others. Rubin (1990) suggests that ritual can be used to assist individuals to move from a maladaptive to an adaptive style of grieving.

Family Support and Coping

The present study, as mentioned above, has found that younger youth tend to seek more social support in order to cope with stress than older youth. This result falls inline with research done by Atkins (1991) which states that the contribution of home factors contribution to youth's ability to cope highlights the importance of caregiver communication. The explanatory value of the extent youth were upset or distressed by talk about the volcano disaster at home was particularly salient. Results supported previous findings that the extent to which children are able to cope with stressful events is often dependent on communication from caregivers, initially and over time (Atkins, 1991; Vernberg et al., 1996). Holohan and Moos (1987) assessed coping and family support as predictors to psychological adjustment to stress. Declination to use avoidance coping, use of active-problem solving and availability of family support operate jointly as buffers against stress.

Hence, it can be concluded that sufficient social support and effective family communication about the stressful event is crucial in affective coping with stress and trauma.

Coping and Gender

Based on the results of this study, scores coping strategies and gender differences were analyzed. Two by three factor ANOVA results showed that there is a significant result in the preference of coping strategies, yet no significant result was found in the interaction of gender and coping strategies used. Findings show that 56% of those who preferred problem solving as their coping strategy were male and 44% female. Furthermore, 52% of those who preferred seeking social support as their coping strategy were female and 48% were male. Where, 58% of those who preferred avoidance as their coping strategy were female and 42% were male.

The mean scores of coping strategies showed that female participants had a higher mean score in problem solving, than in seeking social support or avoidance. It also showed that female participants had a higher mean score than male participants on problem solving. This does not indicate the number of female or male participants who prefer problem solving over other coping strategies.

Consequently, male participants had a higher mean score of avoidance as a coping strategy, than problem solving or seeking social support. This, also, does not indicate the number of male participants who prefer avoidance as their coping strategy.

There is a difference in coping strategies used by males and females. Males and females tend to have different cognitive schemas and do have different views about issues. Although, no significance was found in this study, there does seem to be some notion that there are differences in coping strategies used by males and females.

Psychosocial Development of Youth

Many psychologists and personality theories have dealt with the developmental stages of life, in particular during the adolescent years. These years are very important in a person's life. The seven years constituting the teenage years are among the most crucial years, which determine the course of a person's future in many ways. A person goes through critical stages during these years. Many questions are asked by teenagers and how they find the answers and what answers they find to these questions determines the kind of person he/she will become as an adult.

A sense of identity and belonging is formed during these years. Youth are in the process of developing their identity and usually like to join into

a group (church group, clubs, etc...) where they feel they belong and are accepted by those around them. In addition to this, their self-esteem is being formed and they are learning more about who they are or are not.

Youth ask questions such as: "Who am I?" "Why am I here?" "What difference do I make in this world? In this society I am a part of?" Other issues are dealt with during this age too, such as, what career choice will they make, who they will marry, how they will make an honest living, and such. Perhaps many may not ask these questions out loud or even ask all these posed questions, yet these issues occupy a large part of their thoughts.

Social life also changes, as youth become less dependant on their parents. They have more freedom to go around without the supervision of a parent or adult. They spend time with friends, who can influence them in the right or wrong way. Peers play an important role in their lives. It is also during this stage where teenagers form their beliefs and values, often mimicking their parents, yet also forming their personal ones. They have a longing to find the meaning to life and seek to be loved by those around them, especially their peers.

Physically, they go through major bodily changes as they hit puberty. They begin to look like adults on the outside, yet they are not full adults, yet. Hence, it is during these years that a person really learns how to

solve problems constructively and pick up coping skills that will aid them during stressful events or traumas.

In a study conducted by Hanis and Szyjakowski (1990), the effectiveness of a cognitive intervention to help adolescents cope with stress was investigated. The youth who received training showed significant reductions in levels of stress and anger, improvement in self-esteem, and an increase in the number of reported positive cognitions. Hence, it can be said that having the right coping strategies can enhance one's self-esteem.

Clearly, this study has shown that there is a considerably high level of PTSD among youth in South Lebanon. Studies done by Monahon (1997) indicate that youth react to stress and trauma in different ways. As a result of trauma, some youth may become very self-consciousness and have low level of self-esteem, while others may express rebellion at home or school, abrupt shift in relationships or may show substantial decline in school performance. Adolescents tend to react in different manners to trauma than adults do. They are at a different level psychosocially and hence, trauma affects the health and manner of their development.

With all of these changes taking place their physical, social, and psychological life in such a short time, how can they also manage to deal with the stressor of war? Adolescence itself is a stressful period in a

person's life. With added stressors and traumatic events to add on, youth in South Lebanon need all the help they can get from professionals- psychologists, educators, social workers and others.

Suggestions for Future Research

Challenge

The topic of challenge is an interesting issue to discuss. In psychological terms, the word "challenge" usually refers to an opportunity for growth, mastery, or gain (Folkman, 1984). Challenging situations are perceived by some individuals as a time for growth, yet for others it is perceived as a stress arousing situation (Barrow and Prosen, 1981). One person's threat may be another person's challenge; however, challenge itself may be stressful for some individuals. Yet, what exactly could the challenge be here? The challenge lies in the values and moral beliefs of the people. How war and trauma is viewed culturally by those in the South is of great importance. Do they take it as a challenge? Or do they view themselves as helpless victims? Along with the culture, comes honor and pride. People in the South have a great sense of honor. Their honor is of great value, especially to the men. They take pride in keeping their families safe. Their land constitutes a big part of their honor. They identify with their land and land has great sentimental value for them. Therefore, any man would see war, invasion of their land as a challenge and a cause to fight for. Being a martyr and dying for land and cause is

considered a high privilege. Families take pride in members they have lost in fight for the cause of keeping their land and most importantly, their honor. Many people have a great belief in hope for a better future. Hence, in attempt to delay gratification, they believe that they will endure the hardships of today for a better and brighter tomorrow. Loss of close family members, friends, and other goods of sentimental value suddenly carries on a new meaning. When people lose valued belongings for a cause they truly believe in, coping is seen in a new realm. Hence, to what extent did those living in the South view the war there as a challenge and to what extend did they feel like victims. This could be an interesting field for further study.

Depression and PTSD

The co-occurrance for men with PTSD and major depressive episodes was estimated to be 47.9 percent in a study by Kolb (1987). The comorbidy of PTSD and major depressive disorders among women were 48.5 percent. It was noted earlier that many who suffer a trauma often have high levels of depression and anxiety. They may not score high on PTSD level, yet their depression and anxiety could possibly be a byproduct of trauma (Kolb, 1987). Further research could be done on the prevalence of depression and other anxiety disorders, such as phobias.

Proximity

It was discussed in the review of literature that those who do actually witness, experience a trauma, or live in close proximity of a traumatic event, have higher PTSD level than others. Further researchers could investigate the type of trauma each person faced and estimate the proximity. The present research did not assess the type of loss or trauma a person witnessed or experienced. Further research can be done on proximity, how close (territorially) individuals were to a traumatic event and level of PTSD.

Physical Health Issues

As mentioned earlier, trauma and stress is the cause of many health issues. There can be a number of physical health problems as a result of experiencing trauma, from sleep disturbances to heart failure and strokes. Further research, perhaps more pertaining to the medical realm, could be conducted on health issues. Such as, what is the prevalence of people who have heart problems, and others.

Conclusion

This purpose of this study was to assess levels of PTSD among youth (ages 13-19) living in the South of Lebanon and to assess the type of coping strategies (cognitive, non-cognitive) they prefer. Results obtained showed that female participants have a higher prevalence of high level of PTSD. It was also found that age is a factor in level of PTSD, where older youth had a lower level of PTSD than younger youth. Different coping strategies (problem solving, seeking social support, and avoidance) were also assessed. Results showed that older and young youth use different coping strategies when faced with a stressor. However, no significant differences were found among gender and their use of coping strategies.

The level of PTSD among participants in this study was considerably high, with 38.7 % of the participants qualifying with high PTSD level. Clinicians and other professionals should be aware of these findings. It is apparent that PTSD is significantly prevalent among youth in South Lebanon. This is considerably high compared to prevalence rates in other areas of the world.

Furthermore, it is a fact that stress plays a big role in medical problems. Those who are subject to high stress levels are very likely to suffer from heart failure, ulcers, develop asthma, suffer from substance abuse, and other physiological and psychological disorders. Youth should be aware

of ways that help prevent health problems in the future by learning how to take care of themselves properly.

Social organizations and other professionals can and should form special programs in enhancing coping skills among children and youth. They can work towards equipping youth with a preventive plan in teaching about cognitive coping strategies.

In the world we live in today, stressors are everywhere and traumatic events often surprise a person with no prior warning. Some stressors can be avoided, yet many cannot be. As much as parents and other adults would like to, they cannot protect children and youth from experiencing stressful situations. They live in this world with all the violence and man induced traumatic events. However, how these stressor are handled and how one copes with situations of stress is the issue. Teaching children and youth useful coping strategies and equipping them with the necessary skills to handle what life has in store for them is definitely a must to help youth attempt to prevent the reactions to stressors they will face in life from turning into a mental, physical, or emotional impairment. Furthermore, at a curative level, those who do have high levels of PTSD should have the proper care from professionals who will help them help themselves.

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Appendix A

DSM IV Criteria of Post Traumatic Disorder

DSM-IV Diagnostic Criteria

Posttraumatic Stress Disorder

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

(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others.

(2) the person's response involved intense fear, helplessness, or horror. **Note:** In children, this may be expressed instead by disorganized or agitated behavior.

B. The traumatic event is persistently re-experienced in one (or more) of the following ways:

(1) recurrent and intrusive distressing recollections of the event,

including images, thoughts, or perceptions. **Note:** In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.

(2) recurrent distressing dreams of the event. **Note:** In children, there may be frightening dreams without recognizable content.

(2) acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). **Note:** In young children, trauma-specific reenactment may occur.

(3) intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

(4) physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

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

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma

(2) efforts to avoid activities, places, or people that arouse recollections of the trauma

(3) inability to recall an important aspect of the trauma

(4) markedly diminished interest or participation in significant activities

(5) feeling of detachment or estrangement from others

(6) restricted range of affect (e.g., unable to have loving feelings)

(7) sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span)

D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:

(1) difficulty falling or staying asleep

(2) irritability or outbursts of anger

(3) difficulty concentrating

(4) hypervigilance

(5) exaggerated startle response

E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than 1 month.

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

Specify if:

Acute: if duration of symptoms is less than 3 months

Chronic: if duration of symptoms is 3 months or more

Specify if:

With Delayed Onset: if onset of symptoms is at least 6 months after the stressor

Appendix B

Questionnaires

Penn Inventory for Post Traumatic Stress Disorder

English version

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PENN INVENTORY 1/91A26

Name_____ Date_____

On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling during the PAST WEEK, INCLUDING TODAY! Circle the number beside the statement you picked. **Be sure to read all the statements in each group before making your choice. Please continue on the other side.**

1 A I don't feel much different than most other people my age.
B I feel somewhat different than most other people my age.
C I feel so different than most other people my age that I choose pretty carefully who I'll be with and when.
D I feel so totally alien to most other people my age that I stay away from all of them at all costs.

2 A I care as much about the consequences of what I'm doing as most other people.
B I care less about the consequences of what I'm doing than most other people.
C I care much less about the consequences of what I'm doing than most other people.
D Often I think, "Let the consequences be damned!" because I don't care about them at all.

3 A When I want to do something for enjoyment I can find someone to join me if I want to.
B I'm able to do something for enjoyment even when I can't find someone to join me.
C *I lose interest in doing things for enjoyment when there's no one to join me.*
D I have no interest in doing anything for enjoyment at all.

4 A I rarely feel jumpy or uptight.
B I sometimes feel jumpy and uptight.
C I often feel jumpy or uptight.
D I feel jumpy or uptight all the time.

5 A I know someone nearby who really understands me.
B I'm not concerned whether anyone nearby really understands me.
C I'm worried because no one nearby really understands me.
D I'm very worried because no one nearby understands me at all.

6 A I'm not afraid to show my anger because it's no worse or better than anyone else's.
B I'm sometimes afraid to show my anger because it goes up quicker than other people's.
C I'm often afraid to show my anger because it might turn to violence.
D I'm so afraid of becoming violent that I never allow myself to show any anger at all.

7 A I don't have any past traumas to feel overly anxious about.
B When something reminds me of my past traumas I feel anxious but can tolerate it.
C When something reminds me of my past traumas I feel very anxious and must really make an effort to tolerate it.
D When something reminds me of my past traumas I feel so anxious I can hardly stand it and have no ways to tolerate it.

8 A I have not re-experienced a flashback to a trauma event "as if I were there again."
B I have re-experienced a flashback to a trauma event "as if I were there again" for a few minutes or less.
C My re-experiencing of a flashback to a trauma event sometimes lasts the better part of an hour.
D My re-experiencing of a flashback to a trauma event often lasts for an hour or more.

9 A I am less easily distracted than ever.
B I am as easily distracted as ever.
C I am more easily distracted than ever.
D I feel distracted all the time.

10 A My spiritual life provides more meaning than it used to.
B My spiritual life provides about as much meaning as it used to.
C My spiritual life provides less meaning than it used to.
D I don't care about my spiritual life.

11 A I can concentrate better than ever.
B I can concentrate about as well as ever.
C *I can't concentrate as well as I used to.*
D I can't concentrate at all.

12 A I've told a friend or family member about the important parts of my most traumatic experiences.
B I've had to be careful in choosing the parts of my traumatic experiences to tell friends or family members.
C Some parts of my traumatic experiences are so hard to understand that I've said almost nothing about them to anyone.
D No one could possibly understand the traumatic experiences I've had to live with.

13 A I generally don't have nightmares.
B My nightmares are less troubling than they were.
C My nightmares are just as troubling as they were.
D My nightmares are more troubling than they were.

14 A I don't feel confused about my life.
B I feel less confused about my life than I used to.
C I feel just as confused about my life as I used to.
D I feel more confused about my life than I used to.

15 A I know myself better than I used to.
B I know myself about as well as I used to.
C I don't know myself as well as I used to.
D I feel like I don't know who I am at all.

16 A I know more ways to control or reduce my anger than most people.
B I know about as many ways to control or reduce my anger as most people.
C I know fewer ways to control or reduce my anger than most people.
D I know of no ways to control or reduce my anger.

(PLEASE CONTINUE ON THE REVERSE SIDE)

17 A I have not experienced a major trauma in my life.
B I have experienced one or more traumas of limited intensity.
C I have experienced very intense and upsetting traumas.
D The traumas I have experienced were so intense that memories of them intrude on my mind without warning.

18 A I've been able to shape things toward attaining many of my goals.
B I've been able to shape things toward attaining some of my goals.
C My goals aren't clear.
D I don't know how to shape things toward my goals.

19 A I am able to focus my mind and concentrate on the task at hand regardless of unwanted thoughts.
B When unwanted thoughts intrude on my mind I'm able to recognize them briefly and then refocus my mind on the task at hand.
C I'm having a hard time coping with unwanted thoughts and don't know how to refocus my mind on the task at hand.
D I'll never be able to cope with unwanted thoughts.

20 A I am achieving most of the things I want.
B I am achieving many of the things I want.
C I am achieving some of the things I want.
D I am achieving few of the things I want.

21 A I sleep as well as usual.
B I don't sleep as well as usual.
C I wake up more frequently or earlier than usual and have difficulty getting back to sleep.
D I often have nightmares or wake up several hours earlier than usual and cannot get back to sleep.

22 A I don't have trouble remembering things I should know.
B I have less trouble than I used to remembering things I should know.
C I have about the same trouble as I used to remembering things I should know.
D I have more trouble than I used to remembering things I should know.

23 A My goals are clearer than they were.
B My goals are as clear as they were.
C My goals are not as clear as they were.
D I don't know what my goals are.

24 A I'm usually able to let bad memories fade from my mind.
B Sometimes a bad memory comes back to me, but I can modif it, replace it, or set it aside.
C When bad memories intrude on my mind I can't seem to get them out.
D I worry that I'm going crazy because bad memories keep intruding on my mind.

25 A Usually I feel understood by others.
B Sometimes I don't feel understood by others.
C Most of the time I don't feel understood by others.
D No one understands me at all.

26 A I have not lost anything or anyone dear to me.
B I have grieved for those I've lost and can now go on.
C I haven't finished grieving for those I've lost.
D The pain of my loss is so great that I can't grieve and don't know how to get started.

Further information may be obtained from Melvyn Hammarberg, Ph.D., Department of Anthropology, 325 Museum, University of Pennsylvania, Philadelphia, PA 19104-6398
Penn Inventory for PTSD assessment.

1/91A26.

F-6

Appendix C

Questionnaires

Penn Inventory for Post Traumatic Stress Disorder

Arabic version

العمر:
الدين:
الطائفة:
الجنس: ☐ ذكر ☐ انثى

قدّمت في هذا الاستفتاء مجموعة بيانات. نرجو أن تقرأها بانتباه. ثم اختر بيان واحد من كل مجموعة يصف حالتك من خلال الأسبوع السابق حتى اليوم.
ضع دائرة حول رقم البيان الذي تختاره. تأكد انك قرأت كل البيانات في المجموعة قبل ان تختار.

١) أ- لا اشعر باختلاف كبير بيني وبين الأشخاص من نفس عمري.
ب- اشعر باختلاف بسيط بيني وبين الأشخاص من نفس عمري.
ج- اشعر باختلاف كبير بيني وبين الأشخاص من نفس عمري.
د- اشعر بأنني مختلف تماما عن الأشخاص من عمري لذلك لا اقترب منهم مهما كان الثمن.

٢) أ- اكترث لنتائج أفعالي بقدر ما يكترث لها الآخرين.
ب- اكترث اقل من الآخرين لنتائج أفعالي.
ج- اكترث اقل بكثير من الآخرين لنتائج أفعالي.
د- كثيرا ما أفكر: "فلتذهب النتائج إلى الجحيم" لأنني لا اكترث لها أبدا.

٣) أ- عندما أريد أن أتسلى يمكنني أن أجد شخصا لمرافقتي.
ب- أستطيع التسلية حتى إن لم أجد شخصا ينضم اليّ.
ج- اخسر اهتمامي بالتسلية إذا ما لم أجد شخصا ينضم اليّ.
د- لا يهمني القيام بأيّ شيء لأتسلى.

٤) أ- نادرا ما اشعر بالغضب أو بالتوتر.
ب- اشعر بالغضب وبالتوتر أحيانا.
ج- غالبا ما اشعر بالغضب وبالتوتر.
د- اشعر بالغضب وبالتوتر دائما.

٥) أ- اعرف شخصا قريبا مني يتفهمني جيدا.
ب- لست معنيا إن كان شخص قريب مني يتفهمني أم لا.
ج- إنني قلق لان لا احد قريب مني يتفهمني.
د- إنني كثير القلق لان لا احد قريب مني يتفهمني.

٦) أ- لا أخاف من إظهار غضبي لأنه لا يختلف عن غضب الباقين.
ب- أخاف أحيانا من إظهار غضبي لأنني أسرع غضبا من الباقين.
ج- غالبا ما أخاف من إظهار غضبي لأنه يتحول إلى عنف.
د- إنني أخاف كثيرا أن أصبح عنيفا فلا اسمح لنفسي أن اظهر غضبي.

٧) أ- لم أعاني مسبقا من أي صدمات تقلقني.
ب- عندما أتذكر الصدمات التي حدثت لي في الماضي اشعر بقلق يمكن احتماله.
ج- عندما أتذكر الصدمات التي حدثت لي في الماضي اشعر بقلق كبير يطلب مجهودا لأتحمله.
د- عندما أتذكر الصدمات التي حدثت لي في الماضي اشعر بقلق شديد لا يحتمل.

٨) أ- لم تعد بي ذاكرتي إلى صدمة سابقة وكأنني أعيشها مجددا.
ب- عادت بي ذاكرتي إلى صدمة سابقة وكأنني أعيشها مجددا ولكن لبضع دقائق أو اقل.
ج- تعود بي ذاكرتي إلى صدمة عشتها في السابق ويدوم ذلك ساعة كاملة
د- تعود بي ذاكرتي إلى صدمة عشتها في السابق ويدوم ذلك أكثر من ساعة.

٩) أ- إنني التهي بصعوبة اكبر من ايّ وقت مضى.
ب- إنني التهي بسهولة كالعادة.
ج- إنني التهي بسهولة أكثر من ايّ وقت مضى.
د- إنني التهي كل الوقت.

١٠) أ- تشكل حياتي الروحية معنا أكثر من السابق.
ب- تشكل حياتي الروحية نفس المعنى التي كانت تشكله في السابق.
ج- تشكل حياتي الروحية معنا اقل من السابق.
د- لا اهتم لحياتي الروحية أبدا.

١١) أ- يمكنني التركيز أفضل من ايّ وقت مضى.
ب- لم تتغيّر قدرة تركيزي.
ج- لا يمكنني التركيز كالسابق.
د- لا يمكنني التركيز أبدا.

١٢) أ- أخبرت صديق أو قريب عن اهم أجزاء من صدماتي.
ب- كان عليّ اختيار أجزاء من صدماتي بحذر التي يمكن أن اخبر أصدقائي أو أقربائي إياها.
ج- بعض صدماتي صعب تفهمها لذلك لم اخبرها لأحد.
د- لا يمكن لأحد تفهم الصدمات التي عشتها.

١٣) أ- إجمالا، لا تراودني كوابيس.
ب- كوابيسي اقل إزعاجا من السابق.
ج- تزعجني كوابيسي كالسابق.
د- تزعجني كوابيسي أكثر من السابق.

١٤) أ- لا اشعر بالحيرة حيال حياتي.
ب- اشعر بأقل حيرة من السابق حيال حياتي.
ج- لطالما شعرت بنفس الحيرة حيال حياتي.
د- اشعر بحيرة اكبر من السابق حيال حياتي.

١٥) أ- اعرف نفسي أفضل من السابق.
ب- اعرف نفسي كالسابق.
ج- لا اعرف نفسي كالسابق.
د- اشعر إنني لا اعرف من أنا بتاتا.

١٦) أ- اعرف طرقا أكثر من معظم الناس تساعدني على السيطرة أو التخفيف من غضبي.
ب- اعرف طرقا تعرفها معظم الناس تساعدني على السيطرة أو التخفيف من غضبي.
ج- اعرف طرقا اقل من معظم الناس تساعدني على السيطرة أو التخفيف من غضبي.
د- لا اعرف أي طريقة تساعدني على السيطرة أو التخفيف من غضبي.

١٧) أ- لم اصب بصدمة كبيرة في حياتي.
ب- أصبت بصدمة أو أكثر كان تأثيرها طفيفا.
ج- أصبت بصدمات كثيرة وكبيرة التأثير والإزعاج.
د- أثرتني الصدمات التي أصبت بها بطريقة شديدة فتعود بي الذاكرة دون اي إنذار سابق.

١٨) أ- سبق لي أن نظمت الأمور بغاية تحقيق الكثير من أهدافي.
ب- سبق لي أن نظمت الأمور بغاية تحقيق بعض أهدافي.
ج- ليست أهدافي واضحة.
د- لا اعرف كيف انظم الأمور لتحقيق أهدافي.

١٩) أ- أستطيع التركيز على فرض أقوم به مهملا كل الأفكار الغير مرغوب بها.
ب- عندما تتدخل أفكار غير مرغوب بها على فكري يمكنني أن اميّزها بسرعة وإعادة التركيز على فرضي.
ج- أواجه صعوبة بمكافحة كل الأفكار الغير مرغوب بها ولا يمكنني إعادة التركيز على فرضي.
د- لن أتمكن أبدا من التغلب على الأفكار الغير مرغوب بها.

٢٠) أ- إنني أنجز معظم الأمور التي أريد إتمامها.
ب- إنني اجز الكثير من الأمور التي أريد إتمامها.
ج- إنني اجز بعض الأمور التي أريد إتمامها.
د- إنني اجز القليل من الأمور التي أريد إتمامها.

٢١) أ- أنام جيدا كالعادة.
ب- لا أنام جيدا كالسابق.
ج- استيقظ كثيرا وأبكر من العادة واجد صعوبة بالنوم مجددا.
د- ينتابني كوابيس واستيقظ أبكر من العادة بساعات عدّة ثم لا أتمكن من النوم مجددا.

٢٢) أ- لا أواجه صعوبة بتذكر الأمور التي يجب علي أن اعرفها.
ب- أواجه صعوبة اقل من العادة بتذكر الأمور التي يجب علي أن اعرفها.
ج- أواجه الصعوبة الآن وفي السابق بتذكر الأمور التي يجب علي أن اعرفها.
د- أواجه صعوبة اكبر من السابق بتذكر الأمور التي يجب علي أن اعرفها.

٢٣) أ- أهدافي أوضح من السابق.
ب- أهدافي واضحة ذات الوضوح كالسابق.
ج- ليست أهدافي بنفس الوضوح.
د- لا اعرف ما هي أهدافي.

٢٤) أ- أتمكن عادة من جعل ذكرياتي البشعة تختفي من فكري.
ب- ترجع لي أحيانا ذكرى بشعة ولكنني أتمكن من تغيرها.
ج- عندما ترجع اليّ ذكريات بشعة لا أتمكن من إبعادها.
د- إنني قلق واشعر بالتعب لان الذكريات البشعة تعود بتكرار إلى فكري.

٢٥) أ- اشعر عادة بتفهم من قبل الأخرين.
ب- لا اشعر بالتفهم من قبل الآخرين.
ج- أكثرية الوقت لا اشعر بالتفهم من قبل الآخرين.
د- لا يتفهمني احد مطلقا.

٢٦) أ- لم لخسر شيء أو احد يعزّ عليّ.
ب- قد حزنت على الأشخاص الذين خسرت ولكن أستطيع المثابرة الآن.
ج- ما زلت حزينا على الذين خسرت.
د- إن الم خسارتي لدرجة لا تسمح لي البكاء ولا اعرف أين ابدأ.

Appendix D

Questionnaires

Coping Strategies Indicator

English version

Keeping that stressful event in mind, indicate to what extent you. . .

1. Let your feelings out to a friend?	☐ A lot	☐ A little	☐ Not at all
2. Rearranged things around you so that your problem had the best chance of being resolved?	☐ A lot	☐ A little	☐ Not at all
3. Brainstormed all possible solutions before deciding what to do?	☐ A lot	☐ A little	☐ Not at all
4. Tried to distract yourself from the problem?	☐ A lot	☐ A little	☐ Not at all
5. Accepted sympathy and understanding from someone?	☐ A lot	☐ A little	☐ Not at all
6. Did all you could to keep others from seeing how bad things really were?	☐ A lot	☐ A little	☐ Not at all
7. Talked to people about the situation because talking about it helped you to feel better?	☐ A lot	☐ A little	☐ Not at all
8. Set some goals for yourself to deal with the situation?	☐ A lot	☐ A little	☐ Not at all
9. Weighed your options very carefully?	☐ A lot	☐ A little	☐ Not at all
10. Daydreamed about better times?	☐ A lot	☐ A little	☐ Not at all
11. Tried different ways to solve the problem until you found one that worked?	☐ A lot	☐ A little	☐ Not at all
12. Confided your fears and worries to a friend or relative?	☐ A lot	☐ A little	☐ Not at all
13. Spent more time than usual alone?	☐ A lot	☐ A little	☐ Not at all
14. Told people about the situation because just talking about it helped you to come up with solutions?	☐ A lot	☐ A little	☐ Not at all
15. Thought about what needed to be done to straighten things out?	☐ A lot	☐ A little	☐ Not at all
16. Turned your full attention to solving the problem?	☐ A lot	☐ A little	☐ Not at all
17. Formed a plan of action in your mind?	☐ A lot	☐ A little	☐ Not at all

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18. Watched television more than usual?	☐ A lot	☐ A little	☐ Not at all
19. Went to someone (friend or professional) in order to help you feel better?	☐ A lot	☐ A little	☐ Not at all
20. Stood firm and fought for what you wanted in the situation?	☐ A lot	☐ A little	☐ Not at all
21. Avoided being with people in general?	☐ A lot	☐ A little	☐ Not at all
22. Buried yourself in a hobby or sports activity to avoid the problem?	☐ A lot	☐ A little	☐ Not at all
23. Went to friend to help you feel better about the problem?	☐ A lot	☐ A little	☐ Not at all
24. Went to a friend for advice on how to change the situation?	☐ A lot	☐ A little	☐ Not at all
25. Accepted sympathy and understanding from friends who had the same problem?	☐ A lot	☐ A little	☐ Not at all
26. Slept more than usual?	☐ A lot	☐ A little	☐ Not at all
27. Fantasized about how things could have been different?	☐ A lot	☐ A little	☐ Not at all
28. Identified with characters in novels or movies?	☐ A lot	☐ A little	☐ Not at all
29. Tried to solve the problem?	☐ A lot	☐ A little	☐ Not at all
30. Wished that people would just leave you alone?	☐ A lot	☐ A little	☐ Not at all
31. Accepted help from a friend or relative?	☐ A lot	☐ A little	☐ Not at all
32. Sought reassurance from those who know you best?	☐ A lot	☐ A little	☐ Not at all
33. Tried to carefully plan a course of action rather than acting on impulse?	☐ A lot	☐ A little	☐ Not at all

You may STOP here.
Thank you for your cooperation!

Appendix E

Questionnaires

Coping Strategies Indicator

Arabic version

فكر في مشكلة واجهتك خلال حياتك.
تذكر كيف بدأت هذه المشكلة و كيف حلت

ابق على هذا الحدث المجهد في فكرك واشر إلى ايّ مدى

	كثيرا	قليلا	أبدا
(١) تخبر رفيق لك عن مشاعرك؟	☐	☐	☐
(٢) تعيد النظر بأمور من حولك لتعطي مشكلتك فرصة أفضل بأن تحلّ ؟	☐	☐	☐
(٣) تفكر جيدا بكل الحلول المحتملة قبل اتخاذ القرار؟	☐	☐	☐
(٤) تحاول أن تتناس المشكلة؟	☐	☐	☐
(٥) تتقبل الشفقة والتفهم من الآخرين؟			
(٦) تحاول المستحيل أن تخفي خطورة الأمور؟	☐	☐	☐
(٧) تتكلم مع الآخرين حول المشكلة لأنك تشعر بحال أفضل؟	☐	☐	☐
(٨) تحدّد أهداف لتحلّ المشكلة؟	☐	☐	☐
(٩) تزين خياراتك جيدا؟	☐	☐	☐
(١٠) تحلم بأوقات أفضل؟	☐	☐	☐
(١١) حاولت مرّات عديدة حل المشكلة إلى أن وصلت إلى الحل المناسب؟	☐	☐	☐
(١٢) أخبرت صديقك أو قريبك بمخاوفك أو انزعاجاتك؟	☐	☐	☐
(١٣) تقضي اوقاتا وحيدا أكثر من العادة؟	☐	☐	☐
(١٤) تخبر الناس بالمشكلة لأنه مجرد الكلام عن المشكلة يساعدك على إيجاد حلول؟	☐	☐	☐
(١٥) فكرت بما تحتاج لتسوي الأمور؟	☐	☐	☐
(١٦) ركزت كلّ قواك على إيجاد حلّ للمشكلة؟	☐	☐	☐
(١٧) خططت للقيام بشيء حيال الوضع؟	☐	☐	☐

	كثيرا	قليلا	أبدا
(١٨) شاهدت التلفزيون أكثر من العادة؟	☐	☐	☐
(١٩) لجأت إلى شخص معيّن (أكان صديق أو اختصاصي) لكي يساعدك على التحسن؟	☐	☐	☐
(٢٠) وقفت بثقة وكافحت لما تريده للحالة التي تعيشها؟	☐	☐	☐
(٢١) تجنبت الناس إجمالا؟	☐	☐	☐
(٢٢) دفنت نفسك في هواية أو نشاط رياضي لتجنب المشكلة؟	☐	☐	☐
(٢٣) ذهبت إلى صديق ليساعدك على التحسن؟	☐	☐	☐
(٢٤) لجأت لصديق باحثا عن نصيحة تساعدك على تغيير الحال التي تعيشها؟	☐	☐	☐
(٢٥) قبلت التعاطف والتفهم الذي قدّمه لك صديق عاش المشكلة نفسها؟	☐	☐	☐
(٢٦) نمت أكثر من العادة؟	☐	☐	☐
(٢٧) تخيلت كيف كان بامكان الأمور أن تختلف؟	☐	☐	☐
(٢٨) شعرت بتطابق بينك وبين شخصيات من الروايات والأفلام؟	☐	☐	☐
(٢٩) حاولت حل المشكلة؟	☐	☐	☐
(٣٠) تمنيت لو تركك الناس وشأنك؟	☐	☐	☐
(٣١) قبلت المساعدة من صديق أو قريب؟	☐	☐	☐
(٣٢) سعيت وراء الاطمئنان من الذين يعرفونك جيدا؟	☐	☐	☐
(٣٣) حاولت أن تخطط بحذر للقيام بشيء عوضا عن الاندفاع دون تخطيط؟	☐	☐	☐