# NEAR EAST UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES CLINICAL PSYCHOLOGY MASTER'S PROGRAMME

## PREVALENCE AND RISK FACTORS OF POST TRAUMATIC STRESS DISORDER IN A NORTH CYPRUS HOUSEHOLD ADULT SURVEY

**MASTER'S THESIS** 

ASRA BABAYİĞİT

NICOSIA 2017

# NEAR EAST UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES CLINICAL PSYCHOLOGY MASTER'S PROGRAMME

### PREVALENCE AND RISK FACTORS OF POST TRAUMATIC STRESS DISORDER IN A NORTH CYPRUS HOUSEHOLD ADULT SURVEY

**MASTER'S THESIS** 

PREPARED BY ASRA BABAYIĞIT 20156520

SUPERVISOR PROF.DR. MEHMET ÇAKICI

> NICOSIA 2017

## NEAR EAST UNIVERSITY GRADUATE SCHOOL OF SOCIAL SCIENCES CLINICAL PSYCHOLOGY MASTER'S PROGRAMME

#### **MASTER'S THESIS**

### PREVALENCE AND RISK FACTORS OF POST TRAUMATIC STRESS DISORDER IN A NORTH CYPRUS HOUSEHOLD ADULT SURVEY

Prepared by

Asra BABAYİĞİT

**Examining Committee in Charge** 

Prof. Dr. Mehmet ÇAKICI

**Near East University** 

**Department of Psychology** 

(Supervisor)

Assist. Prof. Dr. Deniz Ergün

**Near East University** 

Department of Psychology

Assist. Prof. Dr. Ayhan Çakıcı

**Near East University** 

Department

of Psychological Counselling

and Guidance

Approval of the Graduate School of Social Sciences

Assoc. Prof. Dr. Mustafa SAĞSAN



### YAKIN DOĞU ÜNİVERSİTESİ

## NEAR EAST UNIVERSITY SOSYAL BİLİMLER ENSTİTÜSÜ GRADUATE SCHOOL OF SOCIAL SCIENCES

Date: 20/06/2017 Nicosia

20/6/20/7 Academic Year Spring Semester

### **DECLARATION**

| Type of The | sis: Master | Proficie   | ency in Art 🗌 | PhD 🗌     |
|-------------|-------------|------------|---------------|-----------|
|             | 201565      |            | •••••         |           |
| PROGRAME    | . clinical  | Psychology | Master's      | Programme |
|             |             |            |               |           |

I am Asra BABAYIGIT, hereby declare that this dissertation entitled " Prevalence and Risk Factors of Post Traumatic Stress Disorder in a North Cyprus Household Adult Sirvey." supervison of guidance and the myself under prepared has been " Prof Dr. Mehmet GAKICI." in partial fulfilment of The Near East University, Graduate School of Social Sciences regulations and does not to the best of my knowledge breach any Law of Copyrights and has been tested for plagarism and a copy of the result can be found in the Thesis.

Signature:

#### ABSTRACT

#### Prevalence and Risk Factors of Post-Traumatic Stress Disorder in a North Cyprus Household Adult Survey

Asra Babayiğit,

June, 2017

Aim: Post Traumatic Stress Disorder (PTSD), in other words impairment after posttraumatic difficulty, is one of the most important topics investigated by mental health professionals all over the world. Aim of this study is defining Post Traumatic Stress Disorder prevalence and risk factors. Method: Between April 2016 - June 2016, individuals between 18-88 years of age living in Northern Cyprus. Multi-stage stratified (randomized) quota used in the survey and 978 people selected according to the 2011 census. Demographic Information Form, Traumatic Events List and Traumatic Stress Symptom Scale were used. Findings: PTSD prevalence stated as 19% for North Cyprus. Being women, widow, unemployed, housewives, having physical illness, having psychiatric illness, being treated by a physical illness, living in a Greek property, living single or with a relative, defined as risk factors of PTSD. Conclusion: The prevalence of Post-Traumatic Stress Disorder in Northern Cyprus was found to be high prevalence similar with other post conflict regions when compared to the other countries in the world. Many risk factors have been found mainly and explain the fact that in recent years there has been a society with a history of war and migration and that the rate of uncertainty about the future is high.

Key Words: Prevalence, Post Traumatic Stress Disorder, North Cyprus, Risk Factors

#### ÖZ

#### KKTC Yetişkin Ev Örnekleminde Travma Sonrası Stres Bozukluğu Yaygınlığı ve Risk Faktörleri

Asra Babayiğit,

Haziran 2017

Amaç: Travma sonrası stres bozukluğu (TSSB), bir diğer adıyla örselenme sonrası zorlanma bozukluğu, tüm dünya genelinde ruh sağlığı uzmanları tarafından araştırılan ve önem verilen konulardan biridir. Bu çalışmada amaç Kuzey Kıbrıs'taki Travma Sonrası Stres Bozukluğu yaygınlığını bulmak ve risk faktörlerini tespit etmektir. Yöntem: Nisan 2016-Haziran 2016 tarihleri arasında Kuzey Kıbrıs'ta 18-88 yaş arasında 2011 nüfus sayımı verilerine göre kotalı çok basamaklı tabakalandırılmış seçkisiz (randomize) örneklem yöntemi ile seçilen 978 kişi çalışmaya alınmıştır. Demografik Bilgi Formu, Yaşam Olayları Listesi ve Travmatik Stres Belirti ölçekleri kullanılmıştır. Bulgular: Kuzey Kıbrıs'ta TSSB yaygınlığı %19 olarak bulunmuştur. Kadın olmak, dul olmak, işsiz olmak, çocuk sayısında artış, ev kadını olmak, rum malı bir evde oturmak, fiziksel hastalığa sahip olmak, psikiyatrik bir hastalığha sahip olmak, psikiyatrik bir hastalık nedeniyle tedavi görmek, yalnız veya akrabasıyla yaşıyor olmak risk faktörleri olarak saptanmıştır. Tartışma: Kuzey Kıbrıs'ta, Travma Sonrası Stres Bozukluğu yaygınlığı, dünyadaki diğer ülkeler ile kıyaslandığında çatışma yaşamış diğer toplumlara benzer bir şekilde yüksek bir yaygınlık oranı bulunmuştur. Birçok risk faktörü bulunmuş olup temelde, yakın zaman içerisinde savaş ve göç geçmişi olan bir toplum olması ve geleceğe dair belirsizliğin hakim olması oranının yüksek çıkmasını açıklar niteliktedir.

Anahtar Kelimeler: Yaygınlık, Travma Sonrası Stres Bozukluğu, Kuzey Kıbrıs, Risk Faktörleri.

#### **ACKNOWLEDGEMENTS**

I wish to thank, first and foremost, my supervisor Prof. Dr. Mehmet Çakıcı for his invaluable support and guidance during my whole education and the dissertation preparation period. I also especially thank my mom Serpil Babayiğit, and brother Aras Babayiğit. My precious mother has sacrificed her life for my brother and myself and provided unconditional love and care. I would also like to thank Assoc. Prof. Dr. Ebru Çakıcı, the head of the department, for her infinite support and valuable knowledges. I especially thankful for the dean of our faculty Prof. Dr. İlkay Salihoğlu for his support and encouragements. I am also sending my gratefulness to my precious teachers Assist. Prof. Dr. Deniz Ergün, Assoc. Prof. Dr. Ülgen Okyayuz, Assoc. Prof. Dr. Zihniye Okray and Assoc. Prof. Dr. İrem Erdem Atak. Finally, I would also thank my colleagues Meryem Karaaziz, Bingül Subaşı, Fahriye Balkır, İpek Özsoy and Gönül Taşcıoğlu for their support and encouragements.

#### CONTENTS

| ACKNOWLEDGEMENTS                        | ii  |
|---|-----|
| ÖZET                                    | iv  |
| ABSTRACT                                | v   |
| CONTENTS                                | vi  |
| LIST OF TABLE                           | vii |
| ABBREVIATIONS                           | X   |
| 1. INTRODUCTION                         | 1   |
| 1.1. Description of the Trauma Concept  | 1   |
| 1.2.Post Traumatic Stress Disorder      | 2   |
| 1.3. History of PTSD                    | 5   |
| 1.4. DSM-V Diagnostic Criterias of PTSD | 6   |
| 1.5. Theories of PTSD                   | 9   |
| 1.5.1. Psychoanalytic theory of PTSD    | 9   |
| 1.5.2. Cognitive Theory of PTSD         | 10  |
| 1.5.3. Behavioral Theory of PTSD        | 11  |
| 1.6. Prevalence of PTSD                 | 11  |
| 1.7. Risk Factors of PTSD               | 13  |
| 1.8. Treatment of Depression            | 15  |
| 1.9. Aim and Importance of the Study    | 18  |
| 1.10. Hypothesis of the Study           | 18  |
| 2. METHOD                               | 19  |
| 2.1. Sampling                           | 19  |
| 2.2. Survey Form                        | 19  |
| 2.2.1. Socio-demographic data sheet     | 19  |
| 2.2.2. Traumatic Symptom Scale          | 19  |
| 2.3. Application                        | 20  |
| 2.4. Data Analysis                      | 20  |
| 3. RESULTS                              | 22  |
| 4. DISCUSSION                           | 40  |
| 5. CONCLUSION                           | 47  |

| 6. REFERENCES                              | 18 |
|--|----|
| APPENDIX 1- BİLGİLENDİRME FORMU6           | 56 |
| APPENDIX 2- AYDINLATILMIŞ ONAM6            | 57 |
| APPENDIX 3- ANKET FORMU                    | 72 |
| APPENDIX 4- TRAVMATİK STRES BELİRTİ ÖLÇEĞİ | 75 |

#### LIST OF TABLE

- **Table 1.** Current PTSD rates of participants according to the Traumatic Stress Symptom Scale.
- **Table 2.** Existence of PTSD compared to depression
- Table 3. Existence of PTSD compared to gender
- **Table 4.** Existence of PTSD compared to age
- **Table 5.** Existence of PTSD compared to birth place
- **Table 6.** Existence of PTSD compared to number of years lived in Cyprus
- **Table 7.** Existence of PTSD compared to marital status
- **Table 8.**Existance of PTSD compared to having children
- **Table 9.** Existence of PTSD compared to number of children
- **Table 10.** Existence of PTSD compared to living place.
- **Table 11.** Existence of PTSD compared to employment
- **Table 12.** Existence of PTSD compared to profession
- **Table 13.** Existence of PTSD compared to education level
- Table 14. Existence of PTSD compared to monthly income
- **Table 15.** Existence of PTSD compared to status of home lived in
- **Table 16.** Existence of PTSD compared to living location
- Table 17. Existence of PTSD compared to physical illness
- Table 18. Existence of PTSD compared to psychiatric illnesses
- **Table 19.** Existence of PTSD compared to being treated because of a psychiatric illness
- **Table 20.** Existence of PTSD compared to whom living with

- Table 21. Existence of PTSD compared to political beliefs about Cyprus Problem
- Table 22. Existence of PTSD compared to alcohol use
- **Table 23.** Existence of PTSD compared to smoking
- Table 24. Existence of PTSD compared to drug abuse
- Table 25. Existence of PTSD compared to life events list
- Table 26. Existence of PTSD compared to experiencing conflicts
- **Table 27.** Existence of PTSD of specific life events compared to Turkey and Cyprus born participants
- Table 28. Logistic Regression Analysis of Risk Factors.
- Table 29. Linear Regression Analysis of Predictor Variables

#### **ABBREVIATIONS**

CBT: Cognitive-Behavioral Therapy

DSM: Diagnostic and Statistical Manual of Mental Disorders

PTSD: Post Traumatic Stress Disorder

TRNC: Turkish Republic of North Cyprus

WHO: World Health Organization

#### 1. INTRODUCTION

#### 1.1. Concept of Trauma

The root of the word "trauma" is based on Ancient Greek and the deep mean of the trauma is any kind of injury which integrity is impaired (Bilgiç, 2011). There are two types of trauma which are mental and physical. Trauma can be classified in three main categories. Deliberately created by human beings are (war, torture, rape, acts of terror, prison and detention practices), the result of man-made accident (traffic, aircraft, ship, train accidents, work accidents, fires) and Natural Disasters (earthquake, flood, forest fire etc.) (APA, 2013). Terr classified the trauma as "type 1 trauma" and "type 2 trauma". Type 1 trauma is the once experienced traumas such as rape, assault, accidents, witnessing the death of a close relative, whereas Type 2 trauma is described as repetitive and prolonged traumas such as abuse and domestic violence (Roberts, 2002).

Events such as earthquakes, floods, natural disasters and wars, sexual or physical attacks, torture, kidnapping, traffic accidents, exposure to terrorist acts, and events that transcend someone's ability to cope are called as mental traumatic events. For this reason, they leave short or long-lasting psychological effects in people and societies when they happen (Ai, Peterson & Ubelhor, 2005; Andrews, Brewind & Rose, 2003)

The vast majority of frustrations and conflicts that can be described as mental trauma are inevitable situations in the process of natural living, and they have a compulsory place in the development and maturation of the self. Developing stamina after encountering obstacles has nearly the same meaning with self-power. The development and maturation of the self is related to resolve conflicting situations and to struggle against anxiety. However, each inhibition and conflict does not leave positive traces in self development. Some of them can traumatic qualities. Conflicts and frustrations, which have disruptive qualities, are the processes that distort, retard, slow, stop or reverse the development of the self. The self is confronted with a set of weighted stimuli that it can not come from above the ego. Structural factors and past experiences of organism are important to overcome confrontation situations. Often traumatic events have a relative impact on the individual, depending on the

physical, social, and mental orientation of the organism (Iribarren et al., 2005; Freedy, 1994).

#### **Potentially Traumatizing Events**

- 1. Economic hardship (Ahnquist and Wamala, 2011; McLaughlin et al., 2011)
- 2. Divorce (Evans and Kim, 2010)
- 3. Natural disasters (Felix et al., 2011; Rivera, 2012; Kuwabara et al., 2008)
- 4. Childhood trauma (Burri et al., 2013; Anda et al., 2006)
- 5. Serious illness (Tedstone & Tarrier, 2003; Hopkins & Brett, 2005)
- 6. Serious injury (APA, 2013; Güler, Tel & Tuncay, 2005; Kessler et al., 2000)
- 7. Traffic accident (Matsuoka et al., 2008; Seethalakshmi et al., 2006)
- 8. Fire or explosion (Ohmi et al., 2002; Kwon, Maruyama & Morimoto, 2001)
- 9. Sudden and uexpected death of loved one (Breslau & Kessler, 2001; Green et al., 2001)
- 10. Domestic violence (Jones et al., 2001)
- 11. Experience of war (Neuner & Elbert, 2007; Betancourt & Williams, 2008)

#### 1.2. Description of the PTSD

Post Traumatic Stress Disorder (PTSD) is one of the most important topics investigated by mental health professionals all over the world. Events which are threatening the life and physical integrity of the individuals such as military combat, severe traffic accidents, natural disasters and violent attacks are called as mental trauma. Mental traumas cause excessive amount of horror, anxiety and helplessness which in turn lead to emotional, behavioral, and social disturbances. The person affected by the mental trauma loses the abilities of coping up strategies and problem solving skills (Şenyuva and Yavuz, 2009; Yorbik et al., 2001).

Conditions accepted as causing traumatic effect are considered to be eperiencing an incident on its own and it is also regarded as witnessing such a phenomenon that someone else has experienced. Witnessing a traumatic event, listening details of a traumatic event or just hearing about the event, can cause a trauma at various levels and can lead to the development of mental reactions (Ericksson et al., 2001). Reactions that last short-term (one-month) response to traumatic events are classified

as acute stress disorder and, if they are lighter, the situation is called as adaptation disorder (WHO, 1993).

The mental response of each individual to such experiences is different. While the same intensity term trauma produces significant PTSD findings in one individual, it may not be present in any other individual (Suer, 2005). There are many things that cause distress and sadness in human life, but not all of them cause a mental trauma. In addition to this, every person is not affected by the same event in the same way. A situation that can cause trauma for one person may not cause trauma for the other (Sütçigil and Aslan, 2012). The schemes that people have before the experience of trauma, determines whether a person will or will not develop PTSD after experiencing a traumatic event. Accordingly, those who have very positive schemes about the future, the world and themselves and those who have very negative charts about them, are at increased risk of developing PTSD after traumatic events. Accordingly, those who have very positive charts about the future, the world and themselves, and those who have very negative charts about them, are at increased risk of developing PTSD after traumatic events. However, those who have more realistic and more flexible schemes about the future, the world and the self, are found to have lower risks for development of PTSD (Yıldırımlı and Tosun, 2012). The PTSD was first defined in the 19th Century with the appearance of the symptoms that appeared in the soldiers after the war. This disorder appears as a reaction to the traumatic events (Hacıoğlu et al., 2002). PTSD, also termed as "Da Costa Syndrome" for some period which is described by Da Costa as "hypersensitive heart" due to physical symptoms such as fearful dreams, aggression, palpitations, shortness of breath and dizziness (Bilgic, 2011).

PTSD is a normal response to abnormal events. Diagnosis is often caused by a stress reaction that occurs after a real or threatening catastrophic event, such as a death or injury. Symptoms include; increased physiological arousal, persistent thoughts that causes recurrence of trauma, sleeping problems, concentration problems, constant triggering, nervousness, anxiety and fear, avoidance behaviors towarsd the trauma-related stimuli, and psychic numbness such as dissociation (Hughes and Jones, 2000). The main symptoms of PTSD are permanent and unhindered memories of the traumatic event, excessive stimulation, inhibition of trauma-related stimuli, numbness in emotional experiences and withdrawal (APA, 1994). Symptoms such as dreams and thoughts about the traumatic event, avoidance

behaviors, forgetfulness, negative beliefs, distorted cognition, negative emotion, alienation, irritability and alertness must be seen at least 1 month (APA, 2013).

Re-experiencing trauma is defined in two ways as cognitive and emotional. In cognitive re-experiencing, flashback episodes such as images and nightmares about the event are re-imagined. On the other hand, emotional re-experiencing is the conditions of anxiety, aggression and restlessness. In the case of avoidance, it is observed that people who experienced the traumatic event, avoid the environment, emotions and thoughts related to the certain trauma. With such behaviors, people aim to protect themselves from the effects of events as a defense and coping strategy (Hacıoğlu et al., 2002).

Especially, PTSD which is chronic has a delayed onset, constitutes an important psychosocial problem. Untreated and chronicized PTSD can be masked by substance abuse and dependence, eating disorders, phobia, criminal behavior, depression, fainting attacks, obsessive compulsive disorder, and psychotic episodes. In other words, the disorders that occur after trauma are unrecognized in the early period and if not intervened they can become chronic and become a serious health problem which is costly for the individual and society (Katz et al., 2012; Brunello et al., 2001; Chan et al., 2003)

In relation to this process, PTSD indications are considered in three main groups in the clinic (APA, 2013). 1. Symptoms of Traumatic Event Repetition: Unintended recurring thoughts are reminiscent of a traumatic event in the form of emotional or somatic symptoms. The person who encounters a stimulus that evokes a traumatic event feels like it is happening again. Re-experiencing is usually the appearance of live visual images of the traumatic event and of the physical sensations at that time (Kline and Rausch, 1985). 2. Avoidance Symptoms: The person avoids any activity reminding the traumatic event. The person deliberately avoids and does not complain about emotions, thoughts and environments that evoke trauma. It is also observed that traumatic individuals, whom have lost a loved person, are trying to stay away from human beings and try not to establish close relationships as a result of fearing to love again. Development of estrangement, closure and unresponsiveness to the environment can be seen as a result of avoidance symptoms In these individuals whose emotional reactions are reduced or restricted, an "emotional anesthesia" is mentioned, in which emotions such as love, closeness, sharing, and sexuality are not experienced as the previous times (Steinmetz et al., 2012). 3. Increased Arousal

Symptoms: Sleep disorders are common in this symptom group. It is seen as a form of disorder which arises before sleeping or maintaining the sleeping. Patient complains of nightmares that disturb sleep. People with PTSD may have severe limb, leg and body movements during sleep. In addition irritability, anger bursts, concentration difficulties, startling reactions occur. The traumatic event leads to the feeling of being overheated at any moment, extreme anxiety and the feeling of being alert. Excessive arousal feeling is the most common symptom of the individuals diagnosed with PTSD. Signs related to sympathetic hyperactivation such as excessive startle response, palpitations, respiratory distress, and stiffness to stimuli such as sound, light, touch are also included in this symptom group (Lanius et al., 2010).

#### 1.3 History of PTSD

The effects of traumatic events on mental health are known since ancient times and these observations are transferred by various sections of the society. Different legends in the world's literature such as the Shakespeare's Henry IV seems to have many symptomatic criteria of the PTSD (King et al., 2013). As indicated by Merskey, the primary specify might be a story distributed in the Times on February 6. 1915, demonstrating that the War Office was masterminding to send fighters experiencing "stun" to be dealt with in unique wards at the National Hospital for the Paralyzed and Epileptic, in Queen Square (Crocq & Crocq, 2000). Additionally in February 1915, the term shell shock was utilized by Charles Myers in an article in The Lancet to depict three troopers experiencing "loss of memory, vision, smell, and taste (Myers, 1915; Crocq & Crocq, 2000). Myers gave an account of three patients. admitted to a healing facility in Le Touquet amid the early period of the war, between November 1914 and January 1915. These patients had been stunned by shells detonating in their quick region and gave astoundingly comparative side effects. As per Myers, these cases bore a nearby connection to "hysteria". Psychological and Psychophysiological effects of the violent trauma in the 19th century have begun to attract more and more attention. Soldiers who fought in American interior war had some physical and mental extinction and this situation is defined as "Soldier's heart". Da Costa named these physical symptoms such as nightmares and nervousness as "irritable heart" (Ramsay, 1990). Charcot named the functional disorder which is characterized by the paralysis and chronic pain after

train accidents as the "railway spine" in 1885. Similar symptoms that observed in the soldiers during the First World War were named as "shell shock". The effect of trauma during the Second World War was called "physioneurosis" and the mental effects of stress become increasingly recognized and distinguished (Van der Kolk, 2000).

After the psychological effects of the second world war on the inidividuals observed, PTSD first appeared as an "gross stress reaction" in DSM-I, 1952 (Şuer, 2005). Subsequently, in DSM-II, it was described as a "transient state disorder" rather than an excessive stress reaction (Ekinci and Samancı, 1998). In the DSM III, it was listed as "a stress-generating effect that can be shown" (APA, 1980) whereas in the revised version DSM III R in 1987 it was described as " an event out of the ordinary human life that could be a major source of distress for almost everyone " (APA, 1987). In DSM IV, PTSD was described as "posttraumatic stress disorder" (APA, 1994). In DSM V, PTSD was termed as tension impairment after trauma (APA, 2013).

#### 1.4 DSM-V Diagnostic Criterias

The diagnostic criterias of the PTSD are recorded underneath. The criteria underneath are substantial for adults, adolescents, and children older than six years. Symptomatic criteria for PTSD incorporate a background marked by presentation to a traumatic occasion that meets particular stipulations and side effects from each of four manifestation groups: interruption, shirking, negative adjustments in perceptions and disposition, and modifications in excitement and reactivity. The 6th foundation concerns length of indications; the seventh evaluates working; and, the eighth basis clears up side effects as not inferable from a substance or co-happening medicinal condition. Two determinations are noted including deferred expression and a dissociative subtype of PTSD, the last of which is new to DSM-5. In both particulars, the full diagnostic criteria for PTSD must be met for application to be justified.

Criterion A: stressor the individual was presented to: death, death threat, genuine or debilitated genuine damage, or real or undermined sexual violence, as follows: (one required)

- 1. Direct exposure.
- 2. Witnessing

- 3. Indirect way such as hearing a close relative/friend was presented to injury. In the event that the occasion included real or debilitated demise, it more likely than not been rough or incidental.
- 4. Iterative or excessive indirect presentation to aversive points of interest of the event(s), for the most part throughout expert obligations (e.g., specialists on call, gathering body parts; experts more than once presented to subtle elements of youngster mishandle). This does exclude circuitous non-proficient introduction through electronic media, TV, films, or pictures.

Criterion B: interruption indications the traumatic occasion is perseveringly reexperienced in the accompanying way(s): (one required)

- 1. Intermittent, automatic, and impertinent, recollections. Note: Children more established than six may express this side effect in dull play.
- 2. Traumatic bad dreams. Note: Children may have unnerving dreams without substance identified with the trauma(s).
- 3. Dissociative responses (e.g., flashbacks) which may happen on a continuum from brief scenes to finish loss of cognizance. Note: Children may reenact the occasion in play.
- 4. Serious or delayed pain after introduction to traumatic updates.
- 5. Checked physiologic reactivity after presentation to trauma related stimulant.

Criterion C: avoidance insistent effortful avoidance of troubling trauma-related stimuli after the occasion: (one required)

- 1. Trauma-related contemplations or sentiments.
- 2. Trauma-related outer clues (e.g., (e.g., individuals, places, conversations, activities, or circumstances).

Criterion D: negative changes in perceptions and state of mind, negative modifications in comprehensions and temperament that started or exacerbated after the traumatic occasion: (two required)

- 1. Powerlessness to review key elements of the traumatic occasion (normally dissociative amnesia; not because of head harm, liquor, or medications).
- 2. Determined (and frequently misshaped) negative convictions and assumptions around oneself or the world (e.g., "I am awful," "The world is totally perilous").
- 3. Industrious contorted fault of self or others for bringing on the traumatic occasion or for coming about outcomes.

- 4. Industrious negative trauma related feelings (e.g., fear, awfulness, outrage, blame, or disgrace).
- 5. Extraordinarily decreased enthusiasm for (pre-traumatic) noteworthy exercises.
- 6. Feeling distanced from others (e.g., separation or antagonism).
- 7. Choked effect: persevering failure to experience positive feelings.

Criterion E: adjustments in excitement and reactivity Trauma-related modifications in excitement and reactivity that started or compounded after the traumatic occasion: (two required)

- 1. Bad tempered or forceful actions
- 2. Self-damaging or neglectful behavior
- 3. Hypervigilance
- 4. Inflated startle reaction
- 5. Concentration difficulties
- 6. Sleep problems

Criterion F: term persistence of side effects (in Criteria B, C, D, and E) for over one month.

Criterion G: functional importance, Substantial symptom-related trouble or practical weakness (e.g., social, word related).

Criterion H: dispensation Disturbance is not because of prescription, substance utilize, or different sickness. Idicate if: With dissociative side effects. Notwithstanding meeting criteria for determination, an individual encounters elevated amounts of both of the accompanying in response to trauma related effects:

- 1. Depersonalization: experience of being an outside spectator of or confined from oneself (e.g., feeling as though "this is not happening" or one were in a fantasy).
- 2. Derealization: experience of illusion, separation, or contortion (e.g., "things are not genuine"). Indicate if: With deferred expression. Full determination is not met until no less than six months after the trauma(s), in spite of the fact that onset of side effects may happen promptly (APA, 2013).

#### 1.5. Theories of PTSD

#### 1.5.1. Psychoanalytic theory of PTSD

The psychoanalytic model of PTSD is based on the assumption that traumatic experience drives from the unresolved internal conflict. Freud argues that violent traumas overcome all defenses and that they live in a severe and painful way, that the

defensive suppression is inadequate, and that ego has no power to cope with it. According to Freud, the force of the protective mechanism first encountering trauma, which causes over excitation of the ego, is regressive to the primitive defense forms such as re-compulsion, natural capacity of adaptation and the capacity to collapse (Baysak, 2010). There is an effort to get rid of the helplessness of passively experiencing the event and actively reestablish the ego-compatible state by repeating the disturbing event or events repeatedly with dream or dissociative episodes (Kaptanoğlu, 1991).

Freud's ideas about the impacts of trauma on the mind have changed after some time. In his early written work Freud was profoundly impacted by Janet, expounding the dissociation wonder (Breuer and Freud, 1955). He later surrendered the separation hypothesis, proposing rather that injury responses persevere on the grounds that of a relationship between the traumatic occasion what's more, adolescence stifled clashes (Freud, 1953). He dismissed the likelihood that a raumatic occasion alone can bring about serious passionate affect. After the negative effects of World War I on individuals, Freud centered again on outside reality and came back to the idea that the changes produced by injury is the wellspring of traumatic anxiety. He recommended that the force of the injury, the failure to discover cognizant expressions for it, the ineptness of the individual cause a rupture to the jolt boundary and overpower the barrier systems (Freud, 1955).

#### 1.5.2. Cognitive Theory of PTSD

Various cognitive theories have been formulated to explain PTSD. Horowitz argued that the PTSD is caused by the need to assimilate the cognitive schemes of the person's perception of the threat to the event and the contradiction of the need to keep emotional and physiological stimulation at normal levels. However, as the person tries to reduce the stimulus, it may interfere with the assimilation process, which can lead to more flashback symptoms (Horowitz, 1986). According to another theory, it is suggested that the traumatic event breaks down the cognitive schemes of the person and the world, so that when the schemes are restructured, they begin to take place in their negative and incompatible beliefs (McCann, Sakheim & Abrahamson, 1988). Information processing theories link PTSD to a disorder in the processing of traumatic events (Foa, Steketee & Olasov-Rothbaum, 1989; Chembot et al., 1988). According to these theories, information about verbal, behavioral

physical reactions and their meanings are placed as "fear" structures in the memory of the person. In order for these structures to survive, it is necessary to correct the information they contain by giving them the correct information after they have been activated before the treatment. Another cognitive theory that attempts to explain PTSD is based on the basic assumptions that one has about himself and the world. According to this theory, at the center of the basic assumptions of people; The world is a good and safe place, the events in the world are meaningful, the person is perceiving himself as a valuable asset. These assumptions lead to the belief that one is impunity (no bad things happen to him). Traumatic events can undermine the perception that impunity, people are confronted with danger and death threats (Foa and Kozak, 1986). This sudden encounter may result in some people failing to find a meaningful and acceptable explanation of trauma, or the destruction of the assumptions that the world is a safe, fair and orderly place (Lifton and Olson, 1976). As a result, the victim begins to experience post-traumatic stress problems, to feel unsafe and helpless, and to perceive the outside world as unreliable (Başoğlu et al., 1996; Resick and Schnicke, 1992). Yet some other theories argue that the functions of the person that he or she already possesses from the change of the traumatic event on cognitive functions are decisive. These theoreticians suggested that whether a traumatic event would lead to mental problems is linked to the perception of the event (Wong and Weiner, 1981; Lazarus, 1984). According to this idea, traumatization is caused by the perception that there is no reason to cope with the severity of the event. In the same way, the citation / loading theory advocates that when a traumatic event occurs, people are in cites for their surroundings and events to understand, predict, and control, and that the quality of attribution made by the person determines how he will react to it (Wong and Weiner, 1981; Mikulincer and Solomon, 1988).

#### 1.5.3. Behavioral Theory of PTSD

According to the behavioral scheme, a two-factor learning process is mentioned in PTSD. In the first period, a person who is exposed to a trauma (unconditioned stimulus) learns that he / she will regret the situation at the center of the trauma, the images and thoughts, or the situation near the trauma (conditional stimulus). Instrumental learning (operant condition) is the second influence. Avoidance from both conditional and unconditional stimuli is continuous in order to reduce anxiety.

As a result, too many stimuli can be generalized, which leads to the occurrence of arousal states (Bandura, 1977).

#### 1.6. Prevalence of PTSD

In most general population surveys, the lifetime prevalence of PTSD has been found to vary between 1-14% (Brunello et al., 2001; Perkonigg et al., 2000; Kessler, Sonnega & Bromet, 1995; Breslau et al., 1991; Yorbik ve et al., 2001). The study conducted in the USA with a huge representative samgle found the lifetime prevalence of PTSD as 7.8% (women 10.4%, men 5.0%) (Kessler et al., 1995). In Australia the PTSD rate in a 1 year was found as 1.3% (Creamer et al, 2001) and 3.6% in USA (Narrow et al, 2002). According to World Mental Health (WMH) surveys lifetime PTSD prevalence was found similar in some countries as 2.3% in South Africa (Atwoli et al., 2013), 2.2% in Spain (Carmassi et al., 2014) and 2.4% in Italy (Olaya et al., 2015). On the other hand much lower rates was found in Japan as 1.3% (Kawakami et al., 2014) and much higher in Northern Ireland as a rate of 8.8% (Ferry et al., 2014).

The study of the second world war prisoners illustrates that the lifelong PTSD prevalence was 50% and the same group was reassessed about 50 years after trauma. After reassessment it is found that PTSD is still ongoing at 29%. A study involving 573 Bosnian migrants from Croatia showed PTSD rate as 26.3% (Kaya, 2000). In a study of populations in the southeastern London area, including immigrants, the PTSD rate was 5.5% (Frissa et. al., 2013). In addition, in a study conducted in the US, the rate of PTSD was 7.8%, while in American Vietnam, this rate was 30.9% for males and 26.9% for females (Kessler et. al., 1995). Different results have been obtained as a result of different researches. PTSD prevalence was found as 11.8% in northern Ugand (Mugisha et al., 2015), highest as a rate of 60.6% in Northern Ireland (Ferry et al., 2014), 60% in Japan (Kawakami et al., 2014), 56.1% in Italy Carmassi et al., 2014), and 73.8% in South Africa (Atwoli et al., 2013). Differences in instrumentation used, traumatic event experience history, and sample differences can lead to consequent changes. According to the study conducted 1,5 years after the earthquake in Armenia, with children in the nearest city to the earthquake center 17% found to have a very severe, 74.5% severe, 8.5% found to have moderate PTSD (Karakaya et al., 2004). PTSD rates were observed between 10% and 24% in the study conducted after the earthquake in Taiwan (1999) (Aker, 2006). In the surveys conducted after the Marmara earthquake, the incidence of PTSD in people who

experienced the earthquake was reported to vary between 56% and 77%. In the southeastern veteran population the rate of possible PTSD was found to be 29.6% (n = 73) and the rate of depression accompanying PTSD was 16.6% (n = 41) (Güloğlu and Karairmak, 2013). Although the psychological problems experienced by soldiers after World War II were handled in a systematic way, researches about the posttraumatic disorder was seen to increased after the Vietnam War. The results of the NVVRS (National Vietnam Veterans Readjustment Study), the most comprehensive survey among soldiers after the Vietnam War, show that 15.2% of men and 8.5% of women meet PTSD diagnostic criteria (Çırakoğlu, 2003). Breslau et al. reported that the lifetime prevalence of PTSD was 24% among trauma victims (Breslau et al., 1991). In a large literature review, it has been found that the percentage of PTSD in a society exposed to a traumatic event varies between 25-30% (Green, 1994). The prevalence of PTSD has been extensively studied in Vietnam for soldiers participating in the Vietnam war, life-long PTSD diagnosis varies between 15-31% and current PTSD is between 2-39% (Helzer et al., 1987; Card, 1987; Snow et al., 1988). In the survey conducted in two villages in South China after the 1998 earthquake, PTSD was found as 24% (Wang et al., 2000). Rates of PTSD are observed elevated in post-conflict areas such as Algeria (37%), Cambodia (28%), Ethiopia (16%), and Gaza (18%) (Jong, 2001).

Because of the nature of Turkey and its underdeveloped social structure, people experience traumatic events almost every day (Öztürk and Uluşahin, 2011). Cyprus is divided into two regions, north and south. After 1974, the Greeks living on the North side of Cyprus are had to migrate to the South side and the Turks living on the south side are placed in the North. As a result, researches including the Turkish veterans and citizens in Northern Cyprus show that the veterans who were displaced show higher levels of PTSD than those who were not displaced (Ergun, Cakici, & Cakici, 2008). In a survey conducted to determine PTSD level, although it passed 40 years after the war, PTSD was found to be 48% in Erenköy Turkish Cypriot warriors and 6% in Turkish Cypriot warriors (Şimşek and Çakıcı, 2015). On the other hand, it is observed that the rate of natural disasters in the world has increased three times in the last 40 years. This increase has killed nearly 3 million people in the last 20 years and has affected the mental health of countless people in the negative direction (Öztürk and Uluşahin, 2011).

#### 1.7. Risk Factors of PTSD

In terms of gender, women are twice as likely to have PTSD than men (Şenyuva and Yavuz, 2009). In addition, recent studies have shown that the manner, nature and severity of traumatic events are also important factors in the development of PTSD. Another important factor is the personality traits of the person who experiences the trauma (Hacıoğlu, Gönüllü & Kamberyan, 2002). PTSD is one of the most common psychiatric problems which occurs after a trauma. In addition to this, problems such as depression alcohol-drug use, anxiety and concordance disordes can arise after a trauma (Şenyuva and Yavuz, 2009; Karakaya et al., 2004). The effect and severity of the trauma varies from individual to individual. Although all people who are exposed to a severe traumatic event (earthquake, etc.) are affected psychologically and physically, mental disorders are not seen in all (Öztürk and Uluşahin, 2011).

Cancer patients are 30-40% more likely to develop psychiatric symptoms (Aydoğan et al., 2012). People with PTSD have a 2-3 times higher incidence of alcohol or substance use disorder than those who have never had a traumatic event. In addition, the incidence of childhood traumatic events is higher in dependent people than in non-dependent people, with a rate of 30-59% (Aldemir and Tan, 2011). Substance use disorders frequently occur together with PTSD and together they have more negative consequences (Prout, Gerber & Gottdiener, 2015). In other words, nicotine, alcohol and drug dependencies are more prevalent in people who experience a traumatic event (Walsch et al., 2014). Frequently occurring disorders after PTSD are depression, anxiety and the increasing use of substance abuse that has begun to get rid of feelings after a traumatic event (Öğel, 2010).

The meaning of the traumatic event also seen as an effective factor which determine the probability of PTSD occurance (Picinelli, 1997). Moreover researches illustrate that severity of the traumatic event is also an important predictor for the PTSD (Dougall et al., 2000; King et al., 1999; King et al., 2000; Ozer et al., 2003). Family history found to be a risk factor in the occurance of PTSD (Ozer et al., 2003). Many research results expressed that who revealed earlier traumatic occasion in their life had an elevated amounts of PTSD indications (Breslau et al., 1999; Brewin et al., 2000; Brunet et al., 2001; Dougall et al., 2000; King et al., 2000; Ozer et al., 2003; Pfefferbaum et al., 2003). Social support found to have a positive effect on PTSD (Brewin, Andrews & Valentine, 2000; Koenen et al., 2003).

The importance of three factors in the formation of PTSD is stated. These are; the nature and severity of the trauma, the characteristics of the trauma person, and the characteristics of the environment after trauma. In addition, ethno-cultural factors can play an important role in the development of PTSD and in the response to treatment (Sungur, Sürmeli & Özçubukcuoglu, 1995). Although a significant trauma plays a key role in the etiology of PTSD, it is thought that multiple factors are involved in the development of the disease. The same PTSD does not occur in any of the traumatic events. Similarly, some events that seem ordinary or do not seem like a disaster for most people can cause PTSD because of the subjective meaning of the event for the person. Stress source is not enough to cause the disorder to occur. The event needs to have a subjective meaning for the patient. Various ethno-cultural, psychological, physical, familial and social factors are involved in the pathogenesis of the disorder (Foa, 1997; Çervatoğlu, 2000). Subjective meaning of the stressor for the patient, the length of time exposed to the stress source, the suddenness of the stressor, being catastrophic, including death threats, physical injury, cruelty and inhumanity, the perception of guilt (guilt of survival), are the factors that increase the severity of trauma (Çervatoğlu, 2000; Yılmaz, 1995). In addition these factors also effect the probability of the PTSD; A history of traumatic life changes in early childhood, borderline, paranoid, antisocial or dependent personality traits, inwardness, neuroticism, inadequate social support, genetic-structural predisposition to develop a psychiatric illness, recent stressful life changes. The presence of alcohol or drug abuse, the separation of parents before the age of 10, to be very young or very old, and the ability to be hypnotized (Baysak, 2010; Barash, 1990).

#### 1.8. Treatment of PTSD

Early evaluation and promptness are the key factors in intervention to PTSD. Early recognition of the disorder and the knowledge that such reactions may be possible will help to make the interventions happen more quickly. Recognizing and accepting the individual's emotional reactions has an accelerating effect on post-traumatic healing. An interview to get a story can help to prevent life-long suffering (Morrison, 1994; Rose 1995).

Both psychotherapy and pharmacotherapy are effective in the treatment of PTSD (Tural and Önder, 2001). It is stated in the literature that combined therapies provide more benefit (Foa, 1997). People who are affected by serious traumas generally do

not tend to get a treatment, and the therapeutic relationship with these patients is a complicated process. For this reason, it is important to use the basic principles of communication in order to ensure the continuity of treatment in the interaction with traumatized individuals (Özgen and Aydın, 1999; Sercan, 2000). In a session, talking about the traumatic event is a beneficial method. It is necessary to give the patient various coping skills. Patient should be encouraged to return to daily functioning in a short time (Özaltın, 2003). Psychological education in PTSD is the basis of psychological approaches. Psychological education includes information about illness and treatment, coping with daily problems, interpersonal relationships, role changes, self-esteem, finding appropriate resources, sharing anxiety, teaching stress coping skills, relaxation exercises (Card, 1987) Explaining the symptoms and the syndrome, gives the message to the person that he or she is understood. Explaining cause-and-effect relationships is important in terms of defining the situation. It is useful to state that mental problems are a common, understandable response to extraordinary situations (Özgen and Aydın, 1999). The treatment of patients suffering from flashbacks in the form of self-harm or dissociation and hallucination seems to be more appropriate in the hospital. Prior to PTSD treatment, alcohol / substance abuse detoxification therapy is considered as a necessary process if there is a alcohol / substance abuse (Özaltın, 2003; Yaluğ, Özdemir & Aker, 2007). Psychotherapeutic interventions are; Cognitive-Behavioral Therapy (BDT), Eye Movement Desensitization and Reprocessing (EMDR), Group Therapy and Psychodynamic Therapies. Specific techniques, such as Relaxation Exercises, may also be useful. CBT consists of interactive psychoeducation, cognitive restructuring, and coping with anxiety (Yaluğ, Özdemir & Aker, 2007).

The most commonly used and effective psychotherapeutic approach is CBT. These treatments are mainly aimed at educating the person experiencing the traumatic event by systematically approaching these experiences through various techniques, teaching the methods of coping with anxiety, eliminating the avoidance behaviors and restoring the feeling of control lost. It is possible to reduce the risk of PTSD by giving people the feeling of control and predictability as soon as possible after trauma (Shapiro, 1989; Sinici, Erden & Yurttaş, 2009). Behavioral methods, which are based on exposure to anxiety stimuli and also known as Exercise Therapy, are the most promising approaches. These are methods such as systematic desensitization, stimulus loading or condensation. With the treatment of

desensitization, the stimuli about the patient's fear are displayed in a certain hierarchy from less stimulant to higher stimulant. In the meantime, the effect of stimulation by relaxation is inhibited and anxiety is extinguished (Pitman & Orr, 1990). The EMDR is an integrated therapy method that focuses on external stimuli such as patient's eye movements and hand-tapping, emotionally disturbing the image, thinking, and focusing on sensations at consecutive doses. This method is repeated until the stressor nature of the traumatic recall diminishes and more appropriate cognition about trauma occurs (Yaluğ, Özdemir & Aker, 2007). There is not much study about the psychodynamic treatments on PTSD. When the effect of desentisization, hypnotherapy and short psychodynamic therapy are compared, it is found that psychodynamic therapy is more effective on treatment of PTSD (Brom, Kleber & Defares, 1989). Group therapies have the advantage of treating many people at the same time and have been reported to reduce their rejection and isolation attitudes that are common in PTSD patients (Shapiro, 1989). Many clinicians also recommend group therapy after starting the individual treatment process, as Group Therapy also helps to reduce the symptoms of PTSD as well as problems with selfworth and interpersonal relationships. It is indicated that Group Therapy applied cognitive process model provides a significant improvement on both PTSD and depressive symptoms (Foa, 1997). When choosing an appropriate treatment method for the individual, the needs of the patient, the characteristics of the disorder, the presence of external supports, and cultural factors must be taking into account. (Özgen and Aydın, 1999). Experts agree that pharmacological agents should be used in severe cases to facilitate psychotherapy (Freidman, 1988). The effectiveness of drug treatments depends on the right diagnosis, the right medication, the appropriate dose, and adequate time to use. In order for medication to be effective, the patient must be at peace with the idea of using medication. Since most PTSD patients do not accept the use of psychotropic medication, the first step should be helping patient to understand the role of medical care in the primary care setting (Shore, Tatum & Vollmer, 1986). Drug treatments include three phases. These are stabilization, and maintenance and discontinuation. The first step in stabilization is the agreement with the patient. Stopping the usage is considered when treatment response is received and continuity is ensured. Drugs are started at a low dose, and the usage is stopped by decreasing the dose. Good results are usually obtained with antidepressants in drug treatments. Treatment should last 6-12 months for acute PTSD and 12-24 months for

chronic PTSD (Özgen and Aydın, 1999). Medicines used in treatment of PTSD can be classified as Selective Serotonin Reuptake Inhibitors (SSRI), Tricyclic Antidepressants (TCA), Monoamine Oxidase Inhibitors (MAOI), Nefazodone, Trazodone, Mirtazapine, Venlafaxine, Tianeptin, Lithium, Beta Blockers, Clonidine, Benzodiazepines, Carbamazepine, Valproic Acid (Davidson and Connor, 1999). SSRIs are the most common and widely used drugs for the treatment of symptoms of relapse, avoidance, emotional blunting and hyperarousal (Foa, Davidson & Frances, 1999).

#### 1.9. Aim and Importance of the Study

This study aims to investigate the prevalence of Post Traumatic Stress Disorder in Turkish Republic of Northern Cyprus, and risk factors of PTSD. Present study tries to examine events linked to PTSD, finding frequency and causes of PTSD. Main aims of this study can be listed as contributing scientifically to find out causes and progress of PTSD and results of it in the means of environmental factors and giving information to professions in the field in TRNC about every dimension of PTSD. This study will also help to improve, evaluate and describe the psychological health politics in TRNC.

PTSD has a prominence to be investigated in our country as in the whole world. Especially, the TRNC community has suffered a serious trauma with the recent experience of war in 1974. The effects of this trauma continue to be transferred from generations to generations. The purpose of the study is to determine the prevalence of Posttraumatic Stress Disorder in North Cyprus and its relation with some sociodemographic variables.

Results of this study will give information about the prevalence and risk factors of PTSD and data collected from the study will contribute to clinical practice, general psychiatry education and psychopathology of PTSD. Knowing the prevalence of PTSD in TRNC will help to professions for acquiring information about the risk factors of PTSD, effects of gender on PTSD, frequency of physical or psychological disorders in the family, use of cigarette, drug or alcohol, marital status, briefly the risk factors to live a PTSD in TRNC.

#### 1.10. Hypothesis of the Study

The PTSD will be found as a high rate in TRNC.

- Women will have higher PTSD rates compared to men.
- Being unemployed is positively associated with PTSD.
- People with physical illnesses will have higher PTSD rates.
- People who live alone will have higher prevalence.
- Alcohol/ cigarette/ substance use is thought to be positively associated with PTSD.
- Low socio-economic income is a predictor for PTSD.

#### 2. METHOD

#### 2.1. Sampling

The universe of the study involves Turkish-speaking individuals between 18-88 years of age living in Northern Cyprus. Multi-stage stratified (randomized) quota was used in the survey and 978 people were selected. Selected individuals based and calculated according to gender (male/female), age (18-19, 20-29, 30-39, 40, 49, 50-65, 65 and above), place of residence (village/city), regional features. 4 December 2011 dated census statistics were considered for sampling (Census of Population, 2011). With the guidance of the last census, five main regions, which are Nicosia, Famagusta, Kyrenia, Morfou and İskele, main characteristics of the population are taken into account. These five central areas are divided into quarters in the rural area and villages in the urban area. 16 quarters, 17 villages and 5 cities were considered randomly in the study.

#### 2.2. Survey Form

#### 2.2.1. Socio-demographic data sheet

Socio-demographic data sheet used to collect profile data and consist of 21 questions. This self-made form, following questions asked to participants: age, gender, marital status, place of birth, where they live, with whom they live, education status, profession, the legal position of their homes, thoughts on uniting with Greek-speaking Cypriots, cigarette/alcohol/substance usage and total monthly income.

#### 2.2.2 Life Events question form

It consists of questions prepared by the researcher. Questions may include child abuse, natural disasters, fire or explosion, traffic accidents, physical assaults, sexual assaults, presence in the field of battle, torture or similar practice, murder or suicidal situations, sudden death of a loved one, Family violence, sudden withdrawal from work, or life events involving heavy economic stress, workplace accidents and other stressful events.

#### 2.2.3. Traumatic Stress Symptom Scale

Başoğlu et al. (2001) was developed and conducted reliability and validity studies of this scale. It is a 4 point likert scale which consists of 23 items. It contains questions that participants evaluate themselves in the last month. The points of the

items are between 0-3. The first 17 items question the symptoms of PTSD and the last 6 items question the symptoms of depression. The scores from these 17 items, which are 25 or higher, points to a possible PTSD. The ideal cut-off score for PTSD was 22 and the cut-off score for depression was 38 (Başoğlu et al., 2001).

#### 2.3. Application

The fieldwork was conducted from April to June 2016. Starting points were randomly selected in particular streets for cities, and in village centers (coffee houses and village mosques) with directions to the north, south, east and west established for the villages. Interviewers tried to draw squares in their movements, starting with the lowest house numbers. One house in three was added to study with the interviewers taking the first right turning each case in order to complete the square. After one square had been completed, a new start point was defined and the creation of a new square commenced. Gender and age quotas were considered in every house entered. Only one person was added to the study in each house, alternating between men and women. If there was more than one candidate in a home, the one whose birthday was closest was selected. 40 interviewers were used, after training about the questionnaire and the interview process. Each interviewer administered 25 questionnaires. In this way, it was aimed to minimise the margin of error that might result from variation in interviewer application. After detailed information was given to the participants, they were asked to sign a consent form signalling their agreement to participate in the study.

#### 2.4. Ethical Considerations

The study was approved by the Social and Science Institute Ethical Board at the Near East University of NC and was conducted according to the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments. Written informed consent from all participants was also obtained.

#### 2.5. Data Analysis

Collected data analyzed by computer with Statistical Package for Social Science (SPSS) 23 software package. Each socio-demographic feature compared between with PTSD and without PTSD groups using Chi-Square analysis and risk factors were defined by using logistic regression analysis method. 0.05 or lower p values considered statistically meaningful to all these statistical analysis. PTSD risk factor rate defined (95% confidence interval) by logistic regression rate for every feature of

socio-demographic values. Linear regression analysis was also applied in order to investigate the level of the correlation between the life events and PTSD.

#### 3. RESULTS

Comparison of socio-demographic characteristics of individuals with and without PTSD. 982 people participated to the study. There were 1000 participants in the study, but 982 of the forms were used for statistical analysis as 18 of them had inconsistent or inconclusive answers. 456 (46,4%) of them were women and 526 (53,6%) of them were men. 181 (19%) of them had PTSD while 770 (81%) of them don't. 37.48 (SD=+15,79) for the average age of PTSD while its 39.84 (SD=+15,13) for without PTSD. Participants according to their birthplace, 479 (%48, 8) for Cyprus, 450 (%45, 8) for Turkey, 13 (%1,3) and 40 (%4,1) for others. In marital status, 524 (%53,4) of them married, 46 (%4,7) of them engaged, 261 (%26,6) of them single, 64 (%6,5) in relationship 29 (%3,0) divorced, 53 (%5,4) are widow and 5 (%0,5) of them choose "others". According to residential data, 257 (%26,2) of them lives in village, 143 (%14,6) of them in town and 581 (%59,2) of them lives in city. According to the education status, 19 (%1,9) of the participants are illiterate while 31 (%3,2) of them literate, 146 (%14,9) of them primary school graduate, 135 (%13,7) of them secondary school graduates, 276 (%28.1) of them high school graduate and 375 (%38,2) of them are college / university graduates.

**Table 1.** Current PTSD rates of the participants according to the Traumatic Stress Symptom Scale.

|              | N   | %   |
|--------------|-----|-----|
| With PTSD    | 181 | 19  |
| Without PTSD | 770 | 81  |
| Total        | 951 | 100 |

n=Frequency, %=percentage

**Table 2.** Existence of PTSD compared to Depression

|                    | With PTSD |      | Without | Without PTSD |     | Total |  |
|--------------------|-----------|------|---------|--------------|-----|-------|--|
|                    | n         | %    | n       | %            | n   | %     |  |
| With Depression    | 118       | 65,2 | 114     | 14,8         | 232 | 24,4  |  |
| Without Depression | 63        | 34,8 | 656     | 85,2         | 719 | 75,6  |  |
| Total              | 181       | 100  | 770     | 100          | 951 | 100   |  |

 $X^2=201,739$ , df=1, p=0,000, NA=31 (3,2%).

This study used chi square analysis to compare the relationship between PTSD and existence of depression and the results were significantly different ( $X^2=201,739$ , df=1, p=0,000). As there was depression, there was also an increased rate of PTSD.

**Table 3.**Existance of PTSD compared to gender.

|        | With PTSD |      | Without PTSD |      | Total |     |
|--------|-----------|------|--------------|------|-------|-----|
|        | n         | %    | n            | %    | n     | %   |
| Female | 110       | 24,9 | 331          | 75,1 | 441   | 100 |
| Male   | 71        | 13,9 | 439          | 86,1 | 510   | 100 |
| Total  | 181       | 19,0 | 770          | 81,0 | 951   | 100 |

X<sup>2</sup>=18,643, df=1, p=0,000, NA=31 (3,2%).

Gender and participants with PTSD and without PTSD are compared by using Chi-square analysis and it is found that there is a meaningful statistic difference ( $X^2=18,643$ , df=1, p=0,000). Women had higher PTSD prevalence compared to men.

Table 4.Existance of PTSD compared to age.

|             | With PTSD |      | Without I | PTSD | Total |     |
|-------------|-----------|------|-----------|------|-------|-----|
|             | n         | %    | n         | %    | n     | %   |
| 18-29       | 55        | 22,4 | 190       | 77,6 | 245   | 100 |
| 30-39       | 36        | 18,2 | 161       | 81,8 | 198   | 100 |
| 40-49       | 31        | 15,4 | 170       | 84,6 | 201   | 100 |
| 50-59       | 15        | 13,9 | 93        | 86,1 | 108   | 100 |
| 60 and more | 0         | 0    | 4         | 100  | 4     | 100 |
| Total       | 162       | 19   | 691       | 81   | 853   | 100 |

 $X^2 = 9.317$ , df= 6, p=0.157, NA=31 (3.2%).

Age average and participants with and without PTSD compared using Chi-square analysis but couldn't found a meaningful statistic difference ( $X^2 = 9,317$ , df= 6, p=0,157).

Table 5. Existence of PTSD compared to birth place.

|         | With PTSD |      | Without PTSD |      | Total |     |
|---------|-----------|------|--------------|------|-------|-----|
|         | n         | %    | n            | %    | n     | %   |
| Cyprus  | 75        | 16,0 | 393          | 84,0 | 468   | 100 |
| Turkey  | 100       | 23,1 | 333          | 76,9 | 433   | 100 |
| Britain | 0         | 0    | 12           | 100  | 12    | 100 |
| Other   | 6         | 15,8 | 32           | 84,2 | 38    | 100 |
| Total   | 181       | 19,0 | 770          | 81,0 | 951   | 100 |

X<sup>2</sup>=10,462, df=3, p=0.015, NA=31 (3,2%).

Place of birth and participants with and without PTSD compared using Chi-square, a meaningful statistic difference was found ( $X^2=10,462, df=3, p=0.015$ ).

**Table 6.** Existence of PTSD compared to number of years lived in Cyprus.

|             | With PTSD |      | Without F | PTSD | Total |     |
|-------------|-----------|------|-----------|------|-------|-----|
|             | n         | %    | n         | %    | n     | %   |
| 0-9         | 57        | 25,6 | 166       | 74,4 | 223   | 100 |
| 10-19       | 19        | 17,4 | 90        | 82,6 | 109   | 100 |
| 20-29       | 19        | 20,0 | 76        | 80,0 | 95    | 100 |
| 30-39       | 15        | 24,6 | 46        | 75,4 | 61    | 100 |
| 40-49       | 8         | 14,8 | 46        | 85,2 | 54    | 100 |
| 50-59       | 5         | 25,0 | 15        | 75,0 | 20    | 100 |
| 60 and more | 8         | 12,5 | 23        | 87,5 | 32    | 100 |
| Total       | 127       | 21,4 | 467       | 78,6 | 594   | 100 |

X<sup>2</sup>=6,854, df=6, p=0,335, NA=388 (%39,5)

In this study, with and without PTSD and residency period of people, whose place of birth isn't Cyprus, compared using Chi-square method but couldn't found a meaningful statistic difference ( $X^2=6,854$ , df=6, p=0,335).

**Table 7.** Existence of PTSD compared to marital status.

|                 | With PTSD |      | Without PTSD |      | Total |     |
|-----------------|-----------|------|--------------|------|-------|-----|
|                 | n         | %    | n            | %    | n     | %   |
| Maried          | 70        | 13,9 | 433          | 86,1 | 503   | 100 |
| Engaged         | 16        | 34,8 | 30           | 65,2 | 46    | 100 |
| In Relationship | 22        | 35,5 | 40           | 64,5 | 62    | 100 |
| Single          | 43        | 17,0 | 210          | 83,0 | 253   | 100 |
| Divorced        | 8         | 27,6 | 21           | 72,4 | 29    | 100 |
| Widow           | 20        | 37,7 | 33           | 62,3 | 53    | 100 |
| Other           | 2         | 40,0 | 3            | 60,0 | 5     | 100 |
| Total           | 181       | 19,0 | 770          | 81,0 | 951   | 100 |

X<sup>2</sup>=42,352, df=6, p=0,000, NA=31 (3,2%).

In this study, marital status and with or without PTSD compared using Chi-square and found a meaningful statistic difference. ( $X^2=42,352$ , df=6, p=0,000). Widows had more higher points of PTSD.

**Table 8.** Existence of PTSD compared to having children.

|               | With PTSD |      | Without PTSD |      | Total |     |
|---------------|-----------|------|--------------|------|-------|-----|
|               | n         | %    | n            | %    | n     | %   |
| No Children   | 74        | 21,2 | 275          | 78,8 | 349   | 100 |
| Have Chlidren | 89        | 17,8 | 412          | 82,2 | 501   | 100 |
| Total         | 163       | 19,2 | 687          | 80,8 | 850   | 100 |

X<sup>2</sup>=1,570, df=1, p=0,210, NA=132 (13,4%).

In this study, children distribution and with and without PTSD distribution compared using Chi-square but couldn't found a meaningful statistic difference(X<sup>2</sup>=1,002, df=1, p=0,317).

Table 9. Existence of PTSD compared to number of children.

|            | With PTSD |      | Without PTSD |      | Total |     |
|------------|-----------|------|--------------|------|-------|-----|
|            | n         | %    | n            | %    | n     | %   |
| 1          | 22        | 17,7 | 102          | 82,3 | 124   | 100 |
| 2-3        | 58        | 16,7 | 290          | 83,3 | 348   | 100 |
| 4 and more | 25        | 28,4 | 63           | 71,6 | 88    | 100 |
| Total      | 105       | 18,8 | 455          | 81,2 | 560   | 100 |

 $X^2=6,463, df=2, p=0,039, NA=363 (37,0\%).$ 

This study used chi square analysis to compare the correlation between PTSD and number of children and the results were significantly different ( $X^2$ =6,463, df=2 p=0,039). As the number of children increases, there was an increased rate of PTSD.

Table 10. Existence of PTSD compared to living place.

| 10. 3   | With PTSD |      | Without PTSD |      | Total |     |
|---------|-----------|------|--------------|------|-------|-----|
|         | n         | %    | n            | %    | n     | %   |
| Village | 44        | 17,6 | 206          | 82,4 | 250   | 100 |
| Town    | 33        | 23,4 | 108          | 76,6 | 141   | 100 |
| City    | 103       | 18,4 | 456          | 81,6 | 559   | 100 |
| Total   | 180       | 18,9 | 770          | 81,1 | 950   | 100 |

 $X^2=2,218$ , df=2 p=0,330, NA=32 (3,3%).

In this study, individuals with and without PTSD and the distribution of where they live compared using Chi-square but couldn't found a meaningful statistic difference  $(X^2=2,218, df=2 p=0,330)$ .

Table 11. Existence of PTSD compared to employment.

|            | With PTSD |      | Without PTSD |      | Total |     |
|------------|-----------|------|--------------|------|-------|-----|
|            | n         | %    | n            | %    | n     | %   |
| Employed   | 79        | 14,0 | 485          | 86,0 | 564   | 100 |
| Unemployed | 102       | 26,4 | 284          | 73,6 | 386   | 100 |
| Total      | 181       | 19,1 | 769          | 80,9 | 950   | 100 |

 $X^2 = 22,913$ , df=1, p=0,000, NA=32 (3,3%).

In this study, individuals with and without PTSD and employment status compared using Chi-square and found a meaningful statistic difference ( $X^2 = 22,913$ , df=1, p=0.000). Employed people showed lower depression rate.

Table 12. Existence of PTSD compared to profession.

|               | With PTSD |      | Without PTSD |      | Total |     |
|---------------|-----------|------|--------------|------|-------|-----|
|               | n         | %    | n            | %    | n     | %   |
| Worker        | 28        | 18,5 | 123          | 81,5 | 151   | 100 |
| Student       | 40        | 23,8 | 128          | 76,2 | 168   | 100 |
| Unemployed    | 9         | 34,6 | 17           | 65,4 | 26    | 100 |
| Civil Servant | 11        | 12,2 | 79           | 87,8 | 90    | 100 |
| Own Business  | 19        | 13,1 | 126          | 86,9 | 145   | 100 |
| Housewife     | 36        | 30,8 | 81           | 69,2 | 117   | 100 |
| Freelance     | 20        | 19,4 | 83           | 80,6 | 103   | 100 |
| Other         | 18        | 12,0 | 132          | 88,0 | 150   | 100 |
| Total         | 181       | 19,1 | 769          | 80,9 | 950   | 100 |

 $X^2 = 27,884$ , df=7, p=0,000, NA=32 (3,3%).

In this study, employment of individuals and without PTSD and employment status compared using Chi-square and found a meaningful statistic difference ( $X^2=27,884$ , df=7, p=0,000). Unemployed participants showed greater depression rate than any other occupations.

**Table 13.** Existence of PTSD compared to education level.

|                      | With PTSD |      | Without PTSD |      | Total |     |
|----------------------|-----------|------|--------------|------|-------|-----|
|                      | n         | %    | n            | %    | n     | %   |
| Illiterate           | 6         | 31,6 | 13           | 68,4 | 19    | 100 |
| Literate             | 9         | 31,0 | 20           | 69,0 | 29    | 100 |
| Primaryschool        | 32        | 22,4 | 111          | 77,6 | 143   | 100 |
| Middle School        | 27        | 20,8 | 103          | 79,2 | 130   | 100 |
| High school          | 40        | 14,9 | 229          | 85,1 | 269   | 100 |
| College / University | 67        | 18,6 | 294          | 81,4 | 361   | 100 |
| Total                | 225       | 19,0 | 738          | 81,0 | 951   | 100 |

X<sup>2</sup>= 9,021, df=5, p=0,108, NA=32 (3,3%).

In this study, education status and with and without PTSD compared using Chisquare and no statistic meaningful difference was found ( $X^2 = 9,021$ , df=5, p=0,108).

Table 14. Existence of PTSD compared to monthly income.

|                | With PTSD |      | Without PTSD |      | Total |     |
|----------------|-----------|------|--------------|------|-------|-----|
|                | n         | %    | n            | %    | n     | %   |
| No income      | 20        | 27,0 | 54           | 73,0 | 74    | 100 |
| Minimum wage   | 56        | 22,4 | 194          | 77,6 | 250   | 100 |
| (1700 TL and   |           |      |              |      |       |     |
| belove)        |           |      |              |      |       |     |
| 1700-3400 TL   | 62        | 17,4 | 294          | 82,6 | 356   | 100 |
| 3400-10.000 TL | 33        | 14,3 | 197          | 85,7 | 230   | 100 |
| 10.000 TL and  | 9         | 23,7 | 29           | 76,3 | 38    | 100 |
| more           |           |      |              |      |       |     |
| Total          | 180       | 19,0 | 768          | 81,0 | 948   | 100 |

 $X^2=9,337$ , df=4, p=0,053, NA=34 (3,5%).

In this study, monthly income and with and without PTSD compared using Chisquare and not found a meaningful statistic difference ( $X^2=9,337, df=4, p=0,053$ ).

Table 15. Existence of PTSD compared to status of home lived in.

|                 | With PTSD |      | Without PTSD |      | Total |     |
|-----------------|-----------|------|--------------|------|-------|-----|
|                 | n         | %    | n            | %    | n     | %   |
| Own resources   | 60        | 16,1 | 313          | 83,9 | 373   | 100 |
| State aid       | 15        | 25,4 | 44           | 74,6 | 59    | 100 |
| On Rent         | 59        | 22,4 | 204          | 77,6 | 263   | 100 |
| Family heritage | 45        | 19,9 | 181          | 80,1 | 226   | 100 |
| Other           | 2         | 6,9  | 27           | 93,1 | 29    | 100 |
| Total           | 181       | 19,1 | 769          | 80,9 | 950   | 100 |

 $X^2=8,517$ , df=4, p=0,074, NA=32 (3,3%).

In this study, how they owned their house and with or without PTSD compared using Chi-square but couldn't found a meaningful statistic difference ( $X^2=8,517, df=4, p=0,074$ ).

Table 16. Existence of PTSD compared to living location.

|                  | With PTSD |      | Without PTSD |      | Total |     |
|------------------|-----------|------|--------------|------|-------|-----|
|                  | n         | %    | n            | %    | n     | %   |
| Turkish Property | 113       | 19,3 | 472          | 80,7 | 585   | 100 |
| Greek Property   | 47        | 24,7 | 143          | 75,3 | 190   | 100 |
| (Allocated)      |           |      |              |      |       |     |
| Greek Property   | 20        | 11,8 | 150          | 88,2 | 170   | 100 |
| (Equivalent)     |           |      |              |      |       |     |
| Total            | 180       | 19,0 | 765          | 81,0 | 945   | 100 |

 $X^2=9,863$ , df=2, p=0,007, NA=37 (3,8%).

In this study, status of property and with or without PTSD compared using Chisquare a meaningful statistic difference was found ( $X^2=9,863$ , df=2, p=0,007). Participants who live in a Greek property had higher PTSD rates.

**Table 17.** Existence of PTSD compared to physical illness.

| C 1280 1809 1809 1800 1800 1800 1800 1800 18 | With PTSD |      | Without PTSD |      | Total |     |
|--|-----------|------|--------------|------|-------|-----|
|  | n         | %    | n            | %    | n     | %   |
| Have Physical                                | 24        | 27,3 | 64           | 72,7 | 88    | 100 |
| Disease                                      |           |      |              |      |       |     |
| Doesn't Have                                 | 157       | 18,2 | 705          | 81,8 | 862   | 100 |
| Physical Disease                             |           |      |              |      |       |     |
| Total  | 181       | 19,1 | 769          | 80,9 | 950   | 100 |

 $X^2=4,249$ , df=1, p=0,039, NA=32 (3,3%).

In this study, physical disease and with or without PTSD compared using Chi-square and found a meaningful statistic difference (X<sup>2</sup>=4,249, df=1, p=0,039). People, who don't have any physical disorders, have low rates of depression rate.

Table 18. Existence of PTSD compared to psychiatric illnesses.

|                  | With PTSD |      | Without PTSD |      | Total |     |
|------------------|-----------|------|--------------|------|-------|-----|
|                  | n         | %    | n            | %    | n     | %   |
| Have psychiatric | 15        | 45,5 | 18           | 54,5 | 33    | 100 |
| disorders        |           |      |              |      |       |     |
| Don't have       | 166       | 18,1 | 751          | 81,9 | 917   | 100 |
| psychiatric      |           |      |              |      |       |     |
| disorders        |           |      |              |      |       |     |
| Total            | 181       | 19,1 | 769          | 80,9 | 950   | 100 |

 $X^2=15,452$ , df=1, p=0,000, NA=32 (3,3%).

In this study, psychiatric disorders and with or without PTSD compared using Chisquare and couldn't found a meaningful statistic difference (X<sup>2</sup>=15,452, df=1, p=0,000). People who have a psychiatric disorder found to have higher PTSD rates.

**Table 19.** Existence of PTSD compared to being treated because of a psychiatric illness.

|       | With | With PTSD |     | TSD  | Total |     |
|-------|------|-----------|-----|------|-------|-----|
|       | n    | %         | n   | %    | N     | %   |
| Yes   | 23   | 33,3      | 46  | 66,7 | 69    | 100 |
| No    | 157  | 17,8      | 724 | 82,2 | 881   | 100 |
| Total | 180  | 18,9      | 770 | 81,1 | 950   | 100 |

 $X^2=10,027$ , df=1, p=0,002, NA=32 (3,3%).

In this study, therapy because of a psychiatric disorder and with or without PTSD compared using Chi-square and found a meaningful statistic difference ( $X^2=10,027$ , df=1, p=0,002). People who had a treatment because of a psychiatric disorder found to have higher PTSD rates.

Table 20. Existance of PTSD compared to whom living with.

|                    | With | PTSD | Without P | TSD  | SD Total |     |
|--------------------|------|------|-----------|------|----------|-----|
|                    | n    | %    | n         | %    | n        | %   |
| Alone              | 37   | 28,0 | 95        | 72,0 | 132      | 100 |
| Spouse / partner / | 77   | 15,2 | 430       | 84,8 | 507      | 100 |
| lover              |      |      |           |      |          |     |
| Mother / father /  | 33   | 18,4 | 146       | 81,6 | 179      | 100 |
| brother            |      |      |           |      |          |     |
| Friend             | 16   | 21,9 | 57        | 78,1 | 73       | 100 |
| Second-degree      | 6    | 46,2 | 7         | 53,8 | 13       | 100 |
| relatives          |      |      |           |      |          |     |
| Other              | 12   | 25,5 | 35        | 74,5 | 47       | 100 |
| Total              | 181  | 19,0 | 770       | 81,0 | 951      | 100 |

 $X^2=19,728$ , df=5, p=0,001, NA=31 (3,2%).

In this study, who they live with and with or without PTSD compared using Chisquare and found a meaningful statistic difference ( $X^2=19,728, df=5, p=0,001$ ). Alone and living with second-degree participants showed higher rate of PTSD.

**Table 21.**Existance of PTSD compared to political beliefs about Cyprus Problem.

|                     | With | PTSD | Without P | TSD  | Total |     |
|---------------------|------|------|-----------|------|-------|-----|
|                     | n    | %    | n         | %    | n     | %   |
| Solution and bi-    | 41   | 13,1 | 272       | 86,9 | 313   | 100 |
| communal bi-zonal   |      |      |           |      |       |     |
| federal state       |      |      |           |      |       |     |
| Confederal solution | 30   | 23,8 | 96        | 76,2 | 126   | 100 |
| of two separate     |      |      |           |      |       |     |
| states              |      |      |           |      |       |     |
| As a continuation   | 34   | 15,7 | 182       | 84,3 | 216   | 100 |
| of TRNC             |      |      |           |      |       |     |
| Return to the 1960  | 6    | 20,7 | 23        | 79,3 | 29    | 100 |
| Republic of Cyprus  |      |      |           |      |       |     |
| Combining to        | 59   | 27,3 | 157       | 72,7 | 216   | 100 |
| Turkey              |      |      |           |      |       |     |
| Other               | 11   | 22,0 | 40        | 78,0 | 51    | 100 |
| Total               | 181  | 19,0 | 770       | 81,0 | 951   | 100 |

X<sup>2</sup>=20,723, df=6, p=0,002, NA=31 (3,2%).

In this study, thoughts on solution of Cyprus and with or without PTSD compared using Chi-square and found a meaningful statistic difference ( $X^2=20,723$ , df=6, p=0,002). People who wish combining with Turkey showed greater PTSD rate.

**Table 22.**Existance of PTSD compared to alcohol use.

|            | With | With PTSD |     | TSD  | Total |     |
|------------|------|-----------|-----|------|-------|-----|
|            | n    | %         | n   | %    | n     | %   |
| 0          | 39   | 17,8      | 181 | 82,2 | 220   | 100 |
| 1-2        | 13   | 28,3      | 33  | 71,7 | 46    | 100 |
| 3-5        | 12   | 30,0      | 28  | 70,0 | 40    | 100 |
| 6-9        | 8    | 20,0      | 32  | 80,0 | 40    | 100 |
| 10-19      | 12   | 16,4      | 61  | 83,6 | 73    | 100 |
| 20-39      | 10   | 14,9      | 57  | 85,1 | 67    | 100 |
| 40 or more | 87   | 18,7      | 378 | 81,3 | 465   | 100 |
| Total      | 181  | 19,0      | 770 | 81,0 | 951   | 100 |

X<sup>2</sup>=7,427, df=7, p=0,386, NA=31 (3,2%).

In this study, how many times they drunk alcoholic beverage and with or without PTSD compared using Chi-square but couldn't found a meaningful statistic difference (X<sup>2</sup>=7,427, df=7, p=0,386)

Table 23. Existance of PTSD compared to smoking.

|            | With | With PTSD |     | PTSD | Total |     |
|------------|------|-----------|-----|------|-------|-----|
|            | n    | %         | n   | %    | n     | %   |
| 0          | 40   | 13,8      | 250 | 86,2 | 290   | 100 |
| 1-2        | 4    | 16,0      | 21  | 84,0 | 25    | 100 |
| 3-5        | 8    | 30,8      | 18  | 69,2 | 26    | 100 |
| 6-9        | 6    | 30,0      | 14  | 70,0 | 20    | 100 |
| 10-19      | 6    | 20,7      | 23  | 79,3 | 29    | 100 |
| 20-39      | 8    | 16,0      | 42  | 84,0 | 50    | 100 |
| 40 or more | 109  | 21,3      | 402 | 78,7 | 511   | 100 |
| Total      | 181  | 19,0      | 770 | 81,0 | 951   | 100 |

X<sup>2</sup>=11,551, df=7, p=0,116, NA=31 (3,2%).

In this study, how many times they smoke and with or without PTSD compared using Chi-square but couldn't found a meaningful statistic difference ( $X^2=11,551$ , df=7, p=0,116).

Table 24. Existence of PTSD compared to drug abuse.

|       | With | With PTSD |     | TSD  | Total |     |
|-------|------|-----------|-----|------|-------|-----|
|       | n    | %         | n   | %    | n     | %   |
| Yes   | 51   | 17,8      | 236 | 82,2 | 287   | 100 |
| No    | 130  | 19,6      | 534 | 80,4 | 664   | 100 |
| Total | 181  | 19,0      | 770 | 81,0 | 951   | 100 |

X<sup>2</sup>=0,425, df=1, p=0,514, NA=31 (3,2%).

In this study, drug usage and with or without PTSD compared using Chi-square and found no meaningful statistic difference ( $X^2=0,425, df=1, p=0,514$ ).

**Table 25.** The comparison of once time life prevalence and of once time last six months of exposed traumatic events between people with PTSD and without PTSD.

|                      |          | With | PTSD | Withou | t PTSD | $X^{2}(p)$ |
|----------------------|----------|------|------|--------|--------|------------|
|                      |          | n    | %    | n      | %      |            |
| 1.Child abuse        | Never    | 147  | 17,4 | 697    | 82,6   | 12,005     |
|                      | Lifetime | 25   | 32,1 | 53     | 67,9   | (0,002)    |
|                      | Last 6   | 8    | 29,6 | 19     | 70,4   |            |
|                      | months   |      |      |        |        |            |
| 2.Natural disaster   | Never    | 128  | 16,9 | 631    | 83,1   | 11,011     |
| (torrentearthquake,  | Lifetime | 37   | 26,8 | 101    | 73,2   | (0,004)    |
| hurricane)           | Last 6   | 15   | 28,8 | 37     | 71,2   |            |
|                      | months   |      |      |        |        |            |
| 3. Fire or explosion | Never    | 120  | 15,8 | 640    | 84,2   | 33,849     |
|                      | Lifetime | 30   | 25,2 | 89     | 74,8   | (0,000)    |
|                      | Last 6   | 29   | 43,3 | 38     | 56,7   |            |
|                      | months   |      |      |        |        |            |
| 4.Traffic accidents  | Never    | 99   | 16,3 | 510    | 83,7   | 8,922      |
| (carship, train,     | Lifetime | 45   | 23,3 | 148    | 76,7   | (0,012)    |
| airplane)            | Last 6   | 37   | 25,2 | 110    | 74,8   |            |
|                      | months   |      |      |        |        |            |
| 5.Physical assault   | Never    | 131  | 16,9 | 654    | 83,1   | 13,392     |
| (being assaulted and | Lifetime | 32   | 28,1 | 82     | 71,9   | (0,001)    |
| beaded)              | Last 6   | 18   | 30,5 | 41     | 69,5   |            |

| 6.0                 | months   |     |      |     |       |         |
|---------------------|----------|-----|------|-----|-------|---------|
| 6. Sexual assault   | Never    | 152 | 17,4 | 720 | 82,6  | 18,286  |
|                     | Lifetime | 16  | 35,6 | 29  | 64,4  | (0,000) |
|                     | Last 6   | 13  | 39,4 | 20  | 60,6  |         |
|                     | months   |     |      |     |       |         |
| 7. Experience of    | Never    | 137 | 17,5 | 647 | 82,5  | 12,142  |
| conflict or war     | Lifetime | 28  | 22,6 | 96  | 77,4  | (0,002) |
|                     | Last 6   | 16  | 38,1 | 26  | 61,9  |         |
|                     | months   |     |      |     |       |         |
| 8. Torture and      | Never    | 154 | 17,6 | 721 | 82,4  | 17,133  |
| similar assault     | Lifetime | 14  | 29,8 | 33  | 70,2  | (0,000) |
|                     | Last 6   | 12  | 46,2 | 14  | 53,8  |         |
|                     | months   |     |      |     |       |         |
| 9.Death events like | Never    | 138 | 17,0 | 672 | 83,0  | 21,958  |
| murder and suicide  | Lifetime | 18  | 23,1 | 60  | 76,9  | (0,000) |
|                     | Last 6   | 25  | 41,0 | 36  | 59,0  |         |
|                     | months   |     |      |     |       |         |
| 10. Sudden and      | Never    | 74  | 14,7 | 430 | 85,3  | 17,490  |
| unexpected death    | Lifetime | 54  | 20,8 | 206 | 79,2  | (0,000) |
| from loved one      | Last 6   | 53  | 28,5 | 133 | 71,5  |         |
|                     | months   |     |      |     |       |         |
| 11. Sudden and      | Never    | 86  | 16,0 | 453 | 84,0  | 12,731  |
| unexpected illness  | Lifetime | 46  | 19,5 | 190 | 80,5  | (0,002) |
| of loved one        | Last 6   | 49  | 28,2 | 125 | 71,8  |         |
|                     | months   |     |      |     |       |         |
| 12. Sudden and      | Never    | 100 | 15,8 | 532 | 85,2  | 14,878  |
| unexpected          | Lifetime | 40  | 23,0 | 134 | 77,0  | (0,001) |
| separation from     | Last 6   | 41  | 28,9 | 101 | 71,1  |         |
| loved one           | months   |     |      |     |       |         |
| 13. Domestic        | Never    | 121 | 15,2 | 677 | 84,8  | 53,464  |
| violence            | Lifetime | 26  | 34,7 | 49  | 65,3  | (0,000) |
|                     | Last 6   | 34  | 45,3 | 41  | 54,7  |         |
|                     |          |     |      |     | 0.504 |         |

| 14. Sudden and       | Never    | 113 | 16,1 | 588 | 83,9 | 19,244  |
|----------------------|----------|-----|------|-----|------|---------|
| unexpected           | Lifetime | 31  | 22,6 | 106 | 77,4 | (0,000) |
| unemployment,        | Last 6   | 37  | 33,0 | 75  | 67,0 |         |
| serious financial    | months   |     |      |     |      |         |
| problems             |          |     |      |     |      |         |
| 15. Industrial       | Never    | 126 | 16,3 | 649 | 83,7 | 21,439  |
| accident             | Lifetime | 22  | 30,1 | 51  | 69,9 | (0,000) |
|                      | Last 6   | 33  | 32,4 | 69  | 67,6 |         |
|                      | months   |     |      |     |      |         |
| 16. Other specific   | Never    | 73  | 13,9 | 454 | 86,1 | 21,270  |
| stressful events and | Lifetime | 52  | 24,2 | 163 | 75,8 | (0,000) |
| experiences          | Last 6   | 56  | 26,9 | 152 | 73,1 |         |
|                      | months   |     |      |     |      |         |
|                      |          |     |      |     |      |         |

<sup>\*</sup>p<0.005 statistical significant differences

**Table 26.** The comparison of experiencing specific conflict in Cyprus between participants with and without PTSD.

|               |     | With PTSD |      | Withou | t PTSD | $X^{2}(p)$ |
|---------------|-----|-----------|------|--------|--------|------------|
|               |     | n         | %    | n      | %      |            |
| Witnessed the | Yes | 27        | 15,4 | 110    | 14,7   | 0,062      |
| 1963 conflict | No  | 148       | 84,6 | 639    | 85,3   | (0,804)    |
| Witnessed the | Yes | 35        | 20,1 | 146    | 19,5   | 0,029      |
| 1963-1974     | No  | 139       | 79,9 | 601    | 80,5   | (0,865)    |
| conflict      |     |           |      |        |        |            |
| Witnessed the | Yes | 43        | 24,6 | 159    | 21,4   | 0,846      |
| 1974 war      | No  | 132       | 75,4 | 585    | 78,6   | (0,358)    |

According to the research results, when witnessing a conflict or war in Cyprus and having PTSD are compared, no statistically meaningful difference was found.

**Table 27.** The comparison of prevalence of experiencing traumatic events between people born in Cyprus and Turkey.

|                           |               |     | prus<br>rned |     | rkey<br>rned      | $X^{2}(p)$ |
|---------------------------|---------------|-----|--------------|-----|-------------------|------------|
|                           |               |     | n<br>n       |     | n                 |            |
| Physical assault (being   | Never         | 401 | 83,9         | 358 | <del>%</del> 79,7 |            |
| assaulted and beaded)     | Lifetime      | 56  | 11,7         | 54  | 12,0              | 5,985      |
|                           | Last 6 months | 21  | 4,4          | 37  | 8,2               | (0,050)    |
| Experience of conflict or | Never         | 371 | 77,5         | 390 | 86,9              | 28,208     |
| war                       | Lifetime      | 92  | 19,2         | 34  | 7,6               | (0,000)    |
|                           | Last 6 months | 16  | 3,3          | 25  | 5,6               |            |
| Torture and               | Never         | 433 | 90,6         | 423 | 94,4              | 12,346     |
| similar assault           | Lifetime      | 35  | 7,3          | 11  | 2,5               | (0,002)    |
|                           | Last 6 months | 10  | 2,1          | 14  | 3,1               |            |
| Industrial accident       | Never         | 402 | 83,9         | 356 | 79,3              | 6,132      |
|                           | Lifetime      | 38  | 7,9          | 34  | 7,6               | (0,047)    |
|                           | Last 6 months | 39  | 8,1          | 59  | 13,1              |            |

The research results illustrate that, participants who born in Cyprus experienced the war, conflict, torture or similar assault traumatic events whereas participants who born in Turkey experienced physical assault and industrial accidents more.

Table 28. Logistic Regression Analysis of Risk Factors.

| Demographic                              | With PTSD/W       | ithout PTSD       |
|--|-------------------|-------------------|
| Variables                                | <b>Odds</b> Level | %95 CI            |
| Gender (Female / Male)                   | 1.792             | (1.368 – 2.347)** |
| Depression(With / Without)               | 1.857             | (1.626 - 2.121)** |
| Birth (Cyprus / Turkey)                  | 1.092             | (1.023-1.165)*    |
| Living status (not with family / with    | 1.124             | (1.038-1.218)**   |
| family)                                  |                   |                   |
| Education (High school below / above)    | 1.357             | (1.042 - 1.768)*  |
| Marital Status (Married / single)        | 1.144             | (1.074 - 1.220)** |
| Employment Status (employed /            | 1.169             | (1.091-1.252)**   |
| unemployed)                              |                   |                   |
| Monthly Income (below and above          | 1.497             | (1.035-2.166)**   |
| 3400TL)                                  |                   |                   |
| Physical Disease (having / don't having) | 2.511             | (1.686-3.740)**   |
| Psychiatric Disorders (Having/ Not       | 1.870             | (1.302-2.688)**   |
| Having)                                  |                   |                   |
| Therapy due to Psychiatric Disorders     | 1.065             | (1.002-1.133)*    |
| Property Status (Turkish Property/ Greek | 1.870             | (1.302-2.688)**   |
| Property)                                |                   |                   |
| Solution in TRNC (willing/not willing)   | 1.065             | (1.002-1.133)*    |
|  |                   |                   |

In the development of PTSD being a woman, living apart from family, having low levels of education, unemployment, born in Turkey, having a physical illness, having a psychiatric illness, being treated by a psychiatric disorder and not wanting the Cyprus Problem to be solved are identified as risk factors.

<sup>\*</sup> $p \le 0.05$  and \*\* $p \le 0.001$  significant level, CI = Confidence Interval.

**Table 29. Results of Multiple Regression Analysis on the Posttraumatic Stress Disorder Prediction** 

| Variable         | В      | Std                       | β      | Т        | р     | Binary | Partial |
|------------------|--------|---------------------------|--------|----------|-------|--------|---------|
|                  |        |                           | P      |          | P     |        |         |
|                  |        | Error                     |        |          |       | r      | r       |
|                  | **     |                           |        |          |       |        |         |
| Constant         | 0.095  | 0.019                     | -      | 5.078    | 0.000 | -      | -       |
| Child abuse      | -0.006 | 0.032                     | -0.006 | -0.189   | 0.850 | 0.092  | -0.006  |
| Natural disaster | 0.017  | 0.025                     | 0.024  | 0.708    | 0.479 | 0.102  | 0.023   |
| Fire or          | 0.070  | 0.024                     | 0.104  | 2.896    | 0.004 | 0.192  | 0.095   |
| explosion        |        |                           |        |          |       |        |         |
| Traffic          | -0.007 | 0.019                     | -0.014 | -0.378   | 0.705 | 0.096  | -0.012  |
| accidents        |        |                           |        |          |       |        |         |
| Physical assault | 0.019  | 0.025                     | 0.027  | 0.761    | 0.447 | 0.119  | 0.025   |
| Sexual assault   | 0.030  | 0.034                     | 0.032  | 0.892    | 0.373 | 0.131  | 0.029   |
| Experience of    | 0.006  | 0.027                     | 0.008  | 0.222    | 0.824 | 0.107  | 0.007   |
| conflict or war  |        |                           |        |          |       |        |         |
| Torture and      | 0.038  | 0.038                     | 0.037  | 1.000    | 0.318 | 0.137  | 0.033   |
| similar assault  |        |                           |        |          |       |        |         |
| Death events     | 0.025  | 0.026                     | 0.034  | 0.946    | 0.344 | 0.149  | 0.031   |
| like murder and  |        |                           |        |          |       |        |         |
| suicide          |        |                           |        |          |       |        |         |
| Sudden and       | 0.033  | 0.019                     | 0.065  | 1.721    | 0.086 | 0.145  | 0.057   |
| unexpected       |        |                           |        |          |       |        |         |
| death from       |        |                           |        |          |       |        |         |
| loved one        |        |                           |        |          |       |        |         |
| Sudden           | 0.003  | 0.020                     | -0.006 | -0.156   | 0.876 | 0.116  | -0.005  |
| and              |        |                           |        |          |       |        |         |
| illness of       |        |                           |        |          |       |        |         |
| loved one        |        |                           |        |          |       |        |         |
| Sudden and       | 0.014  | 0.020                     | 0.027  | 0.712    | 0.476 | 0.131  | 0.023   |
| unexpected       |        |                           |        |          |       |        |         |
| separation       |        |                           |        |          |       |        |         |
| from loved       |        |                           |        |          |       |        |         |
| one              |        | Transco Indigitationed in |        |          |       |        |         |
| Domestic         | 0.095  | 0.025                     | 0.140  | 3.748    | 0.000 | 0. 222 | 0.123   |
| violence         |        |                           |        | v renero |       |        |         |
| Sudden and       | 0.028  | 0.020                     | 0.049  | 1.380    | 0.168 | 0.147  | 0.045   |
| unexpected       |        |                           |        |          |       |        |         |
| unemployment,    |        |                           |        |          |       |        |         |
| serious          |        |                           |        |          |       |        |         |
| financial        |        |                           |        |          |       |        |         |

| problems<br>Industrial<br>accident | -0.007        | 0.023 | -0.012 | -0.314 | 0.754 | 0.135 | -0.010 |  |  |  |
|------------------------------------|---------------|-------|--------|--------|-------|-------|--------|--|--|--|
| R= 0,296                           | $R^2 = 0.088$ |       |        |        |       |       |        |  |  |  |
| F(3,26) = 5,903                    | P= 0,000      |       |        |        |       |       |        |  |  |  |

When the binary and partial correlations between the predictor variables and the dependent variable are examined, it is observed that there is a positive and low level of correlation between the predictor variables and PTSD when the binary correlations are examined. For the predictors as child abuse, traffic accidents, sudden unexpected illness of loved one and industrial accidents, it is seen that there is negative and low levels of correlation between such predictor variables and PTSD when the partial correlations are investigated. In addition, other predictive variables found to have a positive and low level of correlation with PTSD when the partial correlations are examined.

All of the above variables and PTSD found to have a positive and low levels of a meaningful relationship, R=0,296, R<sup>2</sup>=0,088, P<.01. The relative significance rank of the predictor variables over the PTSD according to the standardized regression coefficient (β); Domestic violence, fire or explosion, sudden unexpected death of loved one, unexpected unemployment or serious financial problems, torture or similar assault, death events like murder or suicide, sexual assault, physical assault, sudden separation from loved one, natural disaster, traffic accidents, industrial accidents, experience of conflict or war, child abuse and unexpected illness of a loved one. When the t-test results on the significance of the regression coefficients are examined, only domestic violence and fire or explosion found as a significant predictor for the PTSD.

## 4. DISCUSSION

The aim of this study is to illustrate the prevalence of PTSD among adult population in TRNC, and investigate the risk factors of the PTSD. Post traumatic Stress Disorder is a common serious health problem throughout the whole world whereas the importance given on this topic is still not enough. This study gives an opportunity to see the rates of the PTSD and its relationship with the sociodemographic variables so that beneficial awareness programmes can be conducted.

This study found the current prevalence of PTSD among people who live in North Cyprus is 19%. In most general population surveys, the lifetime prevalence of PTSD has been found to vary between 1-14% (Brunello et al., 2001; Kessler, Sonnega & Bromet, 1995; Yorbık ve ark., 2001; Perkonigg et al., 2000; Breslau et al., 1991). According to World Mental Health (WMH) surveys lifetime PTSD prevalence was found similar in some countries as 2.3% in South Africa (Atwoli et al., 2013), 2.2% in Spain (Carmassi et al., 2014) and 2.4% in Italy (Olaya et al., 2015). On the other hand much lower rates was found in Japan as 1.3% (Kawakami et al., 2014) and much higher in Northern Ireland as a rate of 8.8% (Ferry et al., 2014). In Iran, a representative study sample estimated a PTSD prevalence rate as less than 1% (Mohammadi et al., 2005). In Lebanon lifetime PTSD rates was found as 3.4% (Karam et al., 2008). Moreover in Mexico, a lifetime PTSD rate found as 1.4 % among adult population (Medina-MorcaIcaza et al., 2005). Among adult population in Israel point PTSD prevalence was found as a much higher rate as 17.8% (Bleich et al., 2003). In Germany, concentrates detailed introduction to traumatic occasion rates in the vicinity of 20 and 24% (Hapke et al., 2006; Hauffa et al., 2011; Maercker et al., 2008; Perkonigg et al., 2000) and 54.6% (Spitzer et al., 2009). In spite of the high extent of subjects presented to occasions related with PTSD, life-time pervasiveness of rates of PTSD is much lower and differs extraordinarily from around 1 to 7.8 % crosswise over assorted nations (Kessler et al., 1995; Hauffa et al., 2011; Sareen et al., 2007). As anyone might expect, thinks about in injured people with elevated amounts of injury presentation, e.g. war survivors (Bramsen and Van der Ploeg, 1999; Eytan and Gex- Fabry, 2011), battle veterans (Green et al., 1990), peacekeepers (Litz et al., 1997), protect responders (Perrin et al., 2007) or psychological militant assault survivors (Marshall et al., 2002), have shown higher rates of PTSD. When we look at the other world

prevalence rates, TRNC has one of the high PTSD prevalences. The reality that TRNC is not a perceived nation, late war history, relocation history, past monetary emergency, the uncertainity about Cyprus Problem and people that not being employed may be seen as the purpose behind the high PTSD levels. It has been expressed in past inquires that war (Neuner and Elbert, 2007; Betancourt and Williams, 2008), migration (Tuzcu and Bademli, 2014), economic hardship (Ahnquist and Wamala, 2011; McLaughlin et al., 2011; Çakıcı, 2010; Buffel et al., 2015), unemployement (Najafipour et al., 2016; Hofmann 2006), cultural factors (Ferrari, 2002; Breslau, Davis & Andreski, 1995) can be a predictor for the PTSD.

Different results have been obtained as a result of different researches. PTSD prevalence was found as 11.8% in Northern Ugand (Mugisha et al., 2015), highest as a rate of 60.6% in Northern Ireland (Ferry et al., 2014), 60% in Japan (Kawakami et al., 2014), 56.1% in Italy (Carmassi et al., 2014), and 73.8% in South Africa (Atwoli et al., 2013). Differences in instrumentation used, traumatic event experience history, and sample differences can lead to consequent changes. Variety in the rates of trauma introduction over the world, and in addition the predominance of particular traumatic occasions, seems to reflect sociocultural and political variables that fluctuate rates over the different cultures. For instance, South Africa's history of state-endorsed separation and political brutality, combined with rising rates of criminal attack out in the open spaces may add to the higher rates of trauma related events contrasted with Europe and Japan (Kaminer et al., 2008). Similarly, Northern Ireland's long history of common clash is probably going to have added to its high rates of traumatic occasion presentation (Ferry et al., 2014). Rates of PTSD are observed elevated in post-conflict and low income areas such as Algeria (37%), Cambodia (28%), Ethiopia (16%), and Gaza (18%) (Jong, 2001). Morover in Diyarbakır, PTSD lifelong prevalence was 34.9% and point prevalence was found as 15.1% (Yasan et al., 2008). The research results illustrate that in the regions which have political conflict seem to have higher PTSD rates. Israel (21.4%), Arabs and Jews (16.9%, 10.2%), Southern Lebanon (29.3%), Iran (33%) and Turkish Cypriots (Ergun, Cakici & Cakici, 2008) have higher PTSD rates compared with non-conflict areas (Shalev et al., 2006; Farhood et al., 2006; Hashemian et al., 2006; Hobfoll et al., 2008). The common fetaures of the highest PTSD prevalence was related with conflict-related trauma after age 12 years, psychiatric history or current disease, domestic violence, death or separation in the family, less social support, forced

migration and alcohol abuse in parents (Jong, 2001; Yasan et al., 2008). Past explores made in TRNC underpins these discoveries. Simsek demonstrated that both social orders from North and South of Cyprus experienced despondency and additionally PTSD in light of fight and losing relatives although it passed 40 years after the war, PTSD was found to be 48% in Erenköy Turkish Cypriot warriors and 6% in Turkish Cypriot warriors (Simsek & Çakıcı, 2015). Moreover, researches including the Turkish veterans and citizens in Northern Cyprus show that the veterans who were displaced show higher levels of PTSD in comparison with nondisplaced people (Ergun, Cakici, & Cakici, 2008). Ergün expressed that movement likewise brought about sadness contrasted with the general population who did not relocate thus of the war. Aktolgalı and Çakıcı (2001) additionally expressed that the monetary emergency and financial ruin of the banks made serious mental misery and despondency, future concerns and hostility. Individuals who lost money due to ruin of the banks are found to be more prone to develop PTSD symptoms. Deadlock about Cyprus Problem and future concerns cause negative feelings and it is seen that effect of the war is still continious among the Cyprus population (Çakıcı, 2010).

The present study results illustrate that, domestic violence is the most significant ranked predictor variable among the variable life events. There are important studies in the literature which also highly correlates the domestic violence and predisposition to PTSD (Roberts & Kim, 2005; Pico-Alfonzo, 2005; Mertin &Mohr, 2000). It is observed that women who experience domestic violence have lower life quality which effect the psychological make-up of the females (Laffaye, Kennedy & Stein, 2003). One of the most dangerous result of the violence is PTSD (Heise & Moreno, 2002). It is also found that %74 of the women who expose to domestic violence experience the PTSD symptoms (Woods, 2000).

According to the research data, the PTSD rates in women is higher than men. The study results are consistent with other research results (Farhood et al., 2016; Tekin et al., 2016; Elklit, Østergård, Lasgaard, & Palic, 2012; Avcı & Doğan, 2014; Lukaschek et al., 2013; Shalev et al., 1998; Nemeroff et al., 2006; Rosenberg et al., 2000; Stein et al., 2000). Being a female is seen as a risk factor for PTSD (Carol and Fullerton, 2001; Zatzick et al., 2002). In non military personnel surveys led over 10 years prior revealed lifetime rates of PTSD in the scope of 10–14% in females and 5–6% in men (Kessler et al., 1995; Breslau et al., 1991; Davidson et al., 1991). About a 2 time higher lifetime rate of characterized PTSD was recorded in women (18,3%)

and men (10,2%) in the 1996 Detroit Area Survey (Breslau et al., 1998) U.S. Department of Veteran's Affairs, 2012). Similarly, a current epidemiological review in Australia (n = 10,641) reported the 12-month commonness of PTSD to be higher in women than men presented to injury (3,8% versus 2,0%) (Rosenman, 2002). In the Detroit Area Survey, the higher probability of PTSD in women contrasted with men was essentially inferable with occasions including assaultive viciousness (physical and rape), with a female-to-male proportion of 6:1, ex: ladies were at an expanded hazard for PTSD taking after assaultive savagery (Breslau, 2002). Rather than past discoveries (Creamer et al., 2001; Kessler 1995; Maercker et al., 2008; Breslau, 2009), a similar life time presentation to any traumatic occasion amongst men and women was found, authenticating comes about by Hapke et al. 2006, who additionally did not watch a distinction in presentation of PTSD between the genders. Females often report a traumatic event such as the loss of a relative or close individual, rapes or sexual abuse, while men usually report being presented to mischances, naturally occuring traumatic event, nonsexual strikes and battle, which is reliable with past reviews (Shalev et al., 1998; Breslau et al., 1998). It is also indicated that, the reason for high risk of PTSD among females might be related with the physical and sexual violence during the childhood or adulthood period (Breslau et al., 1997). On the other hand, this sexual orientation divergence could be clarified by the more prominent inclination of women to express and report feelings of fear (Priebe et al., 2009); men, conversely, may see divulgence as a danger to manliness and therefore may hide their emotions.

When the marital status and PTSD were compared, it is seen that married people have lower PTSD rates than divorced and widowed participants. Similar with the present study results, Kessler et al. (1995) found that previously married individuals have higher levels of PTSD compared to never married people. In some studies it is also found that single or divorced people are more vulnerable to the symptoms of PTSD than married ones (Frank et al., 2004, Verger et al., 2004). On the other hand some research results illustrates that there is no difference in terms of marital status (Eşsizoğlu et al., 2009). Studies suggesting that marital status difference is an important factor in the development of PTSD, they have associated this with social support, especially after the trauma condition (Brewin et al., 2000).

Being unemployed is identified as a risk factor for PTSD in the present study. The positive impact of employement during the recovery period of PTSD is a well-known procedure (Farhood et al., 2016; Resnick and Rosenheck, 2008). PTSD might occur as an emotinal reaction to unemployment status so this situation increases the probability of PTSD. On the other hand there are other studies which found no difference between employed and unemployed participants (Avcı and Doğan, 2014). Subsequently, elevated amounts of social bolster go about as a defensive element for PTSD (Farhood and Noureddine, 2003; Weiss, Garvert, and Cloitre, 2015)

According to the study, low education level was also found as a risk factor for PTSD. Similar results were found in another study (Senyonga, 2013). In addition to this, another study also found that as the education level decrease, risk for PTSD increases (Güçlü et al., 2013). Moreover, those with education might not have the psychological ability to adapt to traumatic occasions (Priebe et al., 2009) and hence may not receive solid adapting systems in such troublesome circumstances.

According to the the distribution of the profession, it is observed that PTSD prevalence are higher among housewifes and unemployed participants. Moreover, other researches illustrates similar results with the present study (Farhood et al., 2016; Yasan et al., 2008; Ghanem, et al., 2009). It can be contended that unemployed people as a rule have no wellspring of wage; this money related weight, thus, could foresee despondency among those with PTSD as it were (Priebe et al., 2009).

In the present study no significant difference was found between having children or not having children. As an additional question, the number of children were also asked to the participants. It has been seen that as the number of children increases the PTSD level also rises. Moreover, other studies also found similar results with the present research (Naderi et al., 2012). On the other hand there are some other research results which illustrate opposite findings (Tokgöz et al., 2008; Çolak et al., 2012). As the number of the children increases, the responsibilities, risk of familial conflicts and the economic problems also increases. These factors may lead to an increase predisposition for the PTSD.

It is found out that participants who have any pyhsical illness have greater levels of PTSD in comparison to the people who have no physical illness. According to the other research results same results were also found. In a study, PTSD level was

found significantly higher among cancer patients (Tokgöz et al., 2008). Physical diseases are identified as a risk factor for PTSD occurance in the literature (Sareen, 2014; Wilcox et al., 2009; Belik et al., 2007). According to a national epidemiologic study among US which included 35,000 people illustrated that participants with PTSD were more likely than respondents without PTSD to meet diagnostic criterias of diabetes mellitus, liver disease, stomach ulcer, gastritis, HIV, arthritis, angina pectoris, tachycardia, hypercholesterolemia, and other heart diseases (Pietrzak et al., 2011). The danger of creating cardiovascular risky components (e.g., hypertension, heart hyper reactivity) and coronary vein infection in patients with PTSD has likewise been built up generally (Edmonson et al., 2013; Paulus et al., 2013). Additionally with critical mental impacts, PTSD is related with extensive physical comorbidity. In particular, PTSD has been related with gastrointestinal disease (Toole and Catts, 2008), respiratory disease (Spitzer et al., 2011), musculoskeletal, renal and immune system diseases (Boscariona, 2004), obesity (Bartoli et al., 2015), and sleep disturbances (Jaoude, 2015). Reactions to continuous anxiety in PTSD, for example, expanded substance abuse, horrible eating routine and latency, have the possibility to further damage wellbeing (Zen et al., 2012). As the symptoms of physical diseases can trigger the PTSD occurance, condition of the PTSD patient can also identified as a risk for the physical diseases.

In addition to phsiycal illnesses, psychiatric disorders and being treated due to a psychiatric problem was also identified as a risk factor for PTSD. Psychiatric disorders were also associated with PTSD in the past (Bernal et al., 2007; Weissman et al.,1999; Kessler et al., 1995). Especially depression is highly observed comorbid with the PTSD and lead to exagreation of the symptoms of PTSD (Sareen et al., 2007; Marshall et al., 2001; Fullerton et al., 2000; Breslau et al., 2002). Existence of a psychiatric disorder symptoms, being diagnosed by the disorder and going under the treatment process may increase the likelihood of the PTSD.

At the point when political perspectives are considered, individuals who might want to join with Turkey, bolster confederation, and need to frame Republic of Cyprus again have fundamentally higher rates of PTSD contrasted with individuals who are satisfied with TRNC and individuals who think shaping an administration with two government states. In the view of these outcomes, we can state that the progressing Cyprus issue process may disillusion individuals who need confederation

or being joined to Turkey. Additionally, status as usual proceeds with as a result of the uncertainty of the Cyprus issue. It is obvious that being treated or being experienced by political violence might cause psychological problems (Canetti et al., 2013). Political brutality, including war, common war, and fear based oppression, are group wide traumatic occasions (Canetti et al., 2012), a few components have as of now been found to have a noteworthy impact on political radicalism through their relationship with expanded mental trouble. Such components incorporate the loss of financial assets (Hobfoll et al., 2006), locus of control (Hallis and Slone, 1999), sense of duty regarding belief system (Bonanno and Jost, 2006; Kaplan et al., 2005; Shechner, Slone and Bialik, 2007). These factors can trigger mental trouble by either expanding or diminishing subjective and target ideas of control or the capacity to adapt to the traumatic occasion. In the present study, uncertainity about the future and repeated frustrations about the solution in TRNC might be a leading cause of the relationship between the political beliefs and PTSD. Political beliefs and housing status are related with the previous war and migration events of the participants living in the TRNC. These factors are thought to effect the PTSD level as they can be a source of stress.

Smoking, alcohol and drug use is not considered as a risk factor in the formation of PTSD symptoms. This finding is also supported by the previous research (Risalet et al., 2016). However, some studies found that alcohol and drug use is highly correlated with the PTSD (Tate et al., 2007; Hingson et al., 2006; Hingson and Zha, 2009; Driessen et al., 2008; Sartor et al., 2007; Norman et al., 2007). Individuals who met the criterias of PTSD found to be 2 to 4 times more likely to have substance addiction compared to individuals without PTSD (Kessler et al., 2005).

## 5. CONCLUSION

In conclusion, Post-traumatic stress disorder (PTSD) is a common and serious mental health problem throughout the world. It is a multi-discipline which has biopsychosocial parts. PTSD is a serious disorder as it affects both the health and lifestyle of the patients. PTSD is affecting different people in different degrees. Symptoms of the PTSD vary from person to person. High rates of PTSD are observed among TRNC with the present study. The research results reveal the prevalence and possible risk factors of the PTSD. According to the study results, PTSD prevalence is stated as 19% for North Cyprus. Being women, widow, unemployed, housewives, having physical illness, having psychiatric illness, being treated by a psychiatric illness, living in a Greek property, living single or with a relative, defined as risk factors of PTSD. Many risk factors have been found mainly and explain the fact that in recent years there has been a society with a history of war and migration and that the rate of uncertainty about the future is high. PTSD has symptoms which capture the majority of the daily life of the individuals such as uncontrollable flashback episodes, avoidance behaviors and arousal symptoms. Treatment for this disorder is possible so with an increase in emphasize of the people and awareness programs for public populations might be an effective method for increasing the consciousness of the individuals. Study results can be used for building the health policy programmes and increasing the consciousness so that more people can receive a treatment in a shorter period.

## 6. REFERENCES

- Ahnquist, J., Wamala, S. P. (2011). Economic hardships in adulthood and mental health in Sweden: the Swedish national public health survey 2009. *BMC Public Health*, 11, 788.
- Ai, A., Peterson, C. and Ubelhor, D. (2005). War-related trauma and posttraumatic stress disorder symptoms among adult Kosova refugees. *Journal of Traumatic Stress*, 15(2), 157-160.
- Aldemir, S., Tan, S. (2011). Travma ve Bağımlılık Sendromları. *Yeni Tıp Dergisi*, 28(4), 198-202.
- American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders. 3rd ed. Washington, DC: The American Psychiatric Association.
- American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders. 3rd rev ed. Washington, DC: The American Psychiatric Association.
- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders. 4th ed. Washington, DC: The American Psychiatric Association.
- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders. 4th Text Revision ed. Washington, DC: The American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington, VA: The American Psychiatric Association.
- Andrews, B., Brewin, C.R., Rose, S. (2003). Gender, social support, and PTSD in victims of violent crime. *Journal of Traumatic Stress*, 16, 421–427.
- Avcı, D., & Doğan, S. (2014). Posttraumatıc Stress Disorder In Cancer Patients, The Relationship Between Social Support And Coping With Stress. *Balikesir Health Sciences Journal*, 3(1), 16-21.
- Aydoğan, Ü., Doğaner, Y. Ç., Borazan, E., Kömürcü, Ş., Koçak, N., Öztürk, B., Özet, A., & Sağlam, K. (2012). Kanser hastalarında depresyon ve anksiyete düzeyleri ve hastalıkla başa çıkma tutumlarının ilişlkisi. *Türk Aile Hek Dergisi*, 16(2), 55.

- Anda, R.F., Felitti, V.J., Bremner, J.D., Walker, J.D., Whitfield, C., et al. (2006). The enduring effects of abuse and related adverse experiences in childhood. A convergence of evidence from neurobiology and epidemiology. *Eur Arch Psychiatry Clin Neurosci*, 256, 174–86.
- Atwoli, L., Stein, D.J., Williams, D.R., et al. (2013). Trauma and posttraumatic stress disorder in South Africa: analysis from the South African Stress and Health Study. *BMC Psychiatry*, 13, 182.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychol Rev*, 84(2), 191-215.
- Barash, D. (1990). The San Francisco Earthquake: then and now. *Perspect Psychiatr Care*, 26(1), 32-36.
- Bartoli, F., Crocamo, C., Alamia, A., et al. (2015). Posttraumatic stress disorder and risk of obesity: systematic review and meta-analysis. *J Clin Psychiatry*, 76, 1253-1261.
- Başoğlu, M., Ozmen, E.D., Paker, M., Taşdemir, O., Ceyhanli, A., Incesu, C., Sarimurat, N. (1996). Appraisal of self, social environment, and state authority as a possible mediator of posttraumatic stress disorder in tortured political activists. *J Abnorm Psychol*, 105(2), 232-6.
- Başoğlu, M., Şalcıoğlu, E., Livanou, M., Özeren, M., Aker, T., Kılıç, C., & Mestçioğlu, Ö. (2001). A study of the validity of a screening instrument for traumatic stress in earthquake survivors in Turkey. *Journal of Traumatic Stress*, 14(3), 491-509.
- Baysak, E. (2010). Acil ve Yoğun Bakım Çalışanlarında Travma Sonrası Stres Bozukluğu, Stresle Başa Çıkma Tarzları, Tükenmişlik ve İlişkili Etkenler. Psikiyatri Anabilim Dalı Tıpta Uzmanlık Tezi. Gazi Üniversitesi Tıp Fakültesi, Ankara.
- Belik, S.L., Cox, B.J., Stein, M.B., et al. (2007). Traumatic events and suicidal behavior: results from a national mental health survey. *J Nerv Ment Dis*, 195, 342–349.
- Bernal, M., Haro, J. M., Bernert, S., Brugha, T., de Graaf, R., Bruffaerts, R., et al. (2007). Risk factors for suicidality in Europe: Results from the ESEMED study. *Journal of Affective Disorders*, 101, 27–34.
- Betancourt, T.S., & Williams, T. (2008). Building an evidence base on mental health interventions for children affected by armed conflict. *Intervention*, 6, 39–56.
- Bilgiç, S. (2011). *Travma Sonrası Stres Bozukluğu ve Akut Stres Bozukluğu ile Uyum Bozukluğunun Klinik Açıdan Karşılaştırılması*. Tıpta Uzmanlık Tezi, Eskişehir: Eskişehir Osmangazi Üniversitesi.
- Bonanno, G. A., & Jost. J.T. (2006). Conservative shift among high-exposure survivors of the September 11th terrorist attacks. *Basic and Applied Social Psychology*, 28(4), 311-23.

- Boscarino, J.A. (2004). Posttraumatic stress disorder and physical illness: results from clinical and epidemiologic studies. *Ann N Y Acad Sci*, 1032, 141-153.
- Bramsen, I., van der Ploeg, H.M. (1999). Fifty years later: the long-term psychological adjustment of ageing World War II survivors. *Acta Psychiatr Scand*, 100(5), 350–358.
- Breslau, N. (2009). The epidemiology of trauma, PTSD, and other posttrauma disorders. *Trauma Violence Abuse*, 10(3), 198–210.
- Breslau, N. (2002). Epidemiological studies of trauma, posttraumatic stress disorder, and other psychiatric disorders. *Canadian Journal of Psychiatry*, 47, 923–929
- Breslau, N., Davis, G.C., Andreski, P., Peterson, E. (1991). Traumatic events and posttraumatic stress disorder in an urban population of young adults. *Arch Gen Psychiatry*, 48, 216-222.
- Breslau, N., Davis, G. C., & Andreski, P. (1995). Risk factors for PTSD-related traumatic events: A prospective analysis. *American Journal of Psychiatry*, 152(4), 529-535.
- Breslau, N., Davis, G.C., Peterson, E.L., et al. (1997). Psychiatric sequelae of post-traumatic stress disorder in women. *Arch Gen Psychiatry*, 54, 81–7.
- Breslau, N., Chilcoat, H. D., Kessler, R. C. and Davis, G. C. (1999). Previous exposure to trauma and PTSD effects of subsequen trauma: results from the Detroit area survey of trauma. *American Journal of Psychiatry*, 156(6), 902-907.
- Breslau, N. (2002). Gender differences in trauma and posttraumatic stress disorder. *J Gend Specif Med*, 5(1), 34–40.
- Breuer, J., & Freud, S. (1955). Studies on hysteria. In J. Strachey (Ed.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 2, pp. 1±305). London: Hogarth Press. (Original work published 1893±1895)
- Brewin, C.R., Andrews, B. and Valentine, J.D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. *Journal of Consulting and Clinical Psychology*, 68(5), 748-766.
- Brunello, N., Davidson, J.R., Deahl, M., Kessler, R.C., et al. (2001). Posttraumatic stress disorder: diagnosis and epidemiology, comorbidity and social consequences, biology and treatment. *Neuropsychobiology*, 43, 150-62.
- Brunet, A., Boyer, R., Weiss, D. and Marmar, C. R. (2001). The effects of initial trauma exposure on the symptomatic response to a subsequent trauma. *Canadian Journal of Behavioral Science*, 33(2), 97-102.
- Buffel, V., Velde, S.V., & Bracke, P. (2015). The mental health consequences of the economic crisis in Europe among the employed, the unemployed, and the non-employed. *Social Science Research*, 263-288.

- Burri, A., Maercker, A., Krammer, S., Janevska, K.S.(2013). Childhood Trauma and PTSD Symptoms Increase the Risk of Cognitive Impairment in a Sample of Former Indentured Child Laborers in Old Age. *PLoS One*, 8(2), 57826.
- Canetti, D., Muldoon O., Rapaport, C., Hirsch-Hoefler, S., Hobfoll, S., Johnson, R.J, & Lowe, R. (2012). *An Exposure Effect? Evidence from Studies on Violence, Troubles, and Terrorism in the Middle East and Northern Ireland.* Paper presented at the 35th Annual Meetings of ISPP, Chicago.
- Canetti, D., Rapaport, C., Wayne, C., Hall, B., Hobfoll, S. (2013). An Exposure Effect? Evidence from a Rigorous Study on the Psycho-political Outcomes of Terrorism. In The Political Psychology of Terrorism Fears. Samuel Justin Sinclair and Daniel Antonius, eds. New York: Oxford University Press.
- Card, J.J. (1987). Epidemiology of PTSD in a national cohort of Vietnam veterans. *Journal of Clinical Psychology*, 43, 6-17.
- Carmassi, C., Dell'Osso, L., Manni, C., et al. (2014). Frequency of trauma exposure and Post-Traumatic Stress Disorder in Italy: analysis from the World Mental Health Survey Initiative. *J Psychiatr Res*, 59, 77–84.
- Carol, S., Fullerton, D. (2001). Gender differences in posttrauma stress disorder after motor vehicle accidents. *Am J Psychiatry*, 158, 1486-1491.
- Chan, A.O., Medicine, M., Air, T.M., McFarlane, A.C. (2003). Posttraumatic stress disorder and its impact on the economic and health costs of motor vehicle accidents in South australia. *J Clin Psychiatry*, 64, 175-81.
- Chembot, C., Roitblat, H.L., Hamada, R.S., Carlson, J.G., Twentyman, C.T. (1988). A cognitive action theory of posttraumatic stress disorder. *Journal of Anxity Disorders*, 2, 253-275.
- Creamer, M., Burgess, P., McFarlane, A.C. (2001) Post-traumatic stress disorder: findings from the Australian National Survey of mental health and wellbeing. *Psychol Med*, 31(7), 1237–1247.
- Crocq, M.A., Crocq, L. (2000). From shell shock and war neurosis to posttraumatic stress disorder: a history of psychotraumatology. *Dialogues Clin Neurosci*, 2(1), 47-55.
- Çakıcı, E. (2010). Zorunlu Göç Deneyiminin Kuşaklararası İletimi. *Psikodrama Tezi*. Kıbrıs.
- Çervatoğlu, P.G. (2000). Psikolojik travma ve sonuçları: tarihsel arka plan ve güncel kavramlar üzerine gözden geçirme. *Psikiyatri Psikoloji Psikofarmakoloji Dergisi*, 8(1), 5-8.
- Çolak, B., Şişmanlar, Ş.G., Karakaya, I., Etiler, N., Biçer, Ü. (2012). Çocuk cinsel istismarı olgularını değerlendiren meslek gruplarında dolaylı travmatizasyon. *Anadolu Psikiyatri Dergisi*, 13, 51-58.

- Davidson, J.R., Hughes, D., Blazer, D.G., et al. (1991). Post-traumatic stress disorder in the community: an epidemiological study. *Psychol Med*, 21, 713–21.
- Davidson, J.R.T., Connor, K.M. (1999). Management of posttraumatic stress disorder: diagnostic and therapeutic issues. *J Clin Psychiatry*, 60(18), 33-38.
- De Jong, J., Komproe, T.V.M., Ivan, H., von Ommeren, M., El Masri, M., Araya, M., Khaled, N.,van de Put, W., & Somasundarem, D.J. (2001). Lifetime events and Posttraumatic Stress Disorder in 4 postconflict settings. *Journal of the American Medical Association*, 286, 555-562.
- Dougall, A.L., Herberman, H.B., Delahanty, D.L. and Inslicht, S.S. & Baum, A. (2000). Similarity of prior trauma exposure as a determinant of chronic stress responding to an airline disaster. *Journal of Consulting and Clinical Psychology*, 68(2), 290-295.
- Driessen, M., Schulte, S., Luedecke, C., Schaefer, I., Sutmann, F., Ohlmeier, M., Kemper, U., Koesters, G., Chodzinski, C., Schneider, U., Broese, T., Dette, C., Havemann-Reinicke, U. (2008). Trauma and PTSD in patients with alcohol, drug, or dual dependence: a multi-center study. *Alcohol Clinical and Experimental Research*, 32, 481–488.
- Edmondson, D., Kronish, I.M., Shaffer, J.A., Falzon, L., Burg, M.M. (2013). Posttraumatic stress disorder and risk for coronary heart disease: A meta-analytic review. *Am. Heart J*, 166, 806–814.
- Ekinci, G., Samancı, A.Y. (1998). Savaş, Afet, İşkence, Tecavüz ve Posttravmatik Stres Bozukluğu. *Düşünen Adam*, 11(1), 19-26.
- Ergun, D., Çakici, M., & Çakici, E. (2008). Comparing psychological responses of internally displaced and non-displaced Turkish Cypriots.TORTURE: Journal on Rehabilitation of Torture Victims and Prevention of Torture, 18(1), 20-28.
- Eriksson, C., Vande Kemp, H., Gorsuch, R., Hoke, S., Foy, D. (2001). Trauma exposure and PTSD symptoms in international relief personel. *Journal of Traumatic Stress*, 13, 205-211.
- Eşsizoğlu, A., Yaşan, A., Bülbül, İ., Önal, S., Yıldırım, E.A., Aker, T. (2009). Bir Terörist Saldırı Sonrasında Travma Sonrası Stres Bozukluğu Gelişimini Etkileyen Risk Faktörleri. *Türk Psikiyatri Dergisi*, 20(2), 118-126.
- Evans, G.W., Kim, P. (2010). Multiple risk exposure as a potential explanatory mechanism for the socioeconomic status-health gradient. *Ann. N. Y. Acad. Sci*, 1186, 174–189.
- Eytan, A., Gex-Fabry, M. (2011). Use of healthcare services 8 years after the war in Kosovo: role of post-traumatic stress disorder and depression. *The European Journal of Public Health*, 22(5), 638-43.

- Farhood, L.F., Fares, S., Sabbagh, R., Hamady, C. (2016). PTSD and depression construct: prevalence and predictors of co-occurrence in a South Lebanese civilian sample. *European Journal of Psychotraumatology*, 7, 31509 -
- Farhood, L., & Noureddine, S. (2003). PTSD, depression, and health status in Lebanese civilians exposed to a church explosion. *The International Journal of Psychiatry in Medicine*, 33(1), 39–53.
- Felix E., Hernández L., Bravo M., Ramirez R., Cabiya J., Canino G. (2011). Natural disaster and risk of psychiatric disorders in puerto rican children. *J. Abnorm. Child Psycho*, 39, 589–600.
- Ferrari, A.M. (2002). The impact of culture upon child rearing practices and definitions of maltreatment. *Child Abuse & Neglect*, 26(8), 793-813.
- Ferry F, Bunting B, Murphy S, et al. (2014). Traumatic events and their relative PTSD burden in Northern Ireland: a consideration of the impact of the 'Troubles'. Soc Psychiatry Psychiatr Epidemiol, 49, 435–446.
- Foa, E.B., Kozak, M.J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99, 20-35.
- Foa, E.B., Steketee, G., Olasov-Rothbaum, B. (1989). Behavioural/Cognitive conceptualisations of posttraumatic stres disorder. *Behaviour Therapy*, 20, 155-176.
- Foa, E.B., Davidson, J.R.T., Frances, A. (1999). The expert consensus guideline series: Treatment of posttraumatic stres disorder. *J Clin Psychiatry*, 60(16), 1-40.
- Foa, E.B. (1997). Trauma and women: course, predictors, and treatment. *J Clin Psychiatry*, 58(9), 25-28.
- Frank, G., Njenga, F.G., Nicholls, P.J. et al., (2004). Post-traumatic stress after terrorist attack: psychological reactions following the US embassy bombing in Nairobi. *Br J Psychiatry*, 185, 328-333.
- Freedy, J.R., Saladin, M.E., Kilpatrick, D.G. (1994). Understanding Acute Psychological Distress Following Natural Disaster, *J Trauma Stress*, 7, 257.
- Freud, S. (1953). The interpretation of dreams. In J. Strachey (Ed.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 4, pp. 1±388; Vol. 5, pp. 339±627). London: Hogarth Press. (Original work published 1905.)
- Freud, S. (1955). Beyond the pleasure principle. In J. Strachey (Ed.), The standard edition of the complete psychological works of Sigmund Freud (Vol. 18, pp. 3±64). London: Hogarth Press. (Original work published 1920).
- Friedman, M.J. (1988). Toward rational pharmacotherapy for posttraumatic stress disorder: an interim report. *Am J Psychiatry*, 145(3), 281-285.

- Fullerton, C.S., Ursano, R.J., Epstein, R.S., Crowley, B., Vance, K.L., Kao, T.C., et al. (2000). Peritraumatic dissociation following motor vehicle accidents: relationship to prior trauma and prior major depression. *Journal of Nervous & Mental Disease*, 188, 267–272.
- Ghanem, M., Gadallah, M., Meky, F.A., Mourad, S., El-Kholy, G. (2009). National Survey of Prevalence of Mental Disorders in Egypt: preliminary survey. *Eastern Mediterranean Health Journal*, 15(1), 65-75.
- Green, B.L., Grace, M.C., Lindy, J.D., Gleser, G.C., & Leonard, A. (1990). Risk factors for PTSD and other diagnoses in a general sample of Vietnam veterans. *Am J Psychiatry*, 147(6), 729–733
- Green, B.L. (1994). Psyhosocial research in traumatic stress: An update. *Journal of Traumatic Stress*, 7, 341-362.
- Green, B.L., Krupnick, J.L., Stockton, P., Goodman, L., Corcoran, C., & Petty, R. (2001). Psychological Outcomes Associated With Traumatic Loss In A Sample Of Young Women. *American Behavioral Scientist*, 44, 817-837.
- Güçlü, O.G., Arslan, Ö., Erkıran, M., Gedikbaşı, A. (2013). The Relationship of Temperament and Character Profiles with Posttraumatic Stress Disorder in Women Undergoing Termination of Pregnancy For Fetal Anomaly. *Archives of Neuropsychiatry*, 50(2), 161.
- Güler N., Tel H., Tuncay F. (2005) Kadının Aile İçinde Yaşanan Şiddete Bakışı. *Cumhuriyet Üniversitesi Tıp Fakültesi*, 27(2), 51-56.
- Hacıoğlu, M., Aker, T., Kutlar, T., Yaman, M. (2002). Deprem Tipi Travma Sonrasında Gelişen Travma Sonrası Stres Bozukluğu Belirtileri Alt Tipleri. Düşünen Adam, 15(1), 4-15.
- Hacıoğlu, M., Gönüllü, O., Kamberyan, K. (2002). Travma Sonrası Stres Bozukluğu Tanısının Gelişimi Üzerine Bir Gözden Geçirme. *Düşünen Adam*, 15(4), 210-214.
- Hallis, D. & Slone, M. (1999). Coping strategies and locus of control as mediating variables in the relation between exposure to political life events and psychological adjustment in Israeli children. *International Journal of Stress Management*, 6, 105-123.
- Hapke, U., Schumann, A., Rumpf, H.J., John, U., Meyer, C. (2006). Post-traumatic stress disorder: the role of trauma, pre-existing psychiatric disorders, and gender. *Eur Arch Psychiatry Clin Neurosci*, 256(5), 299–306.
- Hashemian, F., Khoshnood, K., Desai, M. M., Falahati, F., Kasl, S., & Southwick, S. (2006). Anxiety, depression, and posttraumatic stress in Iranian survivors of chemical warfare. *Journal of the American Medical Association*, 296, 560-566.
- Hauffa, R., Rief, W., Brahler, E., Martin, A., Mewes, R., & Glaesmer, H. (2011). Lifetime traumatic experiences and posttraumatic stress disorder in the

- German population: results of a representative population survey. *J Nerv Ment Dis*, 199(12), 934–939.
- Heise L, Garcia Moreno C. (2002). *Violence by intimate partners*. In: Krug EG et al., eds. World report on violence and health. Geneva, World Health Organization, 87–121.
- Hobfoll, S. E., Canetti-Nisim, D., & Johnson, R. J. (2006). Exposure to terrorism, stress related mental health symptoms, and defensive coping among a nationally representative sample in Israel. *Journal of Consulting and Clinical Psychology*, 74, 207-18.
- Hobfoll, S. E., Canetti-Nisim, D., Johnson, R. J., Palmieri, P. A., Varley, J. D., & Galea, S. (2008). The association of exposure, risk, and resiliency factors with PTSD among Jews and Arabs exposed to repeated acts of terrorism in Israel. *Journal of Traumatic Stress*, 21, 9-21.
- Hofmann, A. (2006). Psychotraumatologie-der Stand des Wissens und die Versorgungslage. *Psychotherapie im Dialog*, 4, 351-357.
- Horowitz, M.J. (1986). Stress Response Syndromes:a review of posttraumatic and adjustment disorders. *Hosp Community Psychiatry*, 37(3), 241-9.
- Hingson, R.W., Heeren, T., Winter, M.R. (2006). Age at drinking onset and alcohol dependence: Age at onset, duration, and severity. *Archives of Pediatrics & Adolescent Medicine*, 160, 739–746.
- Hingson, R.W., Zha, W. (2009). Age of drinking onset, alcohol use disorders, frequent heavy drinking, and unintentionally injuring oneself and others after drinking. *Pediatric*, 123, 1477–1484.
- Hughes, M. J., & Jones, L. (2000). Women, Domestic Violence, and Posttraumatic Stress Disorder (PTSD). Department of Health and Human Services School of Social Work, San Diego. Retrieved from https://numerons.files.wordpress.com/2012/04/domestic-violence-and-ptsd.pdf.
- Hopkins, R.O., Brett, S. (2005). Chronic neurocognitive effects of critical illness. *Curr Opin Crit Care*, 11, 369-375.
- Iribarren, J., Prolo, P., Neagos, N., & Chiappelli, F. (2005). Post-Traumatic Stress Disorder: Evidence-Based Research for the Third Millennium. Evid Based Complement Alternat Med, 2(4), 503-512.
- Jaoude, P., Vermont, L.N., Porhomayon, J., El-Solh, A.A. (2015). Sleep disordered breathing in patients with post-traumatic stress disorder. *Ann Am Thorac Soc*, 12, 259-268.
- Kaminer, D., Grimsrud, A., Myer, L., et al. (2008). Risk for posttraumatic stress disorder associated with different forms of interpersonal violence in South Africa. *Soc Sci Med*, 67,1589–1595.

- Kaplan, Z., Matar, M. A., Kamin, R., Sadan, T., & Cohen, H. (2005). Stress-related response after 3 years of exposure to terror in Israel: Are ideological-religious factors associated with resilience. *Journal of Clinical Psychiatry*, 66, 1146–1154.
- Kaptanoğlu, C. (1991). İşkencenin ruhsal etkileri. Psikiyatri Anabilim Dalı Tıpta Uzmanlık Tezi. Anadolu Üniversitesi Tıp Fakültesi, Eskişehir.
- Karakaya, I., Ağaoğlu, B., Coşkun, A., Şişmanlar, Ş. G., Yıldız, Ö. (2004). Marmara Depreminden Üç Buçuk Yıl Sonra Ergenlerde TSSB, Depresyon ve Anksiyete Belirtileri. *Türk Psikiyatri Dergisi*, 15(4), 257-263.
- Katz, C.L., Pellegrino, L., Pandya, A., Ng, A., & DeLisi, L.E. (2002). Research on psychiatric outcomes and interventions subsequent to disasters: a review of the literature. *Psychiatry Res*, 110, 201-17.
- Kawakami, N., Tsuchiya, M., Umeda, M., et al. (2014). Trauma and posttraumatic stress disorder in Japan: Results from the World Mental Health Japan Survey. *J Psychiatr Res*, 53, 157–165.
- Kaya, B. (2000). Travma Sonrası Stres Bozukluğunda Komorbidit. *Turkish Journal of Geriatrics*, 2(2), 76-82.
- Kessler, R.C., Sonnega, A., Bromet, E. (1995). Posttraumatik Stress Disorder in the National Comorbidity Survey. *Arch. Gen. Psychiatry*, 52, 1048-1060.
- Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K.R., & Walters, E.E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62(6), 593–602.
- King, D.W., King, L.A., Foy, D.W., Keane, T.M. and Fairbank, J.A. (1999). Posttraumatic stress disorder in a national sample of female and male vietnam veterans: risk factors, war-zone stressors, and resilience-recovery variables. *Journal of Abnormal Psychology*, 108(1), 164-170.
- King, D.W., King, L.A., Erickson, D.J., Huang, M.T., Sharkansky, E.J. and Wolfe, J. (2000). Posttraumatic stress disorder and retrospectively reported stressor exposure: a longitudinal prediction model. *Journal of Abnormal Psychology*, 109(4), 624-633.
- King, M.W., Street, A.E., Gradus, J.L., Vogt, D.S., & Resick, P.A. (2013). Gender differences in posttraumatic stress symptoms among OEF/OIF veterans: An item response theory analysis. *Journal of Traumatic Stress*, 26, 175-183.
- Kline, N.A., Rausch, J.L. (1985). Olfactory precipitants of flashbacks in posttraumatic stress disorder: case reports. *J Clin Psychiatry*, 46(9), 383-384.
- Koenen, K.C., Stellman, J.M., Stellman, S.D. and Sommer, Jr. J.F. (2003). Risk factors for course of posttraumatic stress disorder among Vietnam veterans:

- a 14-year follow-up of American legionnaires. *Journal of Consulting and Clinical Psychology*, 71(6), 980-986.
- Kuwabara, H., Shioiri, T., Toyabe, S., Kawamura, T., Koizumi, M., Ito-Sawamura, M., et al. (2008). Factors impacting on psychological distress and recovery after the 2004 Niigata-Chuetsu earthquake, Japan: Community-based study. *Psychiatry and Clinical Neurosciences*, 62, 503-507.
- Kwon, Y., Maruyama, S., & Morimoto, K. (2001). Life events and posttraumatic stress in Hanshin-Awaji earthquake victims. *Environmental Health and Preventive Medicine*, 6, 97-103
- Lanius, R.A., Vermetten, E., Loewenstein, R.J., Brand, B., Schmahl, C., & Bremner, J.D. (2010). Emotion modulation in PTSD: Clinical and neurobiological evidence for a dissociative subtype. *Am J Psychiatry*, 167(6), 640-647.
- Lasgaard, M., Elklit, A., Østergård, K.K., & Palic, S. (2012). Social support, coping and posttraumatic stress symptoms in young refugees. *Torture: Quarterly Journal on Rehabilitation of Torture Victims and Prevention of Torture*, 22(1), 11–23.
- Lazarus, R.S. (1976). On the primacy of cognition. *American Psychologist*, 39, 124-129.
- Lifton, R.J., & Olson, E. (1976). The human meaning of total disaster: The Buffalo Creek experience. *Psychiatry*, 39, 1-17.
- Litz, B.T., Orsillo, S.M., Friedman, M., Ehlich, P., & Batres, A. (1997). Posttraumatic stress disorder associated with peacekeeping duty in Somalia for US military personnel. *Am J Psychiatry*, 154(2),178–184.
- Laffaye, C., Kennedy, C., & Stein, M. B. (2003). Post-traumatic stress disorder and health-related quality of life in female victims of intimate partner violence. *Violence and Victims*, 18(2), 227-238.
- Lukaschek, K., Kruse, J., Emeny, R.T. et al. (2013). Soc Psychiatry Psychiatr Epidemiol, 48, 525.
- Maercker, A., Forstmeier, S., Wagner, B., Glaesmer, H., & Brahler, E. (2008). Post-traumatic stress disorder in Germany. Results of a nationwide epidemiological study. *Nervenarzt*, 79(5), 577–586.
- Marshall, R.D., Olfson, M., Hellman, F., Blanco, C., Guardino, M., & Struening, E. L. (2001). Comorbidity, impairment, and suicidality in subthreshold PTSD. *American Journal of Psychiatry*, 158, 1467–1473.
- Marshall, R.D., & Cloitre, M. (2002). Maximizing treatment outcome in post-traumatic stress disorder by combining psychotherapy with pharmacotherapy. *Curr Psychiatry Rep*, 2(4), 335-340.
- Marshall, R.D., Galea, S., Kilpatrick, D. (2002). Psychiatric consequences of September 11. *JAMA*, 288(21), 2683–2684

- Matsuoka, Y., Nishi, D., Nakajima, S., Kim, Y., Homma, M., & Otomo, Y. (2008). Incidence and prediction of psychiatric morbidity after a motor vehicle accident in Japan: The Tachikawa Cohort of Motor Vehicle Accident Study. *Critical Care Medicine*, 36, 74-80
- McCann, I.L., Sakheim, D., Abrahamson, D.J. (1988). Trauma and victimization: a model of psychological adaptation. *Counselling Psychologist*, 16, 531-594.
- McLaughlin K. A., Breslau J., Greif Green J., Lakoma M. D., Sampson N. A., Zaslavsky A. M., et al. (2011). Childhood socio-economic status adn the onset, persistence, and severity of DSM-IV mental disorders in a US national sample. *Soc. Sci. Med*, 73, 1088–1096.
- Medina-Morca Icaza, M.E., Borges-Guimaraes, G., Lara, C. (2005). Prevalence of violent events and post-traumatic stress disorder in the Mexican population. *Salud Publica Mex*, 47, 8–22.
- Mertin, P., & Mohr, P. B. (2000). Incidence and correlates of posttraumatic stress disorder in Australian victims of domestic violence. *Journal of Family Violence*, 15(4), 411-422.
- Mikulincer, M., Solomon, Z. (1988). Attributional style and combat-related posttraumatic stress disorder. *J Abnorm Psychol.* 97(3), 308-13.
- Morrison, R.A. (1994). Early identification of chronic posttraumatic stress disorder by nurse clinicians. *Orthop Nurs*, 13, 22-4
- Myers, C.M. (1915). Contributions to the study of shell shock. Lancet, 13, 316–320.
- Neuner, F., & Elbert, T. (2007). The mental health disaster in conflict settings: can scientific research help? *BMC Public Health*, 7, 275
- Naderi, M., Firouzkoohi, Moghadam, M., Hamzenejad, M., Emamdadi, A., & Karami, H. (2012). Post-Traumatic Stress Disorder and Related Factors in Parents of Children With Cancer in South-East of Iran. *Iran Red Cres Med J.*, 14(12), 776-81.
- Narrow, W. E., Rae, D. S., Robins, L. N., et al (2002) Revised prevalence estimates of mental disorders in the United States: using a clinical significance criterion to reconcile 2 surveys' estimates. *Archives of General Psychiatry*, 59, 115–123.
- Najafipour, H., Banivaheb, G., Sabahi, A., Naderi, N., Nasirian, M., & Mirzazadeh, A. (2016). Prevalence of anxiety and depression symptoms and their relationship with other coronary artery disease risk factors: A population-based study on 5900 residents in Southeast Iran. *Asian Journal of Psychiatry*, 20, 55-60.
- Nemeroff, C.B., Bremner, J.D., Foa, E.B., Mayberg, H.S., North, C.S., Stein, M.B. (2006) Posttraumatic stress disorder: a state-of-the-science review. *J Psychiatr Res*, 40(1), 1–21.

- Norman, S.B., Tate, S.R., Anderson, K.G., Brown, S.A. (2007). Do trauma history and PTSD symptoms influence addiction relapse context? *Drug and Alcohol Dependence*, 90, 89–96.
- Ohmi, H., Kojimi, S., Awai, Y., Kamata, S., Sasaki, K., Tanaka, Y., et al. (2002). Post-traumatic stress disorder in pre-school aged children after a gas explosion. *European Journal of Pediatrics*, 161, 643-648.
- Olaya, B., Alonso, J., Atwoli, L., et al. (2015). Association between traumatic events and posttraumatic stress disorder: results from the ESEMeD-Spain study. *Epidemiol Psychiatr Sci*, 24, 172–183.
- O'Toole, B.I., & Catts, S.V. (2008). Trauma, PTSD, and physical health: an epidemiological study of Australian Vietnam veterans. *J Psychosom Res*, 64, 33-40.
- Ozer, E. J., Best, S. R., Lipsey, T. L. and Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: a meta-analysis. *Psychological Bulletin* 129(1), 52-73.
- Ögel, K. (2010). Sigara, Alkol ve Madde Kullanım bozuklukları: Tanı, Tedavi ve Önleme. Yeniden Yayınları, İstanbul.
- Özgen, F., & Aydın, H. (1999). Travma Sonrası Stres Bozukluğu. *Klinik Psikiyatri*, 1, 34-41.
- Öztürk, O., Aylın U. (2011). *Ruh Sağlığı ve Bozuklukları*. 11. Baskı. Ankara: Nobel Tıp Kitabevi
- Paulus, E.J., Argo, T.R., Egge, J.A. (2013). The impact of posttraumatic stress disorder on blood pressure and heart rate in a veteran population. *J. Trauma. Stress*, 26, 169–172. Perkonigg, A., Kessler, R.C., Storz, S., & Wittchen, H.U. (2000). Traumatic events and posttraumatic stres isorder in the community: prevalence, risk factors and comorbidity. *Acta Psychiatr Scand*, 101, 46-59.
- Perrin, M.A., DiGrande, L., Wheeler, K., Thorpe, L., Farfel, M., Brackbill, R. (2007) Differences in PTSD prevalence and associated risk factors among World Trade Center disaster rescue and recovery workers. *Am J Psychiatry*, 164(9), 1385–1394.
- Pfefferbaum, B., North, C. S., Doughty, D. E., Fullerton, C. S., & Kyula, J. (2003). Posttraumatic stress and functional impairment in Kenyan children following the 1998 American Embassy bombing. *American Journal of Orthopsychiatry*, 73(2), 133-140.
- Piccinelli, M., Simon, G., (1997). Gender and cross-cultural differences in somatic symptoms associated with emotional distress: an international study in primary care. *Psychological Medicine*, 27 (2), 433-444.

- Pico-Alfonzo, M. A. (2005). Psychological intimate partner violence: The major predictor of posttraumatic stress disorder in abused women. *Neuroscience and Biobehavioral Reviews*, 29, 181–193
- Pitman, R.K., & Orr, S.P. (1990). Twenty-four hour urinary cortisol and catecholamine excretion in combat-related posttraumatic stress disorder. *Biol Psychiatry*, 27(2), 245-247.
- Priebe, S., Grappasonni, I., Mari, M., Dewey, M., Petrelli, F., & Costa, A. (2009). Posttraumatic stress disorder six months after an earthquake. *Social Psychiatry and Psychiatric Epidemiology*, 44(5), 393–397.
- Prout, T. A., Gerber, L. E., & Gottdiener, W. H. (2015). Trauma and substance use: the role of defences and religious engagement. *Routledge*, 2(18), 123-133.
- Ramsay, R. (1990). Invited review: post-traumatic stress disorder; a new clinical entity? *J Psychosom Res*, 34(4), 355-65.
- Resick, P.A., & Schnicke, M.K. (1992). Cognitive processing therapy for sexual assault victims. *Journal of Consulting and Clinical Psychology*, 60, 748-756.
- Reslau, N. & Kessler, R.C. (2001). The Stressor Criterion İn Dsm-Iv Posttraumatic Stress Disorder: An Empirical İnvestigation. *Biological Psychiatry*, 50, 699-704.
- Resnick, S.G., Rosenheck, R.A. (2008). Posttraumatic stress disorder and employment in veterans participating in Veterans Health Administration Compensated Work Therapy. *Journal of Rehabilitation Research & Development*, 45(3), 427-36.
- Rivera, F. (2012). Cultural mechanisms in the exchange of social support among Puerto Ricans after a natural disaster. *Qual. Health Res*, 22, 801–809.
- Rose, S. (1995). Traumatic stress: a nurse therapist role? Nurs Stand, 9, 32-4.
- Roberts, A. R. (2002). Assessment, crisis intervention and trauma treatment: The integrative ACT intervention model. Brief *Treatment and Crisis Intervention*, 2(1), 1–21.
- Roberts, A. R., & Kim, J. H. (2005). Exploring the effects of head injuries among battered women: A qualitative study of chronic and severe woman battering. Journal of Social Service Research, 32(1), 33–47.
- Rosenberg, H.J., Rosenberg, S.D., Wolford, G.L., Manganiello, P.D., Brunette, M.F., & Boynton, R.A. (2000). The relationship between trauma, PTSD, and medical utilization in three high risk medical populations. *Int J Psychiatry Med*, 30(3), 247–259.
- Rosenman, S. (2002). Trauma and posttraumatic stress disorder in Australia: findings in the population sample of the Australian National Survey of Mental Health and Wellbeing. *Aust N Z J Psychiatry*, 36(4), 515–20.

- Yasan, A., Saka, G., Ertem, M., Ozkan, M., &Ataman, M. (2008). Prevalence of PTSD and related factors in communities living in conflictual area: Diyarbakir case. *Torture*, 18(1), 29-37.
- Sareen, J. (2014). Posttraumatic Stress Disorder in Adults: Impact, Comorbidity, Risk Factors, and Treatment. *Can J Psychiatry*, 59(9), 460–467.
- Sareen, J., Cox, B.J., Stein, M.B., Afifi, T.O., Fleet, C., & Asmundson, G.J. (2007). Physical and mental comorbidity, disability, and suicidal behavior associated with posttraumatic stress disorder in a large community sample. *Psychosom Med*, 69(3), 242–248.
- Sartor, C.E., Lynskey, M.T., Bucholz, K.K., McCutcheon, V.V., Nelson, E.C., Waldron, M., & Heath, A.C. (2007). Childhood sexual abuse and the course of alcohol dependence development: Findings from a female twin sample. *Drug and Alcohol Dependence*, 89, 139–144.
- Senyonga, J.S., Owens, V., & Olema, D.V. (2013). Posttraumatic Growth, Resilience, and Posttraumatic Stress Disorder (PTSD) Among Refugees. *Procedia Social and Behavioral Sciences*, 82, 144 148.
- Sercan, M. (2000). Felaket sonrasında ruh sağlığı hizmetleri ve psikososyal destek yöntemleri. 3P Dergisi, 8(1), 29-37.
- Seethalakshmi, R., Dhavale, H.S., Gawande, S., & Dewan, M. (2006). Psychiatric morbidity following motor vehicle crashes: a pilot study from India. *J Psychiatr Pract*, 12(6), 415–418.
- Shalev, A.Y., Freedman, S., Peri, T., Brandes, D., Sahar, T., Orr, S.P., & Pitman, R.K. (1998). Prospective study of posttraumatic stress disorder and depression following trauma. *Am J Psychiatry*, 155(5), 630–637.
- Shalev, A.Y., Tuval, R., Frenkiel-Fishman, S., Hadar, H., & Eth, S. (2006). Psychological responses to continuous terror: A study of two communities in Israel. *American Journal of Psychiatry*, 163, 667-67
- Shapiro, F. (1989). Eye movement desensitization: a new treatment for posttraumatic stress disorder. *J Behav Ther Exp Psychiatry*, 20(3), 211-217.
- Shechner, T., Slone, M., & Bialik, G. (2007). Does political ideology moderate stress: The special case of soldiers conducting forced evacuations. *Journal of Orthopsychiatry*, 77, 189–198.
- Shore, J.H., Tatum, E., & Vollmer, W.M. (1986). Psychiatric reactions to disaster: The Mount Saint Helen's experience. *Am J Psychiatry*, 143, 590-595.
- Simsek, A. H., & Cakici, D. M. (2015). Post-Traumatic Stress Disorder Severity Among Turkish Cypriot Fighters of Erenkoy Exclace Battle and Erenkoy Syndrome. Master Thesis. Institute of Applied and Social Sciences.

- Sinici, E., Erden, G., & Yurttaş, Y. (2009). Akut stres bozukluğunda bir müdahale tekniğinin uygulanabilirliği: Göz Hareketleri İle Duyarsızlaştırma ve Yeniden İşleme (EMDR). *Yeni Sempozyum Dergisi*, 47(4), 178-186.
- Snow, R.B., Stellman, J.M., Stellman, S.D. (1988). Posttraumatic Stress Disorder among American Legionnaires in relation to combat experience in Vietnam: associated and contributory factors. *Environmental Research*, 47, 175-192.
- Spitzer, C., Koch, B., Grabe, H.J., et al. (2011). Association of airflow limitation with trauma exposure and post-traumatic stress disorder. *Eur Respir J*, 37, 1068-1075.
- Spitzer, C., Barnow, S., Volzke, H., John, U., Freyberger, H.J., & Grabe, H.J. (2009) Trauma, posttraumatic stress disorder, and physical illness: findings from the general population. *Psychosom Med*, 71(9), 1012–1017.
- Stein, M.B., Walker, J.R., & Forde, D.R. (2000). Gender differences in susceptibility to posttraumatic stress disorder. *Behav Res Ther*, 38(6), 619–628.
- Steinmetz, K.M., Scott, L.A., Smith, D. & Kensinger, E.A. (2012). The effects of trauma exposure and posttraumatic stress disorder on the emotion-induced memory trade-off. *Frontiers in Integrative Neuroscience*, 6, 1-11.
- Sungur, Z.M., Sürmeli, A., & Özçubukçuoğlu, A. (1995). Güneydoğu"da görev yapan askeri ppulasyonda görülen travma sonrası stres bozukluğu üzerine bir çalışma. *Nöropsikiyatri Arsivi*, 32(3), 117-122.
- Şenyuva, G., & Yavuz, M.F. (2009). Fiziksel Şiddet Olgularında Travma Sonrasi Stres Bozukluğunun Değerlendirilmesi. *Adli Tıp Dergisi*, 23(1), 1-14.
- Şuer, T. (2005). Posttravmatik Stres Bozukluğu. İ. Ü. Cerrahpaşa Tıp Fakültesi Sürekli Tıp Eğitimi Etkinlikleri. *Medikal Açıdan Stres ve Çareleri Sempozyum Dizisi*, 47, 205-210.
- Tedstone, J.E., Tarrier, N. (2003). Posttraumatic stress disorder following medical illness and treatment. *Clin Psychol Rev*, 23, 409-448.
- Tate, S.R., Norman, S.B., McQuaid, J.R., & Brown, S.A. (2007). Health problems of substance dependent veterans with and those without trauma history. *Journal of Substance Abuse Treatment*, 33, 25–32.
- Tekin, A., Karadağ, H., Süleymanoğlu, M., Tekin, M., Kayran, Y., Alpak, G., & Şar, V. (2016). Prevalence and gender differences in symptomatology of posttraumatic stress disorder and depression among Iraqi Yazidis displaced into Turkey. *European Journal of Psychotraumatology*, 7, 285556.
- Tokgöz, G., Yaluğ, İ., Özdemir, S., Yazıcı, A., Uygun, K., Aker, T. (2008). Kanserli Hastalarda Travma Sonrası Stres Bozukluğunun Yaygınlığı ve Ruhsal Gelişim. *New Symposium Journal*, 46(2), 51-61.

- Tural, Ü., Önder, E. (2001). *Travma sonrası stres bozukluğunun farmakolojik tedavisi*. Psikolojik Travma Yazıları (10). 5US Yayınları;2001.
- Tuzcu, A., Bademli, K. (2014). Göçün Psikososyal Boyutu. *Psikiyatride Güncel Yaklaşımlar*, 56-66.
- Walsh, K., Elliot, J. C., Schmulewitz, D., Aharanovich E., Strous, R., Frisch, A., Weizman, A., Spivak, B., Grant, B. F., & Hasin, D. (2014). Trauma exposure, posttraumatic stress disorder and risk for alcohol, nicotine, and marijuana dependence in Israel. *The Journal of Psychopathology*, 3(55), 621-630.
- Wang, X., Gao, L., Shifuku, N., Zhang, H., Zhao, C., & Shen, Y.(2000). Longitudinal study of earthquake-related PTSD in a randomly selected community sample in North China. *Am J Psychiatry*, 157, 1260-1266.
- Weiss, B.J., Garvert, D.W., & Cloitre, M. (2015). PTSD and trauma-related difficulties in sexual minority women: The impact of perceived social support. *Journal of Traumatic Stress*, 28(6), 563–571.
- Weissman, M. M., Bland, R. C., Canino, G. J., Greenwald, S., Hwu, H. G., Joyce, P. R., et al. (1999). Prevalence of suicide ideation and suicide attempts in nine countries. *Psychological Medicine*, 29, 9–17
- Wilcox, H.C., Storr, C.L., & Breslau, N. (2009). Posttraumatic stress disorder and suicide attempts in a community sample of urban American young adults. *Arch Gen Psychiatry*, 66, 305–311.
- Woods, S. J. (2000). Prevalence and patterns of post-traumatic stress disorder in abused and post-abused women. *Mental Health Nursing*, 21, 309–324
- Wong, P.T.P., & Weiner, B. (1981). When people ask "why" questions, and the heuristics of attributional search. *Journal of Personality and Social Psychology*, 40, 650-663.
- World Health Organization. (1993). The ICD-10 classification of mental and behavioural disorders: diagnostic criteria for research. Geneva: World Health Organization.
- Van der Kolk, B. (2000). Posttraumatic stress disorder and the nature of trauma. *Dialogues Clin Neurosci*, 2(1), 7-22.
- Verger, P., Dab, W., Lamping, D.L. et al. (2004). The Psychological Impact of Terrorism: An Epidemiologic Study of Posttraumatic Stress Disorder and Associated Factors in Victims of the 1995–1996 Bombings in France. Am J Psychiatry, 161, 1384-1389.
- Yaluğ, İ., Özdemir, S., Aker, T. (2007). Yaşlılarda travma sonrası stres bozukluğu. *Yeni Sempozyum Dergisi*, 45(2), 54-61.

- Yılmaz, U.R. (1995). *Travma sonrası stres bozukluğunu etkileyen faktörlerin incelenmesi*. Ruh Sağlığı ve Hastalıkları Anabilim Dalı Tıpta Uzmanlık Tezi, Ankara.
- Yorbık, Ö., Dikkatli, S., Cansever, A., & Söhmen, T. (2001). Çocuklarda ve Ergenlerde Travma Sonrası Stres Bozukluğu Belirtilerinin Tedavisinde Fluoksetinin Etkinliği. *Klinik Psikofarmokoloji Bülteni*, 4(11), 251-256.
- Zatzick, D.F., Kang, S.M., Müller, H.G., Russo, J.E., Rvara, F.P., Katon, W., Jurcovich G.J, Roy-Byrne, P. (2002). Predicting Posttraumatic Distress in Hospitalized Trauma Survivors with Acute Injuries. *Am. J Psychiatry*, 159, 941-946.
- Zen, A.L., Whooley, M.A., Zhao, S., Cohen, B.E. (2012). Post-traumatic stress disorder is associated with poor health behaviors: findings from the heart and soul study. *Health Psychol*, 31, 194-201.

#### APPENDIX 1- BİLGİLENDİRME FORMU

# KUZEY KIBRIS TÜRK CUMHURİYETİNDE MAJÖR DEPRESYONUN YAYGINLIĞI VE RİSK FAKTÖRLERİ

Bu çalışmanın amacı Kuzey Kıbrıs Türk Cumhuriyetinde Travma Sonrası Stres Bozukluğu Yaygınlığı ve Risk Faktörleri araştırmaktır. Çalışma sonucunda elde edilen veriler doğrultusunda KKTC'de Travma Sonrası Stres Bozukluğu yaygınlığını bulmayı amaçlanmaktadır. Bu çalışmada size bir demografik bilgi formu ve bir dizi ölçek sunduk. Demografik bilgi formu sizin yaş cinsiyet gibi demografik özellikleriniz hakkındaki soruları içermektedir. Ölçekler ise Travma Sonrası Stres Bozukluğunda gözlemlenen duygusal, bilişsel ve motivasyonel semptomları ölçmektedir.

Daha önce de belirtildiği gibi, ölçeklerde ve görüşmelerde verdiğiniz cevaplar kesinlikle gizli kalacaktır. Eğer çalışmayla ilgili herhangi bir şikayet, görüş veya sorunuz varsa bu çalışmanın araştırmacılarından biri olan Psk. Asra Babayiğit ile iletişime geçmekten lütfen çekinmeyiniz (asra.babayigit@neu.edu.tr / 0392 223 6464/dahili:278).

Eğer bu çalışmaya katılmak sizde belirli düzeyde stres yaratmışsa ve bir danışmanla konuşmak istiyorsanız, ülkemizde ücretsiz hizmet veren şu kuruluşlar bulunmaktadır: Eğer üniversite öğrencisiyseniz, devam ettiğiniz üniversitede Psikolojik Danışmanlık, Rehberlik ve Araştırma Merkezine (PDRAM) başvurabilirsiniz.

Eğer öğrenci değilseniz, Barış Sinir ve Ruh Hastalıkları Hastanesine başvurabilirsiniz.

Eğer araştırmanın sonuçlarıyla ilgileniyorsanız, araştırmacıyla iletişime geçebilirsiniz.

Katıldığınız için tekrar teşekkür ederim. Psk. Asra Babayiğit Psikoloji Bölümü, Yakın Doğu Üniversitesi,

Lefkoşa

APPENDIX 2-AYDINLATILMIŞ ONAM

Bu çalışma, Yakın Doğu Üniversitesi Fen Edebiyat Fakültesi Psikoloji Bölümü

tarafından gerçekleştirilen bir çalışmadır.

Bu çalışmanın amacı Kuzey Kıbrıs Türk Cumhuriyetinde Travma Sonrası Stres

Bozukluğu Yaygınlığı ve Risk Faktörleri araştırmaktır. Çalışma sonucunda elde

edilen veriler doğrultusunda KKTC'de Travma Sonrası Stres Bozukluğu yaygınlığını

ve risk faktörlerini bulmayı amaçlanmaktadır.

Anket tamamen bilimsel amaçlarla düzenlenmiştir. Anket formunda kimlik

bilgileriniz yer almayacaktır. Size ait bilgiler kesinlikle gizli tutulacaktır. Çalışmadan

elde edilen veriler yalnızca istatistik veri olarak kullanılacaktır. Yanıtlarınızı içten ve

doğru olarak vermeniz bu anket sonuçlarının toplum için yararlı bir bilgi olarak

kullanılmasını sağlayacaktır.

Telefon numaranız anketörün denetlemesi ve anketin uygulandığının belirlenmesi

amacıyla istenmektedir.

Yardımınız için çok teşekkür ederim.

Psk. Asra Babayiğit

Yukardaki bilgileri ayrıntılı biçimde tümünü okudum ve anketin uygulanmasını

onayladım.

İsim:

İmza:

Telefon:

#### **APPENDIX 3- ANKET FORMU**

Bu anket çalışması sosyal sorunlarımızı ve alışkanlıklarımızı araştırmaya yönelik bilimsel bir çalışmamızdır. Kıbrıs genelinde 18-88 yaş grubundaki kadın—erkek bireylere uygulanacaktır. Bu çalışmada kesinlikle kimlik bilgileri kullanılmayacaktır. Yalnızca çalışmanın istatistik verileri bilimsel olarak akademisyenler tarafından ülkemizdeki sorunların çözümüne yönelik kullanılacaktır.

Katkı sağladığınız için teşekkür ederiz.

| Bölüm 1: Sosyo-Demografik Bilgi Formu  1.Cinsiyetiniz nedir? |  |                      |             |  |  |  |  |
|--|--|----------------------|-------------|--|--|--|--|
| 1) Kadın 2) Erke   | 1) Kadın 2) Erkek                            |                      |             |  |  |  |  |
| 2.Kaç yaşındasınız?  |  |                      |             |  |  |  |  |
| 1) Kıbrıs 2)   | Türkiye                                      | 3) İngiltere         | 4) Diğer    |  |  |  |  |
| 4.Eğer Kıbrıs'ta doğ   | ğmadı iseniz kaç                             | yıldır Kıbrıs'ta yaş | siyorsunuz? |  |  |  |  |
|  | •••••  |                      |             |  |  |  |  |
| 5.Medeni durumuni  | uz nedir?                                    |                      |             |  |  |  |  |
| 1) Evli 2)   | Nişanlı-Sözlü                                | 3) İlişkisi var      | 4) Bekar    |  |  |  |  |
| 5) Boşanmış 6  | ) Dul  | 7) Diğer             |             |  |  |  |  |
| 6. Çocuğunuz var m   | u?   |                      |             |  |  |  |  |
| 1) Yok   | 1) Yok 2) Var (Kaç tane olduğunu belirtiniz) |                      |             |  |  |  |  |
| 7. Daha yoğunlukla   | nerede yaşadınız                             | ?                    |             |  |  |  |  |
| 1) Köy   | 2) Kasaba                                    | 3) Şehir             |             |  |  |  |  |
| 8. Çalışıyor musunuz?  |  |                      |             |  |  |  |  |
| 1) Evet 2) Hayır   |  |                      |             |  |  |  |  |
| 9. Mesleği:  |  |                      |             |  |  |  |  |
| 1) İşçi  | 2) Öğrenci                                   | 3) İşsiz             | 4) Memur    |  |  |  |  |
| 5) Kendi işi   | 6) Ev kadını                                 | 7) Serbest           | 8) Diğer    |  |  |  |  |
| 10. Eğitim durumunuz nedir?                                  |  |                      |             |  |  |  |  |
| 1) Okur-yazar değil  | 2) Okur-yazar                                | 3) İlkokul           |             |  |  |  |  |

| 4) Ortaokul  |   | 5) Lise   | ) Lise 6) Yüksekokul/üniversite |              |   |                |
|--|---|---|---------------------------------|--------------|---|----------------|
| 11. Eve giren aylık gelir ne kadardır?   |   |   |                                 |              |   |                |
| 1) Geliri yok  | 2   | 2) asgari ücret (1700 TL) ve altı 3) 1700- 3400 |                                 |              |   |                |
| 4) 3400-10.000   | 4) 3400-10.000 5) 10.000 ve üzeri                   |   |                                 |              |   |                |
| 12. Oturduğu   | nuz evin  | ize nasıl                                       | sahip oldun                     | uz?          |   |                |
| 1) Kendi olana   | aklarımla 2) Devlet yardımıyla 3) Kirada oturuyorum |   |                                 |              |   |                |
| 4) Aileden mir   | as  | 4)  | Diğer                           |              |   |                |
| 13. Oturduğun  | nuz evin  | konumu  | nedir?                          |              |   |                |
| 1) Türk malı   |   | 2)  | Rum malı ta                     | hsis         | 3) Run                                  | n malı eşdeğer |
| 14. Herhangi i   | fiziksel b  | ir hastal                                       | ığınız var n                    | n? ( Var ise | e lütfen be                             | elirtiniz.)    |
| 1) Var   |   | ************                                    | ••••                            | 2) Y         | ok                                      |                |
| 15. Herhangi l   | bir psiki   | yatrik ha                                       | stalığınız v                    | ar mı?       |   |                |
| 1) Var   | •••••   | •••••   | •••••                           | 2) Y         | ok                                      |                |
| 16. Herhangi l   | bir psiki   | yatrik ha                                       | stalık nede                     | niyle tedavi | gördünü                                 | z mü?          |
| 1) Evet  | 2   | ) Hayır   |                                 |              |   |                |
| 17. Kiminle ya   | ışıyorsur   | nuz?  |                                 |              |   |                |
| 1) Yalnız  | 2) Eş/ pa   | rtner/ sev                                      | gili                            | 3) Anne/ba   | aba/ karde                              | Ş              |
| 4) Arkadaş   | 5) İkinci   | derecede  | en akraba                       | 6) Diğe      | r, belirtini                            | z ()           |
| 18. Kıbrıs'ta n  | asıl bir  | çözüme v  | arılmasını i                    | istiyorsunu  | z?                                      |                |
| 1) Çözüm bulu  | narak iki   | toplumlu  | iki bölgeli                     | federal devl | et                                      |                |
| 2) İki ayrı devletli konfederal çözüm  |   |   |                                 |              |   |                |
| 3) KKTC'nin devamı şeklinde ayrı cumhuriyet olarak devam etnesi                    |   |   |                                 |              |   |                |
| 4) 1960 Kıbrıs Cumhuriyeti'ne dönüş  |   |   |                                 |              |   |                |
| 5) Türkiye'ye bağlanma   |   |   |                                 |              |   |                |
| 6) Diğer   |   |   |                                 |              |   |                |
| 19.Hayatınız b   | oyunca  | kaç kez a                                       | ılkollü bir i                   | çecek içtini | z?                                      |                |
| 1) 0 2) 1-2  | 3) 3-5  | 4) 6-9  | 5) 10-19                        | 6) 20-39     | 7) 40-vey                               | a daha fazla   |
| 20.Hayatınız b   | oyunca  | kaç kez s                                       | igara içtiniz                   | z?           |   |                |
| 1) 0 2) 1-2  | 3) 3-5  | 4) 6-9  | 5) 10-19                        | 6) 20-39     | 7) 40-vey                               | a daha fazla   |
| 21. Hayatınız boyunca herhangi bir uyuşturucu madde (uçucu madde, eroin, esrar,    |   |   |                                 |              |   |                |
| bonzai, amfetamin, vb.) denediğiniz oldu mu? Eğer denediyseniz denediğiniz maddeyi |   |   |                                 |              |   |                |
| belirtin.  |   |   |                                 |              |   |                |
| 1) Hayır   |   | 2) Evet   | (                               | •••••        | • | )              |

**Bölüm 2** Aşağıdaki travmatik olayları hayat boyu ve son altı ayda yaşayıp yaşamadığınızı belirtiniz.

|   | Hayat boyu | Son altı ay | Hiçbir zaman |
|---|------------|-------------|--------------|
| 1.Çocukluktaki kötü olumsuz olaylar ihmal, istismar, şiddet, cinsel |            |             |              |
| taciz ve ilişki   |            |             |              |
| 2. Doğal felaket (sel,deprem,kasırga)                               |            |             |              |
| 3. Yangin veya patlama  |            |             |              |
| 4. Trafik kazası (araba, gemi, tren, uçak)                          |            |             |              |
| 5. Fiziksel saldırı (saldırıya uğrama, dövülme, tekmelenme,         |            |             |              |
| yumruklanma)  |            |             |              |
| 6. Cinsel Saldırı (vurulma, bıçaklanma, bıçakla tehdit edilme)      |            |             |              |
| 7. Çatışma veya savaş bölgesinde asker veya sivil olarak bulunma    |            |             |              |
| 8. İşkence veya benzeri bir kötü muamele                            |            |             |              |
| 9. Cinayet ve intihar gibi ölüm olayları                            |            |             |              |
| 10. Sevdiğiniz birinin ani ve beklenmeyn ölümü                      |            |             |              |
| 11. Sevdiğiniz birinin ani ve beklenmeyen ciddi hastalığı           |            |             |              |
| 12. Sevdiğiniz birinden ani ve beklenmeyen bir şekilde ayrılma      |            |             |              |
| 13. Aile içi şiddet   |            |             |              |
| 14. Ani ve beklenmeyen bir iş kaybı, ciddi ekonomik güçlük          |            |             |              |
| 15. İş kazası   |            |             |              |
| 16. Diğer herhangi çok stresli olay veya yaşantı                    |            |             |              |

| 17. 1963 Kılı | orıs'ta yaşanan olaylara tanık oldunuz mu?          |
|---------------|---|
| 1) Evet       | 2) Hayır  |
| 18. Kıbrıs'ta | 1963-1974 dönemine tanık oldunuz mu?                |
| 1) Evet       | 2) Hayır  |
| 19. Kıbrıs'ta | 1974 harekat dönemine tanık oldunuz mu?<br>2) Hayır |

## Bölüm 3: Travmatik Stres Belirti Ölçeği

Aşağıda travma sonrası birçok insanın yaşadığı bazı sorunlar sıralanmıştır. Lütfen son bir ay içinde bu sorunların sizde olup olmadığını, varsa size ne derecede rahatsız ettiğini belirtiniz. Formu doldururken size en fazla rahatsız eden olayı düşünün (Uygun kolonun altına X koyunuz).

|  | Hiç      | Biraz | Oldukça | Çok      |
|--|----------|-------|---------|----------|
|  | rahatsız | Diruz | Oldunça | rahatsız |
|  | etmiyor  |       |         | ediyor   |
| 1.Olayla ilgili bazı anıları/görüntüleri aklımdan atamıyorum.            | 0        | 1     | 2       | 3        |
| 2.Bazen yaşadıklarım birdenbire gözlerimin önünden bir film şeridi       | 0        | 1     | 2       | 3        |
| gibi geçiyor ve sanki herşeyi yeniden yaşıyorum.                         |          | 1     | 2       | 3        |
| 3.Sık sık korkulu rüyalar görüyorum.                                     | 0        | 1     | 2       | 3        |
| 4. Yeniden aynı olay olacak korkusu ile bazı şeyleri kolaylıkla          | 0        | 1     | 2       | 3        |
| yapamıyorum.   |          |       |         |          |
| 5.Hayata ve sevdiğim şeylere karşı ilgim azaldı.                         | 0        | 1     | 2       | 3        |
| 6.İnsanlardan uzaklaştığımı, onlara karşı yabancılaştığımı               | 0        | 1     | 2       | 3        |
| hissediyorum.  |          |       |         |          |
| 7.Sanki duygularım ölmüş, taşlaşmışım gibi geliyor.                      | 0        | 1     | 2       | 3        |
| 8.Uyumakta güçlük çekiyorum.   | 0        | 1     | 2       | 3        |
| 9.Daha çabuk sinirleniyor ya da öfkeleniyorum.                           | 0        | 1     | 2       | 3        |
| 10.Unutkanlık veya dikkatimi yaptığım işe vermekte güçlük                | 0        | 1     | 2       | 3        |
| çekiyorum.   |          |       |         |          |
| 11.Her an (olay) olacak kaygısıyla tetikte duruyorum.                    | 0        | 1     | 2       | 3        |
| 12. Ani bir ses ya da hareket olduğunda irkiliyorum.                     | 0        | 1     | 2       | 3        |
| 13.Herhangi bir şey bana (olayla) ilgili yaşadıklarımı hatırlatınca      | 0        | 1     | 2       | 3        |
| rahatsızlık ve sıkıntı duyuyorum.  |          |       |         |          |
| 14.Yaşanan olay ile ilgili düşünceleri, duyguları ve anıları aklımdan    | 0        | 1     | 2       | 3        |
| atmaya çalışıyorum.  |          |       |         |          |
| 15.Olay ile ilgili bazı bölümleri hatırlamakta güçlük çekiyorum.         | 0        | 1     | 2       | 3        |
| 16.Olay bana her an ölebileceğimi farkettirdiği için uzun vadeli planlar | 0        | 1     | 2       | 3        |
| yapmak bana anlamsız geliyor.  |          |       |         |          |
| 17.Herhangi birşey bana olay ile ilgili yaşadıklarımı hatırlatınca       | 0        | 1     | 2       | 3        |
| çarpıntı, terleme, baş dönmesi, bedenimde gerginlik gibi fiziksel        |          |       |         |          |
| şikayetler oluyor.   |          |       |         |          |
| 18.Kendimi suçlu hissediyorum.   | 0        | 1     | 2       | 3        |

| 19.Kendimi üzüntülü ve kederli hissediyorum.                 | 0 | 1 | 2 | 3 |
|--|---|---|---|---|
| 20.Hayattan eskisi gibi zevk alamıyorum.                     | 0 | 1 | 2 | 3 |
| 21.Gelecekten umutsuzum.                                     | 0 | 1 | 2 | 3 |
| 22.Zaman zaman aklımdan kendimi öldürme düşünceleri geçiyor. | 0 | 1 | 2 | 3 |
| 23.Gündelik işlerimi yapacak gücüm azaldı.                   | 0 | 1 | 2 | 3 |

### **ÖZGEÇMİŞ**

Asra Babayiğit, 1993 yılında Girne'de doğdu. 2011 yılında Türk Maarif Kolejinden mezun oldu. Psikoloji eğitimine Yakın Doğu Üniversitesi'nde başladı. 2012 yılında stajını 18 Yaş üstü Rehabilitasyon Merkezi ve Sosyal Hizmetler Dairesinde tamamladı. 2013 yılında ise Bakırköy Ruh ve Sinir Hastalıkları hastanesinde stajını tamamladı. 2015 yılında psikoloji lisans eğitimini Fen-Edebiyat fakültesi birincisi olarak tamamladı. 2015 yılında Yakın Doğu Üniversitesi Klinik Psikoloji yüksek lisans programına başladı. 2015 yılında Pozitif Psikoterapi temel eğitimi ve NAADAC madde bağımlılığı danışmanlığı eğitimini tamamladı. 2015 yılından itibaren Yakın Doğu Üniversitesi Psikoloji Bölümünde araştırma görevlisi olarak çalışmaktadır. 2016 yılından itibaren Detay, Haberatör ve Girneli gazetesinde ruh sağlığı üzerine yazılar yazmaktadır.

| ORIGIN   | IALITY REPORT   | entrant attaches, in the second of the |
|----------|---|--|
| % SIMILA | %6 %6 %  ARITYINDEX INTERNET SOURCES PUBLICATIONS STUDENT   | PAPERS                                 |
| PRIMAR   | RY SOURCES  |  |
| 1        | www.policeptsd.com Internet Source  | %3                                     |
| 2        | Kunsook Bernstein, So-Young Park, Kathleen M. Nokes. "Resilience and Depressive Symptoms among Korean Americans with History of Traumatic Life Experience", Community Mental Health Journal, 2017 | <%1                                    |
| 3        | Future Directions in Post-Traumatic Stress Disorder, 2015.  Publication   | <%1                                    |
| 4        | www.mdpi.com Internet Source  | <%1                                    |
| 5        | doc.rct.dk<br>Internet Source   | <%1                                    |
| 6        | www.ptsd.va.gov<br>Internet Source  | <%1                                    |
| 7        | www.nice.org.uk Internet Source   | <%1                                    |
| 8        | Overstreet, Cassie, Erin C. Berenz, Christina<br>Sheerin, Ananda B. Amstadter, Glorisa  | <%1                                    |