

AMERICAN UNIVERSITY OF BEIRUT

ATTITUDES TOWARDS TRAUMA VICTIMS WITH OR
WITHOUT PTSD SYMPTOMOLOGY

by

REEM IMAD HMAIDAN

A thesis
submitted in partial fulfillment of the requirements
for the degree of Master of Arts
to the Department of Psychology
of the Faculty of Arts and Sciences
at the American University of Beirut

Beirut, Lebanon
May 2015

AMERICAN UNIVERSITY OF BEIRUT

ATTITUDES TOWARDS TRAUMA VICTIMS WITH OR
WITHOUT PTSD SYMPTOMOLOGY

by

REEM IMAD HMAIDAN

Approved by:

Dr. Nadiya Slobodenyuk, Assistant Professor
Department of Psychology


Advisor

Dr. Tima Al-Jamil, Assistant Professor
Department of Psychology


Member of Committee

Dr. Alaa Hijazi, Assistant Professor
Department of Psychology


Member of Committee

Date of thesis defense: May 29, 2015

AMERICAN UNIVERSITY OF BEIRUT

THESIS, DISSERTATION, PROJECT RELEASE FORM

Student Name: Hmaidan Reem Imad
Last First Middle

Master's Thesis Master's Project Doctoral Dissertation

I authorize the American University of Beirut to: (a) reproduce hard or electronic copies of my thesis, dissertation, or project; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

I authorize the American University of Beirut, **three years after the date of submitting my thesis, dissertation, or project**, to: (a) reproduce hard or electronic copies of it; (b) include such copies in the archives and digital repositories of the University; and (c) make freely available such copies to third parties for research or educational purposes.

 June 9th 2015
Signature Date

ACKNOWLEDGMENTS

I would like to thank my thesis advisor, Dr. Nadiya Slobodenyuk for her constant guidance and support. Dr. Slobodenyuk provided me with advice and feedback that helped me structure my ideas and thesis, and she also encouraged me and drove me to constantly enhance my work. I would also like to thank my committee members, Dr. Tima Al-Jamil and Dr. Alaa Hijazi for their input, guidance and support.

Also, thank you to my friends and fellow Clinical Psychology graduate students whose friendship made my graduate years memorable and enjoyable. I am grateful for the emotional support and encouragement you provided me throughout this thesis process. Thank you, Aya Salem, Carol Abi Ghanem, Ghina Ghanem, Kevork Wannissian, Shereen Eid, and Stephanie Srour. A special thank you to Samah Salem for listening to my complaints and worries, and to Tina Sahakian for answering my endless thesis questions.

I would also like to express my deepest gratitude to my family for their continuous support and love. A very special thank you to my Mom, who is always there for me when my doubts and fears become overwhelming and whose constant encouragement and guidance help me accomplish my dreams.

AN ABSTRACT OF THE THESIS OF

Reem Imad Hmaidan for Master of Arts
Major: Clinical Psychology

Title: Attitudes towards Trauma Victims with or without PTSD Symptomology

Posttraumatic stress disorder (PTSD) is a mental illness that can develop as a response to experiencing a traumatic event and can result in significant impairment and decline in daily functioning. Research has shown that people with PTSD face stigma that negatively affects their recovery. Research has also shown that people who do not develop PTSD after a traumatic event can experience negative attitudes due to the nature of the experienced trauma. The present study investigated attitudes towards people who have experienced different traumatic events (sexual assault and war-related traumatic events) and are either showing or not showing PTSD symptoms. The role of religiosity and gender differences in attitudes were also explored. A total of 254 students from the American University of Beirut completed the Attitudes toward Trauma Victims Scale after reading three vignettes depicting different traumatic events experienced by either female or male victims who had or did not have PTSD symptoms. The results showed that the type of trauma, presence or absence of PTSD, and the gender of the participant affected the attitudes towards the victims. An interaction effect between the type of trauma and the presence or absence of PTSD was also found. The clinical implications, limitation of the study and future considerations are discussed.

Keywords: Stigma, attitudes, trauma, Posttraumatic Stress Disorder, mental illness

CONTENTS

ACKNOWLEDGEMENTS.....	v
ABSTRACT.....	vi
LIST OF TABLES.....	x
Chapter	
I. TRAUMA AND PTSD.....	1
A. Prevalence of PTSD in the World.....	1
B. Prevalence of PTSD in Lebanon.....	2
II. ATTITUDES TOWARDS MENTAL ILLNESS: THE CASE OF PTSD.....	4
III. ATTITUDES TOWARDS VICTIMS OF TRAUMATIC EVENTS.....	9
A. Attitudes towards Rape Victims.....	9
B. Attitudes towards War Victims.....	11
1. Military War Victims.....	11
2. Civilian War Victims.....	13
C. Moderating Variable: Religiosity.....	14
IV. AIMS AND HYPOTHESES.....	16
V. METHODOLOGY.....	20
A. Participants.....	20

B. Procedure	20
C. Instruments	21
1. Vingnettes and Attitudes towards Trauma Victims Scale.	21
2. Religiosity Scale.	23
3. Demographics Scale.	24
D. Research Design	24
VI. RESULTS	24
A. Preliminary Analysis	24
1. Missing value analysis.	24
2. Univariate and multivariate outliers.	24
3. Normality.	25
B. Descriptive Statistics	25
C. Main Analyses	28
1. Statistical Assumptions for ANCOVA	28
2. ANCOVA.	30
a. Main Effects.....	30
b. Interaction Effects.....	31
D. Supplementary Analyses	32
1. Version One: Attitudes Towards Female Victims With No PTSD Symptoms	33
a. Statistical Assumption For ANOVA.....	33
b. ANOVA 1	34
2. Version Two: Attitudes Towards Female Victims With PTSD Symptoms	34
a. Statistical Assumption For ANOVA.....	34
b. ANOVA 2.....	35
3. Version Three: Attitudes Towards Male Victims With No PTSD Symptoms	36
a. Statistical Assumption For ANOVA.....	36
b. ANOVA 3.....	37
4. Version Four: Attitudes Towards Male Victims With PTSD Symptoms	37
a. Statistical Assumption For ANOVA.....	37

b. ANOVA 4.....	38
VII. DISCUSSION.....	39
A. Overview of the Results.....	39
B. Clinical and Social Implications.....	45
C. Limitations and Future Considerations.....	46
REFERENCES.....	48
Appendix	
I. Appendix A-H.....	59-92

TABLES

1. Version One: Descriptive Statistics.....	86
2. Version Two: Descriptive Statistics.....	86
3. Version Three: Descriptive Statistics.....	86
4. Version Four: Descriptive Statistics.....	87
5. Levene’s Test of Equality of Error Variance.....	87
6. Main Effect: The type of trauma and interaction effects of the independent variables	88
7. Pairwise Comparison for Type of Trauma (1=Rape, 2=Combat and 3=Civilian)...	88
8. Main Effect and Interaction Effects of Religiosity, Gender of Victim, Presence or Absence of PTSD and Gender of Participant.....	89
9. Version One: Main Effect of Type of Trauma.....	89
10. Version One: Pairwise Comparison for Type of Trauma (1=Rape, 2=Combat and 3=Civilian).....	90
11. Version Two: Main Effect of Type of Trauma.....	90
12. Version Two: Pairwise Comparison for Type of Trauma (1=Rape, 2=Combat and 3=Civilian).....	90
13. Version Three: Main Effect of Type of Trauma.....	91
14. Version Three: Pairwise Comparison for Type of Trauma (1=Rape, 2=Combat and 3=Civilian).....	91
15. Version Four: Main Effect of Type of Trauma.....	91
16. Version Four: Pairwise Comparison for Type of Trauma (1=Rape, 2=Combat and 3=Civilian).....	92

Attitudes towards Trauma Victims with or without PTSD Symptomology

CHAPTER I

TRAUMA AND PTSD

Posttraumatic stress disorder (PTSD) is a mental illness that can develop as a response to experiencing a traumatic event. PTSD results in significant impairment and decline in daily functioning; it also affects individual's cognition, mood, and physical arousal. The person persistently re-experiences the event, avoids any trauma-related situations, suffers from the negative alteration in cognition and mood, and has high arousal and reactivity as a consequence of the event (APA, 2013). Not all individuals who experience a traumatic event meet all DSM 5 criteria for PTSD; however, they might endorse some PTSD symptomology.

A. Prevalence of PTSD in the World

The rate of experiencing a traumatic event is quite high so is developing PTSD as a result of the trauma. Frans, Rimmo, Aberg, and Fredrikson (2005) measured the lifetime prevalence of traumatic experiences and PTSD in a sample of 1,824 Swedish individuals. 80.8% of the sample reported having experienced at least one traumatic event and the prevalence rate of PTSD was estimated to be 5.6%. Kilpatrick et al.'s (2013) investigation has shown similar results using a US population; in their study, 89.7% of the sample (N=2,766) reported having experienced at least one traumatic event, and the lifetime prevalence rate of PTSD was 8.3%. PTSD was also assessed among 5,692 participants in The National Comorbidity Survey Replication (NCS-R). The estimate lifetime prevalence of PTSD among adult Americans was 6.8%. The lifetime prevalence of PTSD among men

was 3.6% and 9.7% among women. Twelve-month prevalence was estimated at 3.5%; the prevalence was 1.8% among men and 5.2% among women (Kessler et al., 2005a; Kessler et al., 2005b; National Comorbidity Survey, 2005). Other studies have focused on the types of experienced trauma and have shown that traumatic events involving sexual assault, combat exposure, childhood abuse, and physical assault are among the ones that are most likely to lead to the development of PTSD (Frans, Rimmo, Aberg, & Fredrikson, 2005; Kessler et al., 1995; Norris, 1992).

Some investigations pertain to the prevalence of PTSD in populations that experienced one particular type of traumatic event. The most widely researched traumatic events are rape and war; however, the prevalence rates of PTSD are not consistent across studies and to some extent depend on the time of assessment with regard to the traumatic event. Rothbaum et al. (1992) assessed 95 female rape victims for PTSD. About two weeks after the assault, 94% met the criteria for PTSD and at 14 weeks this number decreased to 47%. This indicates that some individuals can become symptom-free but many will still suffer from the adverse effects of traumatic event exposure. Sui et al. (2014) also investigated the prevalence of PTSD in 223 female victims of sexual assault and found that 15.25% of the victims developed PTSD. Prevalence rates of PTSD in war victims, specifically war veterans, also vary. A review by Richardson, Frueh, and Acierno (2010) indicated that the prevalence of PTSD in returning US war veterans from the Vietnam War, Gulf War, and the Iraq War ranged approximately from 2% to 17%.

B. Prevalence of PTSD in Lebanon

There are only a few studies that have investigated the general prevalence rates of traumatic event exposure or PTSD in Lebanon. Karam et al. (2008) investigated the

prevalence rates of mental disorders in Lebanon and discovered that the prevalence rate for PTSD was 3.4% (N=1031), with women having higher rates of PTSD than men.

Additionally, 5.3% of the sample was expected eventually to meet criteria for PTSD before the age of 75. A national epidemiological survey conducted in Lebanon revealed that 2% of the Lebanese population met criteria for PTSD and 25% of them were considered to have a severe diagnosis (Karam et al., 2006). Other studies have measured prevalence rates of war-related PTSD in some parts of Lebanon, mainly in the South. Farhood, Dimassi, and Lehtinen (2006) assessed 256 participants from two villages in the South and discovered that 97.7% of them had experienced at least one traumatic event and the prevalence of PTSD was reported to be 29.3%. Another study by Farhood and Dimassi (2012) also investigated the prevalence of PTSD in the South of Lebanon. The results showed that 17.6%-33.3% of the 625 participants met the criteria for PTSD. Additionally, higher war exposure, lower social support, lower financial resources, and being female were significantly related to the development of PTSD. Farhood and Nouredine (2004) investigated the prevalence of PTSD in 33 Lebanese civilians exposed to a church bombing, and compared them to 30 neighbors that were not exposed to the event. They discovered that 39.4% of the victims met PTSD criteria while none of the comparison group had any PTSD symptomology.

The studies have only investigated war-related trauma since this type of trauma is common in Lebanon due to the past conflicts on the southern Lebanese border, the civil war, and the war in 2006. However, other traumatic events like sexual assault also occur in Lebanon but research on the prevalence of rape and the rates of PTSD due to rape is lacking.

CHAPTER II

ATTITUDES TOWARDS MENTAL ILLNESS: THE CASE OF PTSD

Individuals with mental disorders are not always seen as people who are suffering and in need of help; many of them face stigma and discrimination. People with mental illness are commonly considered violent and dangerous, thus many fear them and avoid having any interactions with them (Ewalds-Kvist, Högberg, & Lützén, 2013; Lauber & Rossler, 2006). Attitudes towards mental illness have been assessed using both explicit attitude scales and implicit attitude scales. Explicit attitudes are attitudes that are conscious and are easy to report. On the other hand, implicit attitudes are attitudes that are unconscious and cannot be retrieved through self-report as they are unknown to us. Teachman, Wilson, and Komarovskaya (2006) investigated both implicit and explicit attitudes towards mental illness in the general population and mentally ill patients. Results were consistent on both implicit and explicit measures and showed that when compared to physical illness the general population and mentally ill people explicitly viewed people with mental illness as being bad and helpless and implicitly believed that mentally ill people are blameworthy as well.

Most of the research has assessed attitudes towards mental illness as a general concept and only few studies have investigated people's attitudes towards specific types of disorders, and even fewer studies have explored these attitudes towards people with PTSD. Parcesepe and Cabassa (2013) conducted a literature review of the studies that have investigated attitudes towards specific mental disorders and found that the majority of

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

disorders that were included in these studies were depression, substance abuse, and schizophrenia. People with substance abuse and schizophrenia were most likely to be described as violent, dangerous, and incompetent. Also, the majority of the participants believed that mentally ill people should be blamed for their behavior and actions. Arbanas (2008) also researched attitudes towards depression and schizophrenia, but included PTSD as well. Negative attitudes were found towards all three mental disorders; however, attitudes towards schizophrenia were more negative than attitudes towards PTSD and depression and attitudes towards PTSD and depression were similar. Additionally, male students had more stigmatizing attitudes towards PTSD than did female students. Reavely and Jorm (2011) investigated young people's personal and perceived stigma towards depression, social phobia, PTSD, and schizophrenia. Perceived stigma, unlike personal stigma, is not one's own beliefs but what the person thinks other people believe. Each participant read one vignette about a specific disorder and answered questions related to the unpredictability, dangerousness and weakness of the mentally ill person as well as their own social avoidance behaviors towards the mentally ill. The researchers found that perceived stigma questions had higher agreeability rate, implying more negative attitudes, compared to the personal stigma question. This indicates that the participants had less negative stigma towards mental illness but they believed that other people had a more negative view of mental illness. The belief of weakness was found mostly in the social phobia vignette. Social avoidance was greatest in the schizophrenia vignettes and least prominent in PTSD. However, the majority of the participants believed that in all cases the mentally ill people are unpredictable and reported that they would be unwilling to work with any of the people mentioned in the vignettes.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

There has not been much research done on attitudes towards PTSD outside the context of other disorders; however, a deeper independent investigation of attitudes towards PTSD that takes into consideration differences in the types of experienced trauma may prove to be beneficial because of the unique criteria needed to meet a PTSD diagnosis. According to the DSM 5, to be diagnosed with PTSD one must have been exposed to a traumatic event or a stressor. This traumatic event must be identified and be causally linked to the PTSD symptoms (APA, 2013). Unlike other disorders that may or may not have an apparent external trigger, PTSD and acute stress disorder are the only two disorders that require the presence of this identifiable external source as a diagnostic criterion. No one specific event is needed to cause PTSD, any stressful event the person may experience can cause the development of PTSD, thus, widely diverse events may cause PTSD. These events range from being in a car accident to experiencing a war-related traumatic event. Since the traumatic event must be connected to PTSD, this could potentially cause a more complex relationship between PTSD and societal norms and attitudes compared to other mental disorders. An individual showing symptoms of depression or anxiety would be perceived by others based on the symptoms he or she is endorsing and on his or her individual characteristics since no external factor is necessarily needed to develop these mental disorders; however, when a person is showing signs of PTSD he or she is not only being perceived based on the symptoms she is showing but also on the external event that caused the development of the PTSD. All individuals diagnosed with PTSD have nearly the same symptoms; however, the traumatic events that lead to the development of PTSD can vary greatly and society may judge the individual on the type of trauma they have experienced as well as on the presence of PTSD symptoms. Therefore, investigation of

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

attitudes towards PTSD as part of the general investigation of attitudes towards mental disorders and using the same methods as in case of attitudes towards schizophrenia or depression does not give a clear picture of the stigma PTSD patients are facing.

Mendelsohn and Sewell (2004) is the only study that has investigated attitudes towards PTSD in detail. The researchers addressed social reactions towards male and female victims of different types of trauma; the traumatic events included in the study were criminal assault and natural disasters. After reading vignettes about the traumatic event and the PTSD symptoms, the participants answered the Attitudes toward Trauma Victims questionnaire. The researchers found that attitudes towards male victims were less favorable compared to attitudes towards female victims, and male participants judged all trauma victims less positively than female participants. Also, victims of criminal assault were rated more positively than natural disaster victims. The results from this study show that attitudes to trauma victims can vary and that some traumatic events may be related to more stigmatizing attitudes.

The stigma that people with mental illness face has severe consequences for their mental and physical health. A longitudinal study by Link et al. (1997) investigated the consequences of stigma in men suffering from depression and substance abuse before treatment, directly after treatment and one year after that. The men were asked questions that measured the amount of devaluation, discrimination and rejection they had faced; they were also assessed on secrecy and withdrawal which the researchers operationalized as forms of coping with stigma. Results showed that before treatment the majority of the participants reported that they had experienced devaluation, discrimination and rejection and endorsed both stigma coping mechanisms. Both assessments that took place after

treatment showed that the perception of stigma and the use of stigma coping measures did not decline. This indicates that stigma linked to mental illness is long-lasting as the participants were still experiencing stigma even a year after they received treatment. Link et al. (2001) also discovered that stigma, specifically devaluation, discrimination and withdrawal, acted as strong predictors of low self-esteem in mentally ill patients. Moreover, Yanos, Roe and Lysaker (2010) discovered that people who have a mental illness may develop an illness identity, which is a set of attitudes that the individual has towards the idea of having a mental illness. The attitudes related to an illness identity are incompetence and inadequacy and it has been demonstrated that individuals who have endorsed these attitudes are more likely to have low self-esteem and more severe symptomology. Additionally, the stigma that people with mental illness face can exacerbate this illness identity and cause the development of more severe negative attitudes. Also, Sirey et al. (2001) found that stigma acted as a barrier to recovery. The patients who faced stigma were less likely to use mental health services or adhere to treatment and intervention. Additionally, people's negative attitudes could reduce the patient's possibility of securing a stable job or obtaining property (Lai, Hong, & Chee, 2001).

As seen above, there have been few studies that investigated the attitudes towards people suffering from PTSD and no studies have been conducted to investigate these attitudes in Lebanon. Research on attitudes towards mental illness is crucial because of the severe impact they can have on the lives of people suffering from the disorder. Considering that the rate of PTSD is higher in victims of sexual assault and combat exposure, studying attitudes towards these victims might give insight into the stigma they are facing. The

question of particular relevance here might be whether this stigma is related to the type of experienced trauma or the PTSD symptomology regardless of the nature of the trauma.

CHAPTER III

ATTITUDES TOWARDS VICTIMS OF TRAUMATIC EVENTS

A. Attitudes towards Rape Victims

Research on attitudes towards female rape victims is abundant, and most studies have discovered that attitudes are related to gender, with men having more negative attitudes towards rape victims compared to women. Patitu (1998) investigated the attitudes of college students towards rape victims by administering the Attitudes Towards Rape Victims Scale (ARVS) which assessed victim blame, resistance, credibility, denigration, responsibility, trivialization, and deservingness. The results showed that men agreed with negative statements and reported more unfavorable attitudes towards rape victims compared to females, with a significant difference being found on 18 out of the 25 items on the scale. Nagel et al. (2005) also showed that males were less sympathetic towards rape victims compared to females. The researchers also discovered that African Americans were less sympathetic towards rape victims compared to White participants which may have been due to difference in SES and education. Ben-Davud and Schneider (2005) tested people's attitudes towards rape victims and found that men minimized the severity of the rape compared to females, but no differences were found in attribution of responsibility or blame towards the victim. However, Golge et al. (2003) using a sample of Turkish university students did find gender differences in the attribution of responsibility. Men saw

rape as less severe than women and attributed more responsibility to the victim and less responsibility to the assailant. While the majority of the studies investigate explicit attitudes, some address both implicit and explicit attitudes. Nunes, Chantal, and Ratcliffe (2013) tested both the explicit and implicit attitudes of men towards rape; their implicit attitudes were measured using the Rape Evaluation implicit association test and explicit attitudes were measured using the Rape Evaluation scale. No differences were found between the implicit and explicit measures and men had both negative implicit and explicit attitudes. There has been one study conducted in Lebanon by Rebeiz and Harb (2009) that measured perceptions of rape and the predictors of rape myth in a sample of Lebanese students. Rape myths are prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists. Those who endorse rape myths are likely to blame the victim and consider her the one responsible for the rape. The majority of the participants did not hold negative attitudes towards rape victims; however, male participants did endorse rape myths more than females.

Interestingly, these negative attitudes and stigma are not only found in students and the general population but also in mental health professionals. White and Kurpius (1999) assessed attitudes towards rape victims in undergraduate students, trainees in counseling, and master/doctoral level mental health practitioners. Male undergraduates and male professionals had more negative attitudes compared to female participants. Additionally, male trainees and professionals had more favorable attitudes compared to male undergraduates. Further analysis showed that compared to females, males believed that victims were more responsible for the rape and that they should blame themselves if they were raped.

The majority of research addresses attitudes towards female rape victims; there have been very few studies on attitudes towards male victims of female perpetrators. Male victims are seen as more likely to have initiated the assault and less likely to have suffered any distress from the assault (Davies & Rogers, 2006; Smith, Pine & Hawley, 1988). Moreover, Duncanson (2013) investigated rape myths surrounding male rape and discovered that the widely held beliefs are that men are physically stronger and cannot be overpowered by females, that men are sexually aggressive and are the perpetrators and not the victims and that men would not deny sexual offers from females. Struckman-Johnson and Struckman-Johnson (1992) also explored male rape myth and discovered that college students were more likely to believe in rape myths when the perpetrator of a male rape was a female.

B. Attitudes towards War Victims

1. Military War Victims. Another type of trauma that is addressed in this paper is war-related trauma. War victims are soldiers or veterans who have experienced traumatic combat-related events as well as civilians who have experienced war or terrorist attacks on their homeland, witnessed destruction and other war crimes. Research on this topic, as opposed to the research on rape, does not include attitudes towards the victims in general but focuses on attitudes towards veterans who are showing PTSD symptoms. Veterans and army personnel face a lot of stigma when they endorse PTSD symptomology; however, research conducted in this field has not assessed public attitudes towards veterans, instead the studies have been based on the veterans' self-perceived stigma. Britt (2000) measured perceived stigma of veterans returning from Bosnia. The researcher compared perceived stigma associated with admitting to psychological problem with stigma related to a medical

problem. He found that veterans believed that they would face more stigma when admitting to a psychological problem than a medical one; 61% agreed that having a psychological problem would harm their careers and 45% agreed that co-workers would spend less time with them if they admitted to a psychological problem compared to only 22% in case of a medical problem. Additionally, participants felt more discomfort when discussing their responses to the psychological questionnaire and the majority of them were less likely to follow through with a psychological referral fearing being labeled as mentally ill. Mittal et al. (2013) also examined the perceived stigma towards war veterans with PTSD. This qualitative study revealed that the veterans were aware of the stereotypes and labels associated with PTSD. The labels included: crazy, violent, dangerous, nonsocial, unstable, unreliable, etc. Some veterans reported that they felt like society blames them for having PTSD. Because of this, the veterans believed that the public are more sympathetic and favorable towards people who have PTSD as a result of rape or natural disaster since in those situations, they thought, society would not put the blame on the victim. This study also measured the veterans' self-stigma. When asked about self-stigma, a few endorsed the idea that it was actually their fault for having PTSD; they saw themselves as weak and unable to fight the mental illness. Furthermore, several veterans reported that they tried to hide their symptoms and avoided seeking help because they did not want to have any of the above labels attached to them. Bras et al. (2012) assessed the attitudes of psychiatrists towards PTSD veterans. The researchers found that 20% of the psychiatrists had difficulties connecting with the patients, delivering emphatic responses, and understanding their daily struggles and the problems they face. Interestingly, 155 out of the 190 believed that their patients overemphasized their problems.

2. Civilian War Victims. Veterans are not the only victims of war who experience trauma and develop PTSD; civilians are also largely affected by military confrontation. As a result of Lebanon's history of civil war, recent war in Syria, and overall political instability in the region, two types of civilian war victims must be acknowledged: civilians who witnessed war crimes in their homeland and civilian refugees who have been displaced due to the war in their home country. The whole Lebanese population at large has been exposed to war-related traumatic events over the years. These include civil war, assassinations, war in the south of Lebanon in 2006, recent conflicts and military confrontation in the north of Lebanon. Over the past three years Lebanon has also accepted approximately 1,183,327 Syrian refugees who were forced to leave their homes due to war (The UN Refugee Agency, 2015). Research conducted so far has shown that people who witness and experience traumatic war-related events tend to develop PTSD (Farhood & Dimassi, 2012; Farhood, Dimassi, & Lehtinen, 2006; Farhood & Nouredine, 2004); however, attitudes towards these war victims are not commonly measured. A bit more is known about the attitudes towards refugees who constitute a group of civilian victims who are most extremely affected by war. High levels of prejudice have been found towards refugees in UK (Curry, 2000), Australia, (Schweitzer et al., 20005), the US (Crowell, 2000), and notably Lebanon in the case of Palestinian refugees (Badaan 2012; Edminster, 1999; Haddad & Jamali, 2003).

An extensive search in major scientific databases (PsychArticles, PsychInfo, PsychNet, Academic Search Complete, ProQuest Central and Elsevier) revealed that there are no publications on the attitudes towards civilian and military war victims in Lebanon. Taking into account Lebanon's war filled history, research on these attitudes is crucial as a

large proportion of the victims is likely to endorse some PTSD symptoms and face stigma. The present study investigates attitudes towards civilian war victims who remained in their homeland after the conflict and military war victims. While acknowledging that army personnel face a wide range of traumatic events, including death of civilians, death of their comrades, destruction, uncertainty of own survival, we explore attitudes towards military war victims on the basis of one particular traumatic scenario that includes an experience of a wounded soldier who is caught in an ambush. The investigation of the attitudes on the basis of other types of trauma in military personnel and attitudes towards civilian war victims who have been displaced is beyond the scope of this research.

C. Moderating Variables: Religiosity

Research has shown that attitudes towards victims of traumatic events can be moderated by values (Rebeiz & Harb, 2009) and religious conviction (Mulliken, 2005; Sheldon & Parent, 2002). Religiosity has been most systematically researched in the context of attitudes towards victims of traumatic events and is of particular relevance to the present study. Mulliken (2005) showed that high religiosity was related to negative attitudes towards rape victims in a college sample. Another study by Sheldon and Parent (2002) revealed that clergy men with higher fundamentalist Christian belief had more unfavorable attitudes towards rape victims and were more likely to blame the victim for the rape. However, Wong (2005) found that there was no relation between levels of religiosity and attitudes towards rape victims and attributions of blame. Participants with high religiosity levels had neither more negative attitudes nor did they tend to blame the victim more compared to people with low religiosity levels. Carr (2006) also found that high religiosity, specifically Christian fundamentalism, was not correlated with negative

attitudes towards rape victims. Moreover, Rebeiz and Harb (2009) did not find a relation between religiosity and negative attitudes towards rape victims when using a Lebanese college student sample. Research on religiosity and attitudes is not only inconsistent in terms of findings but also limited to attitudes towards rape victims.

There are, however, reasons to believe that in Lebanon the level of religiosity might play a moderating role in attitudes towards war victims as well. Research into the effect of religiosity on attitudes towards war victims is important in Lebanon because of the strong connection between certain religions, religiosity levels and justification of armed opposition. Both Christian and Muslim religions include the concept of martyrdom. Martyrs are people who give their lives for a higher cause, specifically defending their country and religion from others who would do them harm. Martyrs are also believed to be rewarded greatly in the afterlife for their struggles and sacrifices they endured while defending their religion and country (Anees, 2006; Smith 2006). Dabbous, Nasser and Dabbous (2010) studied the culture of martyrdom in Lebanon in the 1960s-1980s by analyzing various posters found around Lebanon that were related to martyrdom. They discovered that while some posters depicted the honor and courage of death in defense of the country other posters included religious themes and verses related to martyrdom and honor. Thus, martyrs are not only seen as heroes who died for their country but also as people who have accomplished a noble and religious duty. Although there have not been recent studies of martyrdom in Lebanon, the concept of martyrdom has embedded itself into our culture over the years.

Research on attitudes towards trauma and PTSD, particularly in Lebanon, is scarce. In the case of rape victims, research addressed attitudes towards victims; however, there is

no research that has measured attitudes towards persons with PTSD due to rape trauma. In contrast, research on attitudes towards war victims has concentrated on veterans that are showing PTSD symptoms and there is no research that investigates stigmatizing attitudes towards veterans who have suffered a trauma but are not showing signs of PTSD. Additionally, research on attitudes towards civilian war victims and civilian war victims with PTSD is lacking, with only attitudes towards refugees being addressed systematically.

CHAPTER IV

AIMS AND HYPOTHESIS

There are different types of traumatic events that could lead to the development of symptoms of PTSD. The present study looked at attitudes towards victims of three types of traumatic events: sexual assault, war exposure in the case of military, and war exposure in the case of civilian population¹. These traumatic events were selected on the basis of their paramount importance in the Lebanese context. Due to the history of civil war and political violence in Lebanon, war-related trauma is possibly the most prevalent one in both the military and the civilian population and could constitute the main cause of PTSD. War-related trauma in Lebanon has been to some extent addressed in the literature. Sexual assault, on the other hand, is a poorly researched area with missing statistical estimations. The poor knowledge of the prevalence of sexual assault in Lebanon and the related

¹ Note that the present study investigated attitudes towards civilian victims who have witnessed war crimes, however, did not investigate attitudes towards civilian victims most severely affected by war and forced to relocate. While refugees do constitute a group of particular significance to Lebanon, we have opted not to measure attitudes towards this population in our study as it is likely that the attitudes towards war victims who were displaced that we intend to measure, would actually reflect attitudes towards Syrians or Palestinians as an ethnic group.

psychological difficulties of the victims could be due to the social blame that leads to underreporting the rape or to the fact that rape, specifically marital rape, is justified by the law and religion and not seen as a criminal act in Lebanon.

Research has shown that negative attitudes towards people who faced traumatic events could be related to the nature of the traumatic event (in the case of rape) or the symptoms of PTSD the victims may experience (in the case of war veterans). There is however no research on the attitudes towards rape victims who suffer from PTSD symptoms, military war victims who do not show symptoms of PTSD, or civilian war victims who experience or do not experience PTSD, nor have there been any studies that compare attitudes towards victims of traumatic events and victims of traumatic events who show PTSD symptoms. Considering the severe adverse effects of stigma associated with the traumatic event experience and mental illness, the investigation of attitudes towards people who have experienced an adverse event and those who have experienced and adverse event and show symptoms of PTSD could give insight into how these people are treated by the community. This, in turn, could help therapists provide a more effective treatment. This knowledge might also help us recognize the stigma that people endorse and propose measures to educate the community and, consequently, diminish the stigma related to PTSD.

The aim of the present study is to identify the attitudes towards victims of two types of trauma (sexual assault and war) who show PTSD symptoms and who do not show PTSD symptoms. With regard to these two types of trauma, attitudes towards the following six populations were investigated: female victims of sexual assault, male victims of sexual assault, female military war victims, male military war victims, female civilian war victims,

and male civilian war victims. The present study also intended to address gender differences in attitudes and the role of religiosity. Attitudes were assessed using a self-report questionnaire. The questionnaire, however, may be considered a combination of explicit and implicit measures rather than a fully explicit one. Despite the self-report format, the questionnaire assesses attitudes towards the victim indirectly by asking questions that are not explicitly targeting the participant's attitude.

Research has shown that mental illness and PTSD, in particular, are associated with negative attitudes in the general population and the mental health professionals (Arbanas, 2008; Bras et al., 2012; Ewalds-Kvist, Högberg, & Lützén, 2013; Lauber & Rossler, 2006; Mendelsohn & Sewell, 2004; Parcesepe & Cabassa, 2013; Reavely & Jorm, 2011; Teachman, Wilson, & Komarovskaya, 2006; White & Kurpius, 1999), therefore:

Hypothesis 1: Participants will have more negative attitudes towards victims with PTSD symptoms than towards victims without PTSD symptoms regardless of the type of trauma.

Due to the lack of relevant research no hypothesis about attitudes towards individual types of trauma and PTSD symptoms were postulated, however, the comparative issues between attitudes towards victims of different adverse events who show and do not show PTSD symptoms were explored.

Research has shown that the majority of people have negative attitudes towards female rape victims (Ben-Davud & Schneider, 2005; Golge et al., 2003; Nagel et al., 2005; Nunes, Chantal, & Ratcliffe, 2013; Patitu, 1998; Rebeiz & Harb, 2009; White & Kurpius, 1999) and male rape victims (Davies & Rogers, 2006; Smith, Pine & Hawley, 1988) and that males have more negative attitudes than females towards victims of rape (Golge et al.,

2003; Nagel et al., 2005; Nunes, Chantal, & Ratcliffe, 2013; Patitu, 1998; Rebeiz & Harb, 2009; White & Kurpius, 1999), therefore:

Hypothesis 2: Participants will have negative attitudes towards rape victims and male participants will have more negative attitudes towards female rape victims compared to female participants.

Due to the lack of relevant research no hypothesis about attitudes towards war victims and gender differences in these attitudes were proposed; however, gender differences in attitudes towards these victims were explored.

Research on religiosity is inconsistent with some studies showing that high levels of religiosity are related to negative attitudes towards rape victims (Mulliken, 2005; Sheldon & Parent, 2002) and other studies showing no relation between religiosity and negative attitudes (Carr, 2006; Rebeiz & Harb, 2009; Wong, 2005). Also, there has been no research about the role of religiosity in attitudes towards war victims. However, due to the sectarian nature of the Lebanese society and the link between religion and martyrdom (Anees, 2006; Dabbous, Nasser, & Dabbous, 2010; Smith, 2006), it is reasonable to assume the role of religiosity in attitudes, therefore:

Hypothesis 3: Religiosity will have a moderating effect on attitudes towards trauma victims.

CHAPTER V

METHODOLOGY

A. Participants

A total of 254 undergraduate students from the American University of Beirut took part in the study for Introduction to Psychology course credit. 250 responses were analyzed and 4 participants were removed from the study due their results being considered outliers. The sample size was determined on the basis of including a minimum of 30 participants per cell as recommended by Cohen (1988). Both genders were almost equally represented (52.4% females and 47.2% males), the age of the participants ranged between 18 and 25 years. The study was approved by the Institutional Review Board of the American University of Beirut.

B. Procedure

A student sample was used for convenience and the participants were recruited from the Psychology 101/201 pool. According to Interim Guidance for Access to the Psychology student pool, students enrolled in Psychology 101/201 who are interested in earning an extra percentage can serve as participants in a research study. The Psychology 101/201 coordinator sent the study announcement to the students. Interested students contacted the co-investigator by email and received a link to the online survey built on Lime Survey platform. Four versions of the online survey were designed. Each version contained 3 vignettes depicting either female victims or male victims with or without PTSD symptoms. In all versions of the survey the participants read about 3 different victims in the following order: a rape victim, a military war victim and a civilian war victim. The participants were

randomly assigned to one of the four versions of the survey. The four versions of the study were assigned in numerical order; where the first participant received version 1, the second received version 2, the third received version 3 and the fourth received version 4 and this was repeated for the next four participants and so on until the number of required participants was reached.

The survey link directed the participants to the welcome script (see Appendix A) and the consent form (see Appendix B). Participants gave their consent by clicking the accept button and were able to leave the study by clicking the exit survey button. Once the participants consented to participate, they were directed to the instruction page (see Appendix C) followed by the survey (see Appendix D) and a religiosity scale (see Appendix E). Participants also filled in the demographics questionnaire (see Appendix F). Upon completion of the survey, the participants were directed to the end script and the debriefing page (see Appendix G).

C. Instruments

1. Vignettes and Attitudes toward Trauma Victims Scale. Attitudes were measured using vignettes followed by a set of questions to assess the attitudes towards victims depicted in these vignettes. This type of measurement has been used to assess social attitudes towards rape victims (Sheldon-Keller et al., 1994) and attitudes towards physical assault and natural disaster victims (Mendelsohn & Sewell, 2004). In the studies conducted by Sheldon-Keller et al. (1994) and Mendelsohn and Sewell (2004) vignettes were stories about female rape victims, physical assault victims with PTSD symptoms, and natural disaster victims with PTSD symptoms.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

For the purpose of the present study, we have designed three vignettes which describe a person who has experienced sexual assault, war as a civilian and war as military personnel. Each of the three vignettes had a female and a male version (i.e., the victim was either female or male), and a version with PTSD symptoms and without PTSD symptoms (see Appendix D). The vignettes were presented as extracts from a therapist's session to make them appear to have occurred in a professional clinical setting and to ensure that the traumatic events and symptoms seem genuine to the readers. The PTSD symptoms were taken from Mendelsohn and Sewell's study who used some of the symptoms needed to meet a PTSD diagnosis. In the present study these symptoms were modified slightly to fit the type of trauma at focus.

In the study conducted by Mendelsohn and Sewell (2004) vignettes were followed by the Attitudes towards Trauma Victims scale. In the present study we used the same method and gave the participants the Attitudes towards Trauma Victims scale to fill after each vignette.

The Attitudes towards Trauma Victims scale measures a number of social dimensions: likability, attractiveness, intelligence, competence and general feeling about the victim. Items are rated on a 7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree) (see Appendix D). The attitudes towards each vignette in the study by Mendelsohn and Sewell (2004) were internally consistent to be analyzed as a scale ($\alpha > .8$ for all vignettes). In the present study the Cronbach's alpha levels for the vignettes were as following: Female rape victim with no PTSD $\alpha = .63$, female combat victim with no PTSD $\alpha = .74$, female civilian victim with no PTSD $\alpha = .61$, female rape victim with PTSD $\alpha = .64$, female combat victim with PTSD $\alpha = .58$, female civilian victim with PTSD $\alpha = .68$, male

rape victim with no PTSD $\alpha=.75$, male combat victim with no PTSD $\alpha=.73$, male civilian victim with no PTSD $\alpha=.79$, male rape victim with PTSD $\alpha=.65$, male combat victim with PTSD $\alpha=.53$, and male civilian victim with PTSD $\alpha=.62$.

In this study three items measuring friendliness, dangerousness, and blame attribution were added to the scale since research has shown that trauma victims are seen as unfriendly and dangerous (Ewalds-Kvist, Högberg, & Lützén, 2013; Lauber & Rossler, 2006; Parcesepe & Cabassa, 2013; Reavely & Jorm, 2011) and that people tend to blame the victims for experiencing the traumatic event (Golge et al., 2003; White & Kurpius, 1999) and for their mental illness (Mittal et al., 2013; Parcesepe & Cabassa, 2013). Similarly to the method used by Mendelsohn and Sewell, in this study the participants' rating on the eight social dimensions on each vignette was summed and a mean rating for each vignette was calculated.

2. Religiosity Scale. Religiosity was measured using the Religiosity Scale which includes eight items that were derived from the intrinsic religiosity literature by Fischer, Harb, Al-Sarrafe, & Nashabe (2008). The researchers selected these items due to their sensitivity and their relevance to a culture that includes members of both Christian and Muslims religions. Sample items include, "I consider myself a religious person," "My religion influences the way I choose to act in my routine life," and "Prayer to God is one of my usual practices." Items are rated on a 7-point Likert-type scale, ranging from 1 (strongly disagree) to 7 (strongly agree) (see Appendix E). The scale has been validated on a sample of Iraqi students (Fischer, Harb, Al-Sarrafe, & Nashabe, 2008) and a general population sample of Lebanese nationals (Rebiez & Harb 2010). Internal consistency in Rebiez and Harb's (2010) study was high, with $\alpha=.93$.

3. Demographics Questionnaire. The demographic questionnaire includes items about the participant's age, gender, nationality, number of years they lived in Lebanon, and whether they have experienced traumatic events related to the study (see Appendix F).

D. Research Design

An experimental survey research design was implemented to investigate the aims and the hypothesis. A mixed factorial ANCOVA and several repeated measure ANOVAs were conducted to test the hypothesis of the study.

CHAPTER VI

RESULTS

A. Preliminary Analyses

Preliminary analyses involving missing value analysis, exploration of univariate and multivariate outliers and normality testing were conducted prior to the main analyses.

1. Missing Value Analysis. A missing value analysis showed that all the variables had a percentage of missing values below or equal to 5%. Thus, these missing values do not pose problems for subsequent analyses and were not removed. This also indicates that the Little MCAR test and an independent sample t-test are not needed.

2. Univariate and Multivariate Outliers. Univariate outliers were inspected by converting all variables into Z-scores through the descriptive command. Univariate outliers were defined as values not between + or - 3.29 as this represents the standard deviation marker where scores are said to be too far from the mean to be acceptable. Four univariate outliers were found with Z-scores above ± 3.29 standard deviations and these cases were

removed (Cases 42 and 59 from version 1 of the survey, case 46 from version 3 of the survey and case 34 from version 4 of the survey). Multivariate outliers were investigated through Mahalanobis distance using SPSS syntax and no cases exceeded the prescribed chi square value meaning that no multivariate outliers were found in the data set.

3. Normality. Normality of the variables was investigated by examining Z-scores of skewness. The z-skewness was calculated by dividing Skewness by the Standard Error of Skewness. This method was chosen because with large sample size Kolmogorov-Smirnov test will be very sensitive to any deviations from normality. A Z skew value of ± 3.29 was used as the marker for significant skew and violation of normality. The variables of attitudes towards rape victims, combat victims and civilian victims had Z skew scores below the ± 3.29 significance level across all levels of the independent variables, signifying that these variables were distributed normally. The variable religiosity had a Z skew score above ± 3.29 and was negatively skewed; therefore, the variable was transformed by subtracting each score on each of these variables from the highest score (7) and then square rooting the result. Z skew was again conducted and the transformed scores had a Z skew value below the ± 3.29 significance indicating that the variable was normally distributed after the transformation.

B. Descriptive Statistics

A total of 250 participants completed the study, 131 of the participants were female and 119 were male. The average age of the participants was about 19 ($M=18.85$, $SD=1.92$), and the average amount of time lived in Lebanon was about 14 years ($M=13.68$, $SD=6.64$). The religiosity level of the sample was close to neutral ($M=4.83$, $SD=1.64$) being slightly above the midpoint of the scale (midpoint being 4). 90% of the sample reported having

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

experienced at least one traumatic event. The average number of traumatic events experienced by the participants in our sample was almost 3 events ($M=2.52$, $SD=1.61$) with the majority of the participants (75.2%) reporting to have felt the effects of an explosion (ground shaking, heard the explosion, or saw the smoke). This is not considered an extreme traumatic event so we can assume that our sample does not only represent victims of severe traumatic experiences, since a sample of participants that have experienced extreme trauma may significantly skew the results.

63 participants (29 males and 34 females) completed version one of the study. This version measured attitudes towards female rape victims with no PTSD symptoms. Attitudes towards the rape victim were close to neutral ($M=4.51$, $SD=.73$). This was true for both males ($M=4.59$ $SD=.49$) and females ($M=4.43$ $SD=.88$). Attitudes toward the combat victim ($M=4.88$, $SD=.71$) and the civilian victim ($M=4.85$, $SD=.50$) were marginally positive and slightly above the midpoint of the scale (midpoint being 4). Attitudes of male and female participants were similar for the combat trauma condition ($M=4.86$, $SD=.75$; $M=4.89$, $SD=.68$) and the civilian trauma condition ($M=4.86$, $SD=.48$; $M=4.84$, $SD=.51$) (Table H1).

62 participants (30 males and 32 females) completed version two of the study. This version measured attitudes towards female victims with PTSD symptoms. Attitudes towards the rape victim ($M=4.28$, $SD=.71$) and the combat victim ($M=4.47$, $SD=.64$) were close to neutral. In the rape trauma condition, attitudes of male ($M=4.15$ $SD=.61$) and female ($M=4.41$ $SD=.78$) participants were close to neutral. In the combat trauma condition, males ($M=4.29$, $SD=.58$) had close to neutral attitudes while females ($M=4.64$, $SD=.65$) had slightly more positive attitudes. Attitudes towards the civilian victim

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

($M=4.69$, $SD=.58$) were marginally positive and slightly above the midpoint of the scale (midpoint being 4) and females ($M=4.84$, $SD=.59$) had more positive attitudes than males ($M=4.53$, $SD=.53$) (Table H2).

64 participants (31 males and 33 females) completed version three of the study. This version measured attitudes towards male victims with no PTSD symptoms. Attitudes towards the rape victim were close to neutral ($M=4.48$, $SD=.92$), however, females ($M=4.60$, $SD=.86$) had more positive attitudes than males ($M=4.35$, $SD=.98$). Attitudes toward the combat victim ($M=4.91$, $SD=.74$) and the civilian victim ($M=4.89$, $SD=.66$) were marginally positive and slightly above the midpoint of the scale (midpoint being 4). Attitudes of male and female participants were similar for the combat trauma condition ($M=4.90$, $SD=.75$; $M=4.91$, $SD=.75$) and the civilian trauma condition ($M=4.86$, $SD=.66$; $M=4.93$, $SD=.67$) (Table H3).

61 participants (29 males and 32 females) completed version four of the study. This version measured attitudes towards male victims with PTSD symptoms. Attitudes towards the rape victim ($M=4.51$, $SD=.80$) and the combat victim ($M=4.49$, $SD=.64$) were close to neutral. In the rape trauma condition, females ($M=4.62$, $SD=.75$) had more positive attitudes than males ($M=4.38$, $SD=.84$). In the combat trauma condition, attitudes of male ($M=4.44$, $SD=.74$) and female ($M=4.54$, $SD=.55$) participants were close to neutral. Attitudes towards the civilian victim ($M=4.72$, $SD=.63$) were marginally positive and slightly above the midpoint of the scale (midpoint being 4). This was true for both males ($M=4.72$, $SD=.64$) and females ($M=4.73$, $SD=.62$) (Table H4).

A randomization check was conducted on the four versions of the study to examine whether there were any significant differences between the groups. Several independent t-

tests were run to investigate the presence of any significant differences between the groups on following variables: gender, age, years lived in Lebanon, and past traumatic experiences. A significant difference was found between version one and version three, where participants in version three ($M=19.11$, $SE=.2$) were significantly older than participants in version one ($M=18.62$, $SE=.10$), $t(125)=-2.18$, $p<.05$, with a small effect size $r=.19$. No other significant differences between the four versions were found.

C. Main Analyses

1. Statistical Assumptions for ANCOVA. For an ANCOVA analysis one of the assumptions is that the data on the dependent variable and the covariate be measured at an interval level. In this study this assumption was met. The covariate religiosity was measured on a Likert scale from 1 to 7 and the dependent variable being attitudes towards rape, combat and civilian victims were also measured using a Likert scale from 1 to 7.

A second assumption of ANCOVA is the assumption of independence. Scores collected on the dependent variable should be independent of each other. According to Field (2011) and Tabachnick and Fidell (2014) there is no test to check if this assumption was met and that researchers could assume that it was met. The study was conducted online and in the absence of the researcher. Since there is no statistical analysis to test this assumption and since the surveys were randomly assigned to participants at different times we are going to assume that all the data points collected are independent of one another.

A third assumption needed for a repeated measure ANCOVA is the assumption of sphericity. Mauchly's test indicated that this assumption had been violated, $\chi^2(2)=29.70$, $p<.05$. According to Fields (2011), when this assumption is violated the corrected degrees

of freedom for Greenhouse-Geisser or Huynh-Feldt should be reported. Since $\epsilon > .75$ the Huynh-Feldt corrected degrees of freedom were reported.

A fourth assumption is that of normality. Normality testing was done as part of the preliminary analysis (see Results section 1.c.) and the variables were found to be distributed normally.

A fifth assumption of ANCOVA is homogeneity of variance. Homogeneity of variance of attitudes towards victims was assessed using Levene's tests. The omnibus Levene's test through the ANCOVA analysis revealed that variances in attitudes towards rape victims $F(7,242)=1.3$, ns, combat victims $F(7,242)=1.48$, ns, and civilian victims $F(7,242)=.69$, ns were equal across the different conditions hence the assumption of homogeneity of variance was met (Table H5).

Assumption of homogeneity of regression slopes is a specific assumption of ANCOVA. The relationship between the dependent variable and the covariate should be the same at each level of the independent variable. This assumption was tested by running an ANCOVA using a customized model and assessing the interaction of the dependent variable and the covariate; the assumption is met when the interaction is not significant. The result of this test showed that the assumption was met with $F(1,245)=.57$, $p > .05$ ns, for the interaction of gender of victim and religiosity, the assumption was also met with $F(1,245)=2.93$, $p > .05$ ns for the interaction of gender of participant and religiosity; however, the assumption was not met with $F(1,245)=9.67$, $p < .05$ for the interaction of presence of PTSD and religiosity. Religiosity will be kept as a covariate and the failure to fully meet this assumption will be considered the limitations section of the discussion.

2. ANCOVA. A within subject factorial ANCOVA was run to analyze the main effects and interaction effects of the type of trauma, presence or absence of PTSD, gender of the victims, as well as the effects of the moderating variables: gender of the participant and the covariate religiosity.

a. Main Effect. The analysis indicated that there was a significant main effect of the type of trauma on attitudes, $F(1.86,449.20) = 7.99$, $p < .05$, $partial \eta^2 = .03$, this represents a low to medium effect size. (Table H6). To further investigate the main effect of trauma, the pairwise comparison of the type of trauma was analyzed (Table H7). The mean score on attitudes for the rape trauma condition ($M = 4.45$, $SD = .79$) was significantly less positive than the mean score on attitudes for the combat condition ($M = 4.69$, $SD = .71$) and civilian trauma conditions ($M = 4.79$, $SD = .50$). There was no significant difference between the combat trauma condition ($M = 4.69$, $SD = .71$) and the civilian trauma condition ($M = 4.79$, $SD = .50$) on mean scores of attitudes.

A main effect of presence or absence of PTSD was also found, $F(1,241) = 14.56$, $p < .05$, $partial \eta^2 = .06$, this represents a medium effect size (Table H8). This effect means that overall, when ignoring the type of trauma, gender of the victim, and gender of the participant, the presence or absence of PTSD symptoms did affect the participants rating on attitudes. Attitude towards victims with PTSD symptoms ($M = 4.52$, $SE = .04$) were less positive compared to victims without PTSD symptoms ($M = 4.76$, $SE = .04$). This finding supports our first hypothesis that states that *'Participants will show more negative attitudes towards victims with PTSD symptoms than towards victims without PTSD symptoms regardless of type of trauma.'*

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

No significant main effect for gender of the victim was found, $F(1,241)=.64$, $p>.5$ (Table H8).

The analysis indicated that there was a significant main effect of gender of the participant on attitudes, $F(1,241) = 4.15$, $p<.05$, *partial* $\eta^2 = .02$, this represents a low to medium effect size (Table H8). This effect means that overall, when ignoring the type of trauma, gender of the victim, and presence or absence of PTSD symptoms, the gender of the participants did affect their ratings on attitudes, with male participants having less positive attitudes towards the victims ($M=4.58$, $SE=.04$) compared to female participants ($M=4.70$, $SD=.04$).

There was no significant main effect for the covariate religiosity $F(1,241)=1.23$, $p>.5$ (Table H8). This finding does not support our third hypothesis which states ‘*Religiosity will have a moderating effect on attitudes towards trauma victims*’

b. Interaction Effects. A significant interaction effect was found between the type of trauma and presence or absence of PTSD symptoms $F(1.86, 449.20)=4.24$, $p<.5$, *partial* $\eta^2 = .02$, this represents a low to medium effect size (Table H6). An independent t-test was conducted to further analyze this effect. The results of this independent t-test analysis when equal variance was assumed, indicated that attitudes towards combat victims showing PTSD symptoms ($M = 4.48$, $SE=.06$) were significantly less positive than attitudes towards combat victims without PTSD symptoms ($M = 4.89$, $SE=.06$), $t(248) = 4.76$, $p < .05$, $r=.29$. Also, attitudes toward civilian victims showing PTSD ($M=4.70$, $SE=.05$) were significantly less positive than attitudes towards civilian victims without PTSD symptoms ($M=4.87$, $SE=0.5$), $t(248)=2.19$, $p<.05$, $r=.14$. No significant differences were found for rape victims.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

No significant interaction effect was found between the type of trauma and gender of the participant $F(1.86,449.20)=.17, p>.5$ (Table H6). These findings do not support our second hypothesis which states '*Participants will have negative attitudes towards rape victims and male participants will have more negative attitudes towards female rape victims compared to female participants*' because male participant's less positive attitudes were a main effect and were not linked to the type of trauma.

No interaction effects were found between the type of trauma and gender of the victim $F(1.86,449.20)=.08, p>.05$. No interaction effects were found between the type of trauma, gender of the victim, and presence or absence of PTSD, $F(1.86,449.20)=.84, p>.5$. No interaction effects were found between the type of trauma, gender of the victim, and gender of the participant $F(1.86,449.20)=1.96, p>.05$. No interaction effects were found between the type of trauma, gender of the participant, and presence or absence of PTSD symptoms, $F(1.86,449.20)=.07, p>.05$. No interaction effects were found between the type of trauma, gender of the participant, gender of the victim, and presence or absence of PTSD symptoms, $F(1.86,449.20)=.12, p>.05$ (Table H6).

D. Supplementary Analyses

The results for each version of the survey were analyzed to explore the differences between attitudes to different types of trauma. Individual analysis of each version of the study is beneficial because further effects may be discovered. The analyses were run to include both the type of trauma and gender of the participant, however only main effects for the type of trauma are reported. The gender of participant was only included to investigate whether it would have any suppression effects.

1. Version One: Attitudes towards Female Victims with No PTSD Symptoms

a. Statistical Assumptions for ANOVA. For an ANOVA analysis one of the assumptions is that the data on the dependent variable be measured at an interval level. In this study this assumption was met since the dependent variable being attitudes towards rape, combat and civilian victims were measured using a Likert scale from 1 to 7.

A second assumption of ANOVA is the assumption of independence. Scores collected on the dependent variable should be independent of each other. According to Field (2011) and Tabachnick and Fidell (2014) there is no test to check if this assumption was met and that researchers could assume that it was met. The study was conducted online and in the absence of the researcher; however, since there is no statistical analysis to test this assumption and since the surveys were randomly assigned to participants at different times we are going to assume that all the data points collected are independent of one another.

A third assumption needed for a repeated measure ANOVA is the assumption of sphericity. Mauchly's test indicated that this assumption had been met, $\chi^2(2)=4.88, p>.05$.

A fourth assumption is that of normality. Normality of attitudes towards rape, combat and civilian victims was tested using the Kolmogorov-Smirnov test. Results indicated that attitudes towards rape victims were normally distributed for females but not for males $D(29)=.16 p<.05$. Scores on attitudes towards combat victims were normally distributed for males only but not for females with $D(34)=.18 p<.05$. Also, scores on attitudes towards civilian victims were normally distributed only for females and not for males with $D(29)=.17 p<.05$. Since these variables were normally distributed in the main

analysis and since the ANOVA is considered a robust test and to keep the integrity of the data these variables were not transformed.

b. ANOVA 1. A within subject ANOVA was run to analyze the main effects of the type of trauma. The analysis indicated that there was a significant main effect of the type of trauma on attitudes, $F(2,122)=7.65$, $p < .05$, $partial \eta^2 = .11$, this represents a medium to large effect size (Table H9). To further investigate the main effect of trauma, the pairwise comparison of the type of trauma was analyzed (Table H10). The mean score on attitudes for the rape trauma condition ($M=4.51$, $SD=.73$) was significantly less positive than the mean score on attitudes for the combat condition ($M=4.88$, $SD=.71$) and civilian trauma conditions ($M=4.85$, $SD=.50$). There was no significant difference between the combat trauma condition ($M=4.88$, $SD=.71$) and the civilian trauma condition ($M=4.85$, $SD=.50$) on mean scores on attitudes.

2. Version Two: Attitudes towards Female Victims with PTSD Symptoms

a. Statistical Assumptions for ANOVA. For an ANOVA analysis one of the assumptions is that the data on the dependent variable be measured at an interval level. In this study this assumption was met since the dependent variable being attitudes towards rape, combat and civilian victims were measured using a Likert scale from 1 to 7.

A second assumption of ANOVA is the assumption of independence. Scores collected on the dependent variable should be independent of each other. According to Field (2011) and Tabachnick and Fidell (2014) there is no test to check if this assumption was met and that researchers could assume that it was met. The study was conducted online and in the absence of the researcher; however, since there is no statistical analysis to test this assumption and since the surveys were randomly assigned to participants at different

times we are going to assume that all the data points collected are independent of one another.

A third assumption needed for a repeated measure ANOVA is the assumption of sphericity. Mauchly's test indicated that this assumption had been violated, $\chi^2(2)=10.86$, $p<.05$. According to Fields (2011), when this assumption is violated the corrected degrees of freedom for Greenhouse-Geisser or Huynh-Feldt are reported. Since $\epsilon>.75$ the Huynh-Feldt corrected degrees of freedom were reported.

A fourth assumption is that of Normality. Normality of attitudes towards rape, combat and civilian victims was tested using the Kolmogorov-Smirnov test. Results indicated that attitudes towards rape and civilian victims were normally distributed across genders. However, scores on attitudes towards combat victims were normally distributed only for females and not for males $D(30)=.16$ $p<.05$. Since this variable was normally distributed in the main analysis and since the ANOVA is considered a robust test and to keep the integrity of the data this variable was not transformed.

b. ANOVA 2. A within subject ANOVA was run to analyze the main effects of the type of trauma. The analysis indicated that there was a significant main effect of the type of trauma on attitudes, $F(1.79,107.19)=8.15$, $p<.05$, *partial* $\eta^2= .30$, this represents a large effect size (Table H11) . To further investigate the main effect of trauma, the pairwise comparison of the type of trauma was analyzed (Table H12). The mean score on attitudes for the rape trauma condition ($M= 4.28$, $SD= .71$) was significantly less positive than the mean score on attitudes for the civilian trauma condition ($M=4.69$, $SD= .58$). There was no significant difference between the rape trauma condition ($M= 4.28$, $SD= .71$) and the combat trauma condition ($M=4.47$, $SD= .64$) and between the combat trauma condition

(M=4.47, SD= .64) and the civilian trauma condition (M=4.69, SD=.58) on mean scores on attitudes.

3. Version Three: Attitudes towards Male Victims with No PTSD Symptoms

a. Statistical Assumptions for ANOVA. For an ANOVA analysis one of the assumptions is that the data on the dependent variable be measured at an interval level. In this study this assumption was met since the dependent variable being attitudes towards rape, combat and civilian victims were measured using a Likert scale from 1 to 7.

A second assumption of ANOVA is the assumption of independence. Scores collected on the dependent variable should be independent of each other. According to Field (2011) and Tabachnick and Fidell (2014) there is no test to check if this assumption was met and that researchers could assume that it was met. The study was conducted online and in the absence of the researcher; however, since there is no statistical analysis to test this assumption and since the surveys were randomly assigned to participants at different times we are going to assume that all the data points collected are independent of one another.

A third assumption needed for a repeated measure ANOVA is the assumption of sphericity. Mauchly's test indicated that this assumption had been violated, $\chi^2(2)=25.49$, $p<.05$. According to Fields (2011), when this assumption is violated the corrected degrees of freedom for Greenhouse-Geisser or Huynh-Feldt are reported. Since $\epsilon<.75$ the Greenhouse-Geisser corrected degrees of freedom were reported.

A fourth assumption is that of normality. Normality of attitudes towards rape, combat and civilian victims was tested using the Kolmogorov-Smirnov test. Results indicated that attitudes towards combat victims and civilian victims were normally

distributed across gender. However, scores on attitudes towards rape victims were normally distributed only for males but not for females with $D(33)=.18$ $p<.05$. Since this variable was normally distributed in the main analysis and since the ANOVA is considered a robust test and to keep the integrity of the data this variable was not transformed.

b. ANOVA 3. A within subject ANOVA was run to analyze the main effects of the type of trauma. The analysis indicated that there was a significant main effect of the type of trauma on attitudes, $F(1.49,92.43)=7.42$, $p<.05$, *partial* $\eta^2=.13$, this represents a medium to large effect size (Table H13). To further investigate the main effect of trauma, the pairwise comparison of the type of trauma was analyzed (Table H14). The mean score on attitudes for the rape trauma condition ($M=4.48$, $SD=.92$) was significantly less positive than the mean score on attitudes for the combat condition ($M=4.91$, $SD=.74$) and civilian trauma conditions ($M=4.89$, $SD=.66$). There was no significant difference between the combat trauma condition ($M=4.91$, $SD=.74$) and the civilian trauma condition ($M=4.89$, $SD=.66$) on mean scores on attitudes.

4. Version Four: Attitudes towards Male victims with PTSD Symptoms

a. Statistical Assumptions for ANOVA. For an ANOVA analysis one of the assumptions is that the data on the dependent variable be measured at an interval level. In this study this assumption was met since the dependent variable being attitudes towards rape, combat and civilian victims were measured using a Likert scale from 1 to 7.

A second assumption of ANOVA is the assumption of independence. Scores collected on the dependent variable should be independent of each other. According to Field (2011) and Tabachnick and Fidell (2014) there is no test to check if this assumption was met and that researchers could assume that it was met. The study was conducted online

and in the absence of the researcher; however, since there is no statistical analysis to test this assumption and since the surveys were randomly assigned to participants at different times we are going to assume that all the data points collected are independent of one another.

A third assumption needed for a repeated measure ANOVA is the assumption of sphericity. Mauchly's test indicated that this assumption had been met, $\chi^2(2)=3.71$, $p>.05$.

A fourth assumption is that of normality. Normality of attitudes towards rape, combat and civilian victims was tested using the Kolmogorov-Smirnov test. Results indicated that attitudes towards civilian victims were normally distributed across gender. However, scores on attitudes towards rape victims were only normally distributed for males but not for females with $D(32)=.16$ $p<.05$. Also, scores on attitudes towards combat victims were only normally distributed for males and not for females with $D(32)=.16$ $p<.05$. Since these variables were normally distributed in the main analysis and since the ANOVA is considered a robust test and to keep the integrity of the data these variables were not transformed.

b. ANOVA 4. A within subject ANOVA was run to analyze the main effects of the type of trauma. The analysis indicated that there was a significant main effect of the type of trauma on attitudes, $F(2,118)=3.00$, $p<.05$, *partial* $\eta^2 = .11$ this represents a medium to large effect size (Table H15). To further investigate the main effect of trauma, the pairwise comparison of the type of trauma was analyzed (Table H16). The mean score on attitudes for the combat trauma condition ($M= 4.49$, $SD= .64$) was significantly less positive than the mean score on attitudes for the civilian condition ($M=4.72$, $SD= .63$). There was no significant difference between the rape trauma condition ($M=4.51$, $SD= .80$) and the

civilian trauma condition ($M=4.72$, $SD=.63$) and between the rape trauma condition ($M=4.51$, $SD=.80$) and the combat trauma condition ($M=4.49$, $SD=.64$) on mean scores on attitudes.

CHAPTER VII

DISCUSSION

A. Overview of the results

Previous research has focused on investigating attitudes towards PTSD in general (e.g., Arbanas, 2008; Mendelsohn & Sewell, 2004; Reavely & Jorm, 2011), and assessing attitudes towards victims of rape (Golge et al., 2003; Nagel et al., 2005; Nunes, Chantal, & Ratcliffe, 2013; Rebeiz & Harb, 2009) and towards victims of war who are showing PTSD symptoms (Bras et al., 2012; Britt, 2000; Mittal et al., 2013). The present study contributed to the literature by investigating attitudes towards victims of different types of trauma with and without PTSD symptoms in a comparative manner. Apart from Mendelsohn and Sewell's (2004) study that explored attitudes towards victims of different types of trauma who are showing PTSD symptoms, there are no other investigations of this kind. The present study being the second one to draw the comparison between attitudes towards trauma victims of different types is also the first one that adds the analysis of such attitudes with regard to presence or absence of PTSD symptoms. The study is an important first step towards understanding of the social context the recovery from trauma takes place in and gives insight into the social change that can aid such recovery.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

The specific aim of the present study was to investigate the effect of the type of trauma (rape, war trauma in civilians, war trauma in military), gender of the victim, and PTSD symptoms on attitudes towards trauma victims. Additionally, we explored the effect of religiosity of the respondents on their attitudes and gender differences in attitudes.

The results of the study showed that the participants did not have strong negative or positive attitudes towards the victims of all of the investigated traumatic events. This may be explained by the participants' past traumatic experiences which may have caused them to become more sensitive to traumatic and harsh events experienced by others. In the sample of participants used in this study, 90% have reported to have had experienced at least one traumatic event. This is similar to the prevalence rates of traumatic experiences found in Lebanon by Farhood, Dimassi and Lethinen (2006) and in the US by Kilpatrick et al. (2013). Participants may have sympathized with the victims depicted in the vignettes and, therefore, did not rate the victims negatively because they themselves were able to relate to having experienced a traumatic event. Personal experiences might have also resulted in the sample not reporting positive attitudes towards the victims. Due to high prevalence rates of traumatic experiences in the current sample and the moderate nature of the war-based traumatic scenarios, the participants may not have been affected by the described traumatic events and might have perceived them as common ones.

Attitudes towards all victims were close to neutral; however, stigmatizing attitudes towards mentally ill people were still evident in this study. Overall, results indicated that the attitudes towards victims who were showing PTSD symptoms were less positive compared to the attitudes towards victims not showing PTSD symptoms. This finding is in line with previous research that has shown that people with mental disorders are seen less

favorably compared to people who do not have a mental illness (Bras et al., 2012; Lauber & Rossler, 2006; Mendelsohn & Sewell, 2004; Parcesepe & Cabassa, 2013; White & Kurpius, 1999).

The type of trauma experienced by the victims also affected the participants' attitudes. Attitudes towards rape victims were significantly less positive compared to victims of other types of trauma and this might have been due to the nature of this traumatic event. Rape is a sexual assault that affects only the victim of the assault and, therefore, people may place the blame on either the victim or the assailant. Patitu (1998), Golge et al. (2013) and Nunes, Chantal, and Ratcliffe (2013) showed that some people endorse rape myths, have negative attitudes towards the rape victim, and are more likely to blame the victim than the assailant. Thus, the participants in the present study might have rated the victims of rape less positively because of such victim-attributed blame. More positive attitudes towards combat and civilian victims found in the present study might be explained from this perspective as well. War does not have only one victim; it is an event that involves the whole nation at large which makes the attribution of the personal blame to the victim, be it a military or a civilian one, less likely. It is also worth noting that the vignettes included in the present study depicted either a soldier who is defending his/her country from the enemy or a civilian whose house was targeted by the enemy forces. In case of the combat victims, participants may not have felt negatively towards the victims or blamed them for the traumatic event because they were not actively attacking the enemy but were performing their duty of defending their country. In the case of the civilian victims, participants may not have felt negatively towards the victims or blamed them since they were depicted as innocent bystanders of the war. Moreover, the majority of the sample

reported to have felt the effects of an explosion (ground shaking, heard the explosion, or saw the smoke) and thus, they were more likely to relate to the civilian victims than rape victims.

Another finding was an interaction effect between the presence or absence of PTSD and the type of trauma. Attitudes towards rape victims showing PTSD symptoms and not showing PTSD symptoms were similar; however, attitudes towards combat and civilian victims showing PTSD symptoms were less positive compared to the same victims not showing PTSD symptoms. Regarding the combat victims, this may be explained by the attitudes and bias that people have towards soldiers. Masculinity, courage and strength are characteristics commonly attributed to soldiers, so people may expect soldiers to be able to manage the trauma they experience without showing any negative symptoms. These beliefs about soldiers are also in agreement with the self-stigma reported by veterans in Mittal et al.'s (2013) study where veterans with PTSD considered themselves weak and unable to fight the mental illness. The discrepancy found between civilian victims showing and not showing PTSD symptoms could be attributed to the characteristics of the sample. Since the majority of the sample had experienced at least one traumatic event, specifically the effects of bombing, the participants may have compared the civilian victim to themselves. They may have believed that if they were able to overcome their own experience without showing any negative symptoms so should other victims.

Not only did the presence or absence of PTSD and the type of trauma affect attitudes, the gender of the participants was also found to have a significant effect on attitudes towards victims. The results indicated that female participants were likely to rate victims more positively than males. This finding is in agreement with previous research

which has shown that female participants have more favorable attitudes towards trauma victims (Arbanas, 2008; Mendelsohn & Sewell, 2004). However, the gender of the victim did not have an effect on attitudes, as there was no significant difference in attitudes towards male or female victims. These findings are inconsistent with the finding of Mendelsohn and Sewell's (2004) study. The researchers reported that attitudes towards male victims were less favorable compared to attitudes towards female victims. However, in the present study it appears that the gender of the victims did not significantly contribute to the participants' perception of the victims. In Mendelsohn and Sewell's study, each participant reported their attitudes towards both female and male victims and this may have caused the participants to compare the female victim to the male victim thus biasing the response. In the present study, each participant was exposed to three scenarios with three different victims who were all of the same gender; therefore, the participants were not able to compare vignettes and decide which scenarios are gender-appropriate. Such design might have made the gender of the victim non-salient to the participant, and, therefore, it did not play an important role in the attitude of the participant when compared to the type of trauma the victim experienced, or the presence or absence of PTSD symptoms.

However, results of the supplementary analyses indicated that gender of the victim may have become a salient feature when the vignettes depicted non-traditional or culturally non-common victims like the female combat victim and the male rape victim. In case of female and male victims showing no PTSD symptoms, attitudes towards rape victims were significantly less positive compared to attitudes towards combat and civilian victims. However, for female victims with PTSD symptoms, attitudes towards the rape victim were significantly less positive compared to civilian victims only, and there was no difference

between rape and combat victims. For male victims with PTSD symptoms, significant differences in attitudes were found only between combat and civilian victims, with no difference between rape victims and combat or civilian victims. The presence of PTSD symptoms in certain situations may have led the participants to envision the victim differently. In these cases, participants appear to have had stronger reactions towards female civilian and female rape victims and male combat and male civilian victims. Given these findings, it could be that the idea of a female combat victim and a male rape victim might not have been very accessible to the participants. The Lebanese forces began recruiting women in 1990s on a per-need basis, but they later on stopped female intake until 2008. The Lebanese army does not issue official statistics about their army personnel; however, the Lebanese American University's Institute for Women Studies in the Arab World estimated that only 2.5% of the Lebanese armed forces are female and the majority of positions held are administrative and unrelated to active combat (Sikimic, 2010). Also, participants might have not found the male rape scenario realistic due to male rape myths (Duncanson, 2013; Struckman-Johnson & Struckman-Johnson, 1992) and the lower number of reported male rapes. There are no statistics about male rapes in Lebanon; however, it has been found that about 18.3% of American women are likely to be sexually assaulted per year compared to only 1.4% of men (Black et al., 2011) and that women are five times more likely to be raped than men (Brennan & Taylor-Butts, 2008). Since these two types of victims (female combat victim and male rape victim) objectively represent a minority of trauma victims the participants may have thought of the scenarios as unlikely and were unable to relate to the victims. Additionally, the presence of the PTSD symptoms may have caused the participants to have ambivalent feelings towards the victims.

Therefore, the participants' attitudes towards these victims were neither positive nor negative.

The moderating variable, religiosity, was not found to have a significant effect on attitudes towards victims even though it was believed that religiosity would have an effect on attitudes towards war victims due to the concept of martyrdom. However, these findings are consistent with the findings of Carr (2006), Rebeiz & Harb (2009), and Wong (2005), where religiosity was found not have an effect on attitudes towards rape victims. The results of the present study may have been influenced by the peculiarities of the sample as well. The sample in the present study was a convenience student sample that showed neither high nor low levels of religiosity, with the mean being close to neutral. Thus, attitudes with regard to different levels of religiosity could not be compared. The finding on the religiosity levels in the present sample is consistent with literature that shows that college students tend to have moderate levels of religiosity (Leftkowitz, 2005; Stolzenberg, Blair-Loy & Waite, 1995). Another factor that may have influenced our results is the failure to fully meet one of the assumptions for ANCOVA.

B. Clinical and Social Implications

The findings of the present study have important clinical implications because they may inform therapists on the kind of stigma individuals with PTSD experience. Stigma has many adverse effects on the patients, and research has shown that mentally ill people who face stigma usually have low self-esteem (Link et al., 2001), are less likely to adhere to psychological treatments and referrals (Sirey et al., 2001), are more likely to face difficulties at work or in acquiring property (Lai, Hong & Chee, 2001), and may develop a mental illness identity (Yanos, Roe, & Lysaker, 2010). Considering that stigma has such

strong adverse effects and interferes with recovery, the knowledge on the kind of stigma persons with various traumatic experiences face may become an integral part of the therapeutic process and help therapists develop interventions that target this stigma.

The findings have significant implications on society as well. Once the presence and the type of stigma is identified in society, therapist and social workers will be able to develop anti-stigma campaigns to fight and reduce this stigma. Anti-stigma campaigns seem to be effective at decreasing stigma (McDavid, 2008) and campaigns from different countries could be adapted and modified to better suit the Lebanese culture and they would address the specific stigma that is found in the society.

C. Limitations and Future Considerations

There are several limitation associated with this study. First, the study included only AUB students who are highly educated young adults. This sample is not representative of the Lebanese population and restricts the generalizability of the results. The second limitation might be related to the vignettes used. The vignettes were created specifically for this study and have not been tested before; moreover, the war scenarios depict only moderately traumatic events and this level of trauma may not have had a strong impact on the participants. Similarly, PTSD symptoms described in the vignettes did not depict severe cases but rather moderate ones. The third limitation is related to The Attitudes towards Trauma Victims scale. As a self-report measure it is not immune to social desirability bias; the answers of the participants might have been impacted by the desire to present themselves in a positive light. The fourth limitation pertains to the data collection method. The sequence of the vignettes was not counterbalanced as this was not possible when using the online survey hosted on LimeSurvey. This may have caused an order effect where the

participants' responses on the attitudes towards the victim of one vignette may have been affected by the content of the previous vignette. The fifth limitation concerns the moderating variable, religiosity. The findings for religiosity may not have been accurate because of the failure to fully meet the assumption of homogeneity of regression slopes.

Future research could address the limitations of the present study and replicate it using a more representative sample that includes participants from all regions of Lebanon and from various socioeconomic, educational and religious backgrounds. One of the questions that follow this study is if there are any variables that could explain the relationship found between the type of trauma and attitudes towards the victims. One such variable could be locus control; people who possess an internal locus of control have been found to have more negative attitudes towards rape victims (Paulsen, 1979; Thornton, Robbins, & Johnson, 1981). Thus, locus of control may have an interaction effect with the type of trauma, meaning that people might have different attitudes towards different victims due to their attributional orientation. Future studies could also investigate whether people with PTSD experience self-stigma and if this self-stigma is similar to or different from that of the society. This could greatly help with more encompassing and targeted intervention and awareness campaigns.

REFERENCES

- Anees, M. A. (2006). Salvation and Suicide: What Does Islamic Theology Say? *Dialog: A Journal of Theology*, 45 (3), 275–279. doi: 10.1111/j.1540-6385.2006.00277.x
- American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: American Psychiatric Association.
- Arbanas, G. (2008). Adolescents' Attitudes Toward Schizophrenia, Depression, and PTSD. *Journal of Psychosocial nursing and Mental Health Services*, 46(3), 45-51.
doi:10.3928/02793695-20080301-01
- Baddan, V. F. (2012). *Threat perceptions perspective and attitudes towards Palestinian refugees in a Lebanese community sample* (Master Thesis). American University of Beirut, Lebanon.
- Ben-David, S., & Scheider, O. (2005). Rape perceptions, gender role attitudes and victim-perpetrator acquaintance. *Sex Roles*, 53(5/6), 385-399. doi:10.1007/s11199-005-6761-4
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., Chen J, & Stevens, M. R. (2011) The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Bras, M., Brajkovic, L., Milunovic, V., Bicanic, I., Haller, F., Dordevic, V., & Milicic, D. (2012). Psychiatrists' empathy, beliefs, and attitudes towards veterans suffering from combat-related posttraumatic stress disorder. *Psychiatria Danubina*, 24(3), 287-291. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23013634>

- Brennan, S. & Taylor-Butts, A. (2008). Sexual assault in Canada. *Canadian Center for Justice Statistics Profile Series*. Retrieved from <http://www.statcan.gc.ca/pub/85f0033m/85f0033m2008019-eng.htm>
- Britt, T. W. (2000). The stigma of psychological problems in a work environment: Evidence from the screening of service members returning from Bosnia. *Journal of Applied Social Psychology, 30*(8), 1599-1618. doi: 10.1111/j.1559-1816.2000.tb02457.x
- Carr, C. A. (2006). *Christian fundamentalism, authoritarianism, and attitudes toward rape victims* (Order No. 1433054). Available from ProQuest Dissertations & Theses Global. (305327719). Retrieved from <http://search.proquest.com/docview/305327719?accountid=8555>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Crowell, T. A. (2000). Attitudes towards refugees surviving human rights abuses before and after exposure to refugee related information. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 61*(2B), 1132 – 1247.
- Curry, P. (2000) “. . .she never let them in”: Popular reactions to refugees arriving in Dublin. In M. MacLachlan, & M. O’Connell (Eds.), *Cultivating pluralism: Psychological, social and cultural perspectives on a changing Ireland*. Dublin, Ireland: Oak Tree Press.

- Dabbous, Y., Nasser, K., & Dabbous, F. (2010). Across the bridge of death: The culture of martyrdom in Lebanon 1960s-1980s. *International Journal of Cultural Studies*, 13(6), 593-615. doi: 10.1177/1367877910376578
- Davies, M., & Rogers, P. (2006). Perceptions of male victims in depicted sexual assaults: A review of the literature. *Aggression and Violent Behavior*, 11(4), 367-377.
doi:10.1016/j.avb.2006.01.002
- Duncanson, K. (2013). Community beliefs and misconceptions about male sexual assault. *Australian Institute of Family Studies*. Retrieved from <http://www.aifs.gov.au/acssa/pubs/sheets/rs7/>
- Edminster, S. (1999). *Trapped on all sides: The marginalization of Palestinian refugees in Lebanon*. Washington, DC: US Committee for Refugees.
- Ewalds-Kvist, B., Högberg, T., & Lützén, K. (2013). Impact of gender and age on attitudes towards mental illness in Sweden. *Nordic Journal of Psychiatry*, 67(5), 360-368.
doi:10.3109/08039488.2012.748827
- Farhood, L. F., & Dimassi, H. (2012). Prevalence and predictors for post-traumatic stress disorder, depression and general health in a population from six villages in South Lebanon. *Social Psychiatry Psychiatric Epidemiology*, 47(4), 639-649.
doi:10.1007/s00127-011-0368-6
- Farhood, L. F., Dimassi, H., & Lehtinen, T. (2006). Exposure to war-related traumatic events, prevalence of PTSD, and general psychiatric morbidity in a civilian population from southern Lebanon. *Journal of Transcultural Nursing*, 17(4), 333-340. doi:10.1177/1043659606291549

- Farhood, L. F., & Nouredine, S. N. (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. Retrieved from <http://search.proquest.com/docview/196304620?accountid=8555>
- Field, A. P. (2011). *Discovering statistics using SPSS*. London, England : SAGE
- Fisher, R., Harb, C., Al-Sarraf, S., & Nashabe, O. (2008). Support for resistance among Iraqi students: An exploratory study. *Basic and Applied Social Psychology*, 30(2), 167-175. doi:10.1080/01973530802209202
- Frans, O., Rimmo, P. A., Aberg, L., & Fredrikson, M. (2005). Trauma Exposure and Post-Traumatic Stress Disorder in the General Population. *Acta Psychiatrica Scandinavica*, 111(4), 291-299. doi:10.1111/j.1600-0447.2004.00463.x
- Golge, Z. B., Yavuz, M. F., Muderrisoglu, S., & Yavuz, M. S. (2003). Turkish university students' attitudes towards rape. *Sex Roles*, 49(11/12), 653-661. doi:10.1023/B:SERS.00000003135.30077.a4
- Haddad, S., & Jamali, D. (2003). The politics of refugees' non integration: The dilemma of Palestinians in Lebanon. *Journal of International Migration and Integration*, 4(1), 1-22. doi: 10.1007/s12134-003-1017-z
- Karam, E. G., Mneimneh, Z. N., Dimassi, H., Fayyad, J. A., Karam, A. N., Nasser, S. C., Chatterji, S., & Kessler, R. C. (2008). Lifetime prevalence of mental disorders in Lebanon: First onset treatment, and exposure to war. *PLoS Medicine*, 5(4), 579-586. doi: 10.1371/journal.pmed.0050061

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

- Karam, E. G., Mneimneh, Z. N., Karam, A. N., Fayyad, J. A., Nasser, S. C., Chatterji, S., & Kessler, R. C. (2006). Prevalence and treatment of mental disorders in Lebanon: a national epidemiological survey. *Lancet*, *367*, 1000-1006.
- Kessler, R. C., Berglund, P., Delmer, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005a). 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. doi: 10.1001/archpsyc.62.6.593
- Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005b). Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 617-627. doi: 10.1001/archpsyc.62.6.617
- Kessler, R. C., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress in the National Comorbidity Study. *Archives of General Psychiatry*, *52*(12), 1048–1060. doi: 10.1001/archpsyc.1995.03950240066012
- Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of Traumatic Stress*, *26*(5), 537-47. doi:10.1002/jts.21848.
- Lai, Y. M., Hong, C. P., & Chee, C. Y. (2001). Stigma of mental illness. *Singapore Medical Journal*, *42*(3), 111–114. Retrieved from www.ncbi.nlm.nih.gov/pubmed/11405561

- Lauber, C., & Rossler, W. (2007). Stigma towards people with mental illness in developing countries in Asia. *International Review of Psychiatry, 19*(2), 157-178.
doi:10.1080/09540260701278903
- Lefkowitz, E. S. (2005). Things have gotten better: Developmental changes among emerging adults after the transition to university. *Journal of Adolescent Research, 20*(1), 40–63. doi: 10.1177/0743558404271236
- Link, B. G., Stuenkel, E. L., Neese-Todd, S., Asmussen, S., & Phelan, J. C. (2001). Stigma as a barrier to recovery: The consequences of stigma for the self-esteem of people with mental illnesses. *Psychiatric Services, 52*(12), 1621-1626.
doi:10.1176/appi.ps.52.12.162
- Link, B. G., Struening, E. L., Rahav, M., Phelan, J. C. C., & Nuttbrock, L. (1997). On stigma and its consequences: evidence from a longitudinal study on men with dual diagnoses of mental illness and substance abuse. *Journal of Health and Social Behavior, 38*(2), 177–190. doi:10.2307/2955424
- McDaid, D. (2008). Countering the stigmatisation and discrimination of people with mental health problems in Europe. *Luxembourg: European Commission, 1-20.*
- Mendelsohn, M., & Sewell, K. W. (2004). Social attitudes toward traumatized men and women: A vignette study. *Journal of Traumatic Stress, 17*(2), 103-111.
doi:10.1023/B:JOTS.0000022616.03662.2f
- Mittal, D., Drummond, K. L., Blevins, D., Curran, G., Corrigan, P., & Sullivan, G. (2013). Stigma associated with PTSD: Perceptions of treatment seeking combat veterans. *Psychiatric Rehabilitation Journal, 36*(2), 86-92. doi: 10.1037/h0094976

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

- Mulliken, B. L. (2005). *Rape myth acceptance in college students: The influence of gender, racial, and religious attitudes* (Order No. 3195602). Available from ProQuest Central; ProQuest Dissertations & Theses Global. (305379215). Retrieved from <http://search.proquest.com/docview/305379215?accountid=8555>
- Nagel, B., Matsuo, H., McIntye, K. P., & Morrison, N. (2005). Attitudes towards victims of rape: Effects of gender, race, religion, and social class. *Journal of Interpersonal Violence, 20*(6), 725-737. doi:10.1177/0886260505276072
- National Comorbidity Survey. (2005). Lifetime prevalence of DSMIV/WMH-CIDI disorders by sex and cohort. Twelve-month prevalence of DSMIV/WMH-CIDI disorders by sex and cohort. Retrieved from <http://www.hcp.med.harvard.edu/ncs/publications.php>
- Norris, F. H. (1992). Epidemiology of trauma: Frequency and impact of different potentially traumatic events on different demographic groups. *Journal of Personality and Social Psychology, 60*(3), 409–418. doi: 10.1037/0022-006X.60.3.409
- Nunes, K. L., Hermann, C. A., & Ratcliffe, K. (2013). Implicit and explicit attitudes towards rape are associated with sexual aggression. *Journal of Interpersonal Violence, 28*(13), 2657-2675. doi:10.1177/0886260513487995
- Parcesepe, A. M., & Cabassa, L. J. (2013). Public stigma of mental illness in the United States: A systematic literature review. *Administration and Policy in Mental Health, 40*(5), 384–399. doi:10.1007/s10488-012-0430-z

- Patitu, C. L. (1998). College student's attitudes towards rape victims. *College Student Affairs Journal, 17*(2), 44-55. Retrieved from <http://search.proquest.com/docview/224813437?accountid=8555>
- Paulsen, K. (1979). Attribution of fault to a rape victim as a function of locus of control. *The Journal of Social Psychology, 107* (1), 131-132. doi: 10.1080/00224545.1979.9922684
- Reavely, N. J., & Jorm, A. F. (2011). Young people's stigmatizing attitudes towards people with mental disorders: Findings from an Australian national survey. *Australian and New Zealand Journal of Psychiatry, 45*(12), 1033-1039. doi:10.3109/00048674.2011.614216
- Rebeiz, M. J., & Harb, C. (2009). Perceptions of rape and attitude towards women in a sample of Lebanese students. *Journal of Interpersonal Violence, 25*(4), 735-752. doi:10.1177/0886260509334410
- Richardson, L. K., Frueh, B. C., & Acierno, R. (2010). Prevalence estimates of combat-related post-traumatic stress disorder: Critical review. *Australian and New Zealand Journal of Psychiatry, 44*(1), 4-19. doi:10.3109/00048670903393597
- Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., & Walsh, W. (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress, 5*(3), 455-475. doi:10.1002/jts.2490050309
- Schweitzer, R., Perkoulidis, S., Krome S., Ludlow, C., & Ryan, M. (2005). Attitudes towards refugees: The dark side of prejudice in Australia. *Australian Journal of Psychology, 57*(3), 170-179. doi:10.1080/00049530500125199

Sheldon, J. P., & Parent, S. L. (2002). Clergy's attitudes and attributions of blame toward female rape victims. *Violence Against Women*, 8(2), 233-256.

doi:10.1177/10778010222183026

Sheldon-Keller, A., Lloyd-McGarvey, E., West, M., & Canterburg, R. J. (1994).

Attachment and assessment of blame in date rape scenarios. *Social Behavior & Personality: An International Journal*, 22(4), 313-318.

doi:10.2224/sbp.1994.22.4.313

Sikimic, S. (2010, June 17). Army gives women parity with men except in combat. *The*

Daily Star. Retrieved from <http://www.dailystar.com.lb/News/Lebanon-News/2010/Jun-17/57817-army-gives-women-parity-with-men-except-in-combat.ashx>

Sirey, J. A., Bruce, M. L., Alexopoulos, G. S., & Perlick, D. A., Friedman, S. J., & Meyers, B. S.(2001). Perceived stigma and patient-rated severity of illness as predictors of antidepressant drug adherence. *Psychiatric Services*, 52(12), 1615 -1620.

doi:10.1176/appi.ps.52.12.1615

Smith, J. W. (2006). Martyrdom: Self-denial or self-exaltation? Motives for self-sacrifice from Homer to Polycarp - A theological reflection. *Modern Theology*, 22 (2), 169-196. doi:10.1111/j.1468-0025.2006.00314.

Smith, R.E., Pine, C. J., & Hawley, M. E. (1988). Social cognitions about adult male victims of female sexual assault. *Journal of Sex Research*, 24(1), 101-112. doi:

10.1080/00224498809551401

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

- Stolzenberg, R. M., Blair-Loy, M., & Waite, L. J. (1995). Religious participation in early adulthood: Age and family life cycle effects on church membership. *American Sociological Review*, *60*(1), 84-103. doi: 10.2307/2096347
- Stoppa, T. M., & Lefkowitz, E. S. (2010). Longitudinal changes in religiosity among emerging adult college students. *Journal of Research on Adolescence*, *20* (1), 23-38. doi: 10.1111/j.1532-7795.2009.00630.x
- Struckman-Johnson, C., & Struckman-Johnson, D. (1992). Acceptance of male rape myths among college men and women. *Sex Roles*, *27*(3-4), 85-100. doi: 10.1007/BF00290011
- Sui, S. G., King, M. E., Li, L. S., Chen, L. Y., Zhang, Y., & Li, L. J. (2014). Posttraumatic stress disorder among female victims of sexual assault in China: Prevalence and psychosocial factors. *Asia Pac Psychiatry*, *6*(4), 405-13. doi:10.1111/appy.12155.
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics*. Boston: Pearson/Allyn & Bacon.
- Teachman, B. A., Wilson, J. G., & Komarovskaya, I. (2006). Implicit and explicit stigma of mental illness in diagnosed and healthy samples. *Journal of Social and Clinical Psychology*, *25*(1), 75-95. doi:10.1521/jscp.2006.25.1.75
- The UN Refugee Agency (UNHCR). (2015). "Syria regional refugee response." Retrieved from: <http://data.unhcr.org/syrianrefugees/country.php?id=122>
- Thornton, B., Robbins, M. A., & Johnson, J. A. (1981). Social perception of the rape victim's culpability: The influence of respondents' personal-environmental causal attribution tendencies. *Human Relations*, *34*(3), 225-237. doi: 10.1177/001872678103400304

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

- White, B. H., & Kurpius, S. E. R. (1999). Attitudes toward rape victims effects of gender and professional status. *Journal of Interpersonal Violence, 14*(9), 989-995.
doi:10.1177/088626099014009006
- Wong, A. O. (2005). *Effects of religiosity, gender, and gender role on attitudes toward rape* (Order No. 1426338). Available from ProQuest Dissertations & Theses Global. (305347539). Retrieved from
<http://search.proquest.com/docview/305347539?accountid=8555>
- Yanos, P. T., Roe, D., & Lysaker, P. H. (2010). The impact of illness identity on recovery from severe mental illness. *American Journal of Psychiatric Rehabilitation, 13*(2), 73-93. doi: 10.1080/15487761003756860

Appendix A

Welcome to the study, my name is Reem Hmaidan, I am a graduate student in the Clinical Psychology master's program at AUB. I am conducting a research study about attitudes towards people who have been involved in different types of stressful events. You will now read the consent form which will give you detailed information about the study and help you decide whether you want to participate or not.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Appendix B

Consent Form for Psychology 201 Students

Participating in a Research Project

Project Title: Attitudes towards trauma victims with or without PTSD Symptomology
Investigator: Dr. Nadiya Slobodenyuk
Co-Investigator: Reem Hmaidan
Address: American University of Beirut
Jesup 106
Phone: 01- 350 000, ext 4366
Email: ns74@aub.edu.lb

Dear participants, we would like to invite you to participate in a research study conducted at the American University of Beirut. The study seeks to examine attitudes towards people who have been involved in different types of stressful events. In order to take part in this study, you must be 18 years old or older.

As a research participant, you will be asked to read this consent form, and respond to a questionnaire. We will be asking 240 participants (students who are registered in Psychology 201) to complete the study questionnaire. Your participation in this research will take no more than 30 minutes.

All of the data collected will be treated in the strictest **confidence** and only the primary investigator and the co-investigator will have access to it. To ensure **anonymity**, no direct identifying information will be recorded; you will not be asked to give us your name. All data from the study will be maintained on a password protected computer for a period of three years after which it will be deleted. Individual results will not be published and only data from a group of participants will be analyzed.

Your participation is **voluntary**, you have the right to refuse to participate and to withdraw from the study or discontinue your participation at any time without giving a reason and with no penalties. Your refusal to participate in this study will not affect your relationship with AUB and will not result in the loss of benefits.

The results of the study will allow filling the gaps in the literature on attitudes towards trauma victims and PTSD and will provide data on the attitudes towards the target populations in Lebanon which is so far missing. There is no monetary reward for participating in this study. However, you will receive 1% point on your final PSYC 201 grade. Should you decide not to participate in this study but still wish to receive extra course credit, you can write a brief report on an article from a psychological journal. If you

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

want to write a brief report instead of participating, please contact your PSYC-201 instructor to receive the task.

In case you decide to participate you will be asked to create and enter a code which you will give to your PSYC 201 instructor. This code will not link your responses to you, and will only ensure that you receive credit for your participation.

There are no more than minimal risks associated with this study. Some examples of stressful events in the survey might make you feel upset. If you think that you need talk to someone about your feelings, please visit or contact Counseling Center at AUB which provides free counseling services to students. Their number is 01-350 000 ext. 3196 If at any time and for any reason you prefer not to answer any questions, please feel free to skip them.

If you have questions about this research study, or if you are interested in learning about the outcome of the study, you may contact Dr. **Nadiya Slobodenyuk** , ns74@aub.edu.lb, +961.1.350000 x4366 or Reem Hmaidan, rih19@aub.edu.lb

If you have any questions about your rights as a participant, you may contact the Social & Behavioral Sciences Institutional review Board (SBSIRB) at AUB: 01- 350 000 ext. 5445 or 5454 or irb@aub.edu.lb

If you accept the above statements and are willing to participate in this study, please press the ACCEPT button below.

THANK YOU FOR YOUR COOPERATION

Appendix C

Instructions

The following are several short stories about people who have been involved in different types of stressful experiences; the stories are extracts from the interviews given by victims to the therapist and include some follow up evaluation of the psychological state of the victim. ***Please read these short stories and answer questions that follow.***

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Appendix D

Version 1

The following information is part of a therapist's report of a traumatic event experienced by Rola

Therapist: Dr. R. H.

Client Name: Rola

Age: 22

"I was packing my belongings after a long day at work and I noticed that my boss and I were the only ones left at the office. As I was leaving I realized that I still needed to hand in some files to my boss. I knocked on his door and entered, I told him that there were some papers he needs to look over and I gave him the files. He looked over the papers quickly and told me that there was something wrong with one of them and told me to come and have a look. When I was standing next to him reading over the information I felt that he touched me inappropriately. At first I ignored it thinking it was by accident, but when it happened two more times, I pushed away from him and told him to stop. He then grabbed me and reminded me that he was my boss and the one that pays me salary. I was shocked and scared of what he might do and I did not know what to say or how to behave. He started forcing himself onto me and he then proceeded to rape me."

Two months later, Rola thinks about the rape at certain times and feels some distress. However, she does not suffer from any long lasting effects and resumes her daily life. She does not have any feelings of fear or recurring thoughts about the event and spends time outside the house.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Rola Competent?

1 2 3 4 5 6 7

In general, do you find Rola Intelligent?

1 2 3 4 5 6 7

In general, do you find Rola Likable?

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

1 2 3 4 5 6 7

In general, do you find Rola Attractive?

1 2 3 4 5 6 7

In general, do you find Rola Friendly?

1 2 3 4 5 6 7

In general, do you find Rola Dangerous?

1 2 3 4 5 6 7

Do you blame Rola for what happened to her?

1 2 3 4 5 6 7

Generally, how do you feel about Rola

1 2 3 4 5 6 7

(Very negative)

(Very positive)

The following information is part of a therapist's report of a traumatic event experienced by Zeina

Therapist: Dr. R. H.

Client Name: Zeina

Age: 24

“My military unit and I were moved to an army base that was situated in a war zone and we were asked to investigate a suspicious house that was said to contain ammunition reserves for the enemy. We were told that the area was safe and not to expect any danger; however, as we were making our way there, we were ambushed and gunshots started coming from all directions. I was shot and was unable to find a safe shelter for some time. We engaged with the enemy for hours and waited for our support to arrive. Our reinforcement finally came and they were able to detain the enemy soldiers.”

Two months later, Zeina's gunshot wound was nearly healed and she thinks about the ambush at certain times and feels some distress. However, she does not suffer from any

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

long lasting effects and resumes her daily life. She does not have any feelings of fear or recurring thoughts about the event and continues to go to work and spend time outside with friends.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Zeina Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Zeina Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Zeina Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Zeina Attractive?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Zeina Friendly?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Zeina Dangerous?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Do you blame Zeina for what happened to her?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Generally, how do you feel about Zeina

1	2	3	4	5	6	7
---	---	---	---	---	---	---

(Very negative)

(Very positive)

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

The following information is part of a therapist's report of a traumatic event experienced by Maya

Therapist: Dr. R. H.

Client Name: Maya

Age: 23

“One day, during the war in 2006, I was at home when all of a sudden I heard a loud explosion and the whole building started to shake and I was forced backwards onto the floor. The windows in the living room shattered and glass started to rain all over me and I had pieces of glass embedded in my hands and face. At first, I was confused and did not know what was happening, then I realized that one of the buildings on my street was bombed. I ran outside my apartment towards the stairs and I saw people running around everywhere screaming. I saw my neighbors running down the stairs and I followed them to the shelter in the basement. After some time, the police and fire department arrived and started to secure the area.”

Two months later, Maya's minor cuts and bruises have healed and she thinks about the bombing at certain times and feels some distress. However, she does not suffer from any long lasting effects and resumes her daily life. She does not have any feelings of fear or recurring thoughts about the event and continues to go to work and spend time outside with friends.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Maya Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Maya Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Maya Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Maya Attractive?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

In general, do you find Maya Friendly?

1 2 3 4 5 6 7

In general, do you find Maya Dangerous?

1 2 3 4 5 6 7

Do you blame Maya for what happened to her?

1 2 3 4 5 6 7

Generally, how do you feel about Maya

1 2 3 4 5 6 7

(Very negative)

(Very positive)

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Version 2

The following information is part of a therapist's report of a traumatic event experienced by Rola

Therapist: Dr. R. H.

Client Name: Rola

Age: 22

"I was packing my belongings after a long day at work and I noticed that my boss and I were the only ones left at the office. As I was leaving I realized that I still needed to hand in some files to my boss. I knocked on his door and entered, I told him that there were some papers he needs to look over and I gave him the files. He looked over the papers quickly and told me that there was something wrong with one of them and told me to come and have a look. When I was standing next to him reading over the information I felt that he touched me inappropriately. At first I ignored it thinking it was by accident, but when it happened two more times, I pushed away from him and told him to stop. He then grabbed me and reminded me that he was my boss and the one that pays me salary. I was shocked and scared of what he might do and I did not know what to say or how to behave. He started forcing himself onto me and he then proceeded to rape me."

Two months later, Rola cannot stop thinking about the rape. She has vivid nightmares in which the attack is repeated and she becomes very distressed if people start getting to close to her. She avoids the office when she can and works from home and sometimes feels afraid to go out at all. In addition, she avoids talking about what happened and she sometimes has very low mood, she also feels continually "jumpy" and unable to relax.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Rola Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rola Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rola Likable?

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

1 2 3 4 5 6 7

In general, do you find Rola Attractive?

1 2 3 4 5 6 7

In general, do you find Rola Friendly?

1 2 3 4 5 6 7

In general, do you find Rola Dangerous?

1 2 3 4 5 6 7

Do you blame Rola for what happened to her?

1 2 3 4 5 6 7

Generally, how do you feel about Rola

1 2 3 4 5 6 7

(Very negative)

(Very positive)

The following information is part of a therapist's report of a traumatic event experienced by Zeina

Therapist: Dr. R. H.

Client Name: Zeina

Age: 24

“My military unit and I were moved to an army base that was situated in a war zone and we were asked to investigate a suspicious house that was said to contain ammunition reserves for the enemy. We were told that the area was safe and not to expect any danger; however, as we were making our way there, we were ambushed and gunshots started coming from all directions. I was shot and was unable to find a safe shelter for some time. We engaged with the enemy for hours and waited for our support to arrive. Our reinforcement finally came and they were able to detain the enemy soldiers.”

Two months later, Zeina's gunshot wound was nearly healed but she cannot stop thinking about the ambush. She has vivid nightmares in which the attack is repeated and she

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

becomes very distressed if people start getting too close to her. She avoids talking about the attack and she sometimes has very low mood, she also feels continually “jumpy” and unable to relax.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Zeina Competent?

1 2 3 4 5 6 7

In general, do you find Zeina Intelligent?

1 2 3 4 5 6 7

In general, do you find Zeina Likable?

1 2 3 4 5 6 7

In general, do you find Zeina Attractive?

1 2 3 4 5 6 7

In general, do you find Zeina Friendly?

1 2 3 4 5 6 7

In general, do you find Zeina Dangerous?

1 2 3 4 5 6 7

Do you blame Zeina for what happened to her?

1 2 3 4 5 6 7

Generally, how do you feel about Zeina

1 2 3 4 5 6 7

(Very negative)

(Very positive)

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

The following information is part of a therapist's report of a traumatic event experienced by Maya

Therapist: Dr. R. H.

Client Name: Maya

Age: 23

“One day, during the war in 2006, I was at home when all of a sudden I heard a loud explosion and the whole building started to shake and I was forced backwards onto the floor. The windows in the living room shattered and glass started to rain all over me and I had pieces of glass embedded in my hands and face. At first, I was confused and did not know what was happening, then I realized that one of the buildings on my street was bombed. I ran outside my apartment towards the stairs and I saw people running around everywhere screaming. I saw my neighbors running down the stairs and I followed them to the shelter in the basement. After some time, the police and fire department arrived and started to secure the area.”

Two months later, Maya's minor cuts and bruises have healed but she cannot stop thinking about the bombing. She has vivid nightmares in which the bombing is repeated and she becomes very distressed if a lot of people start getting too close to her. She avoids leaving her home and sometimes feels afraid to go out at all. In addition, she avoids talking about the attack and she sometimes has very low mood, she also feels continually “jumpy” and unable to relax.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Maya Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Maya Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Maya Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Maya Attractive?

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

1 2 3 4 5 6 7

In general, do you find Maya Friendly?

1 2 3 4 5 6 7

In general, do you find Maya Dangerous?

1 2 3 4 5 6 7

Do you blame Maya for what happened to her?

1 2 3 4 5 6 7

Generally, how do you feel about Maya

1 2 3 4 5 6 7

(Very negative)

(Very positive)

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Version 3

The following information is part of a therapist's report of a traumatic event experienced by Tarek

Therapist: Dr. R. H.

Client Name: Tarek

Age: 22

"I was packing my belongings after a long day at work and I noticed that my boss and I were the only ones left at the office. As I was leaving I realized that I still needed to hand in some files to my boss. I knocked on her door and entered, I told her that there were some papers she needs to look over and I gave her the files. She looked over the papers quickly and told me that there was something wrong with one of them and told me to come and have a look. When I was standing next to her reading over the information I felt that she touch me inappropriately. At first I ignored it thinking it was an accident, but when it happened two more times, I pushed away from her and told her to stop. She then grabbed me and reminded me that she was my boss and the one who pays me salary. I was shocked and scared of what she might do and I did not know what to say or how to behave. She started forcing herself onto me and she then proceeded to rape me."

Two months later, Tarek thinks about the rape at certain times and feels some distress. However, he does not suffer from any long lasting effects and resumes his daily life. He does not have any feelings of fear or recurring thoughts about the event and spends time outside the house.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Tarek Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Tarek Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Tarek Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

In general, do you find Tarek Attractive?

1 2 3 4 5 6 7

In general, do you find Tarek Friendly?

1 2 3 4 5 6 7

In general, do you find Tarek Dangerous?

1 2 3 4 5 6 7

Do you blame Tarek for what happened to him?

1 2 3 4 5 6 7

Generally, how do you feel about Tarek

1 2 3 4 5 6 7

(Very negative)

(Very positive)

The following information is part of a therapist's report of a traumatic event experienced by Ziad

Therapist: Dr. R. H.

Client Name: Ziad

Age: 24

“My military unit and I were moved to an army base that was situated in a war zone and we were asked to investigate a suspicious house that was said to contain ammunition reserves for the enemy. We were told that the area was safe and not to expect any danger; however, as we were making our way there we were ambushed and gunshots started coming from all directions. I was shot and was unable to find a safe shelter for some time. We engaged with the enemy for hours and waited for our support to arrive. Our reinforcement finally came and they were able to detain the enemy soldiers.”

Two months later, Ziad's gunshot wound was nearly healed and he thinks about the ambush at certain times and feels some distress. However, he does not suffer from any long lasting effects and resumes his daily life. He does not have any feelings of fear or recurring thoughts about the event and continues to go to work and spend time outside with friends.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

1 2 3 4 5 6 7
Strongly Neutral Strongly
Disagree

In general, do you find Ziad Competent?

1 2 3 4 5 6 7

In general, do you find Ziad Intelligent?

1 2 3 4 5 6 7

In general, do you find Ziad Likable?

1 2 3 4 5 6 7

In general, do you find Ziad Attractive?

1 2 3 4 5 6 7

In general, do you find Ziad Friendly?

1 2 3 4 5 6 7

In general, do you find Ziad Dangerous?

1 2 3 4 5 6 7

Do you blame Ziad for what happened to him?

1 2 3 4 5 6 7

Generally, how do you feel about Ziad

1 2 3 4 5 6 7

(Very negative)

(Very positive)

The following information is part of a therapist's report of a traumatic event experienced by Rami

Therapist: Dr. R. H.

Client Name: Rami

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Age: 23

“One day, during the war in 2006, I was at home when all of a sudden I heard a loud explosion and the whole building started to shake and I was forced backwards onto the floor. The windows in the living room shattered and glass started to rain all over me and I had pieces of glass embedded in my hands and face. At first, I was confused and did not know what was happening, then I realized that one of the buildings on my street was bombed. I ran outside my apartment towards the stairs and I saw people running around everywhere screaming. I saw my neighbors running down the stairs and I followed them to the shelter in the basement. After some time, the police and fire department arrived and started to secure the area.”

Two months later, Rami’s minor cuts and bruises have healed and he thinks about the bombing at certain times and feels some distress. However, he does not suffer from any long lasting effects and resumes his daily life. He does not have any feelings of fear or recurring thoughts about the event and continues to go to work and spend time outside with friends.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Rami Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Attractive?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Friendly?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Dangerous?

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

1 2 3 4 5 6 7

Do you blame Rami for what happened to him?

1 2 3 4 5 6 7

Generally, how do you feel about Rami

1 2 3 4 5 6 7

(Very negative)

(Very positive)

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Version 4

The following information is part of a therapist's report of a traumatic event experienced by Tarek

Therapist: Dr. R. H.

Client Name: Tarek

Age: 22

"I was packing my belongings after a long day at work and I noticed that my boss and I were the only ones left at the office. As I was leaving I realized that I still needed to hand in some files to my boss. I knocked on her door and entered, I told her that there were some papers she needs to look over and I gave her the files. She looked over the papers quickly and told me that there was something wrong with one of them and told me to come and have a look. When I was standing next to her reading over the information I felt that she touch me inappropriately. At first I ignored it thinking it was an accident, but when it happened two more times, I pushed away from her and told her to stop. She then grabbed me and reminded me that she was my boss and the one who pays me salary. I was shocked and scared of what she might do and I did not know what to say or how to behave. She started forcing herself onto me and she then proceeded to rape me."

Two months later, Tarek cannot stop thinking about the rape. He has vivid nightmares in which the attack is repeated and he becomes very distressed if people start getting to close to him. He avoids the office when he can and works from home and sometimes feels afraid to go out at all. In addition, he avoids talking about what happened and he sometimes has very low mood, he also feels continually "jumpy" and unable to relax.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Tarek Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Tarek Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Tarek Likable?

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

1 2 3 4 5 6 7

In general, do you find Tarek Attractive?

1 2 3 4 5 6 7

In general, do you find Tarek Friendly?

1 2 3 4 5 6 7

In general, do you find Tarek Dangerous?

1 2 3 4 5 6 7

Do you blame Tarek for what happened to him?

1 2 3 4 5 6 7

Generally, how do you feel about Tarek

1 2 3 4 5 6 7

(Very negative)

(Very positive)

The following information is part of a therapist’s report of a traumatic event experienced by Ziad

Therapist: Dr. R. H.

Client Name: Ziad

Age: 24

“My military unit and I were moved to an army base that was situated in a war zone and we were asked to investigate a suspicious house that was said to contain ammunition reserves for the enemy. We were told that the area was safe and not to expect any danger; however, as we were making our way there we were ambushed and gunshots started coming from all directions. I was shot and was unable to find a safe shelter for some time. We engaged with the enemy for hours and waited for our support to arrive. Our reinforcement finally came and they were able to detain the enemy soldiers.”

Two months later, Ziad’s gunshot wound was nearly healed but he cannot stop thinking about the ambush. He has vivid nightmares in which the attack is repeated and he becomes

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

very distressed if people start getting too close to him. He avoids talking about the attack and he sometimes has very low mood, he also feels continually “jumpy” and unable to relax.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Ziad Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Ziad Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Ziad Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Ziad Attractive?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Ziad Friendly?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Ziad Dangerous?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Do you blame Ziad for what happened to him?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Generally, how do you feel about Ziad

1	2	3	4	5	6	7
---	---	---	---	---	---	---

(Very negative)

(Very positive)

The following information is part of a therapist’s report of a traumatic event experienced by Rami

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Therapist: Dr. R. H.

Client Name: Rami

Age: 23

“One day, during the war in 2006, I was at home when all of a sudden I heard a loud explosion and the whole building started to shake and I was forced backwards onto the floor. The windows in the living room shattered and glass started to rain all over me and I had pieces of glass embedded in my hands and face. At first, I was confused and did not know what was happening, then I realized that one of the buildings on my street was bombed. I ran outside my apartment towards the stairs and I saw people running around everywhere screaming. I saw my neighbors running down the stairs and I followed them to the shelter in the basement. After some time, the police and fire department arrived and started to secure the area.”

Two months later, Rami’s minor cuts and bruises have healed but he cannot stop thinking about the bombing. He has vivid nightmares in which the bombing is repeated and he becomes very distressed if a lot of people start getting too close to him. He avoids leaving his home and sometimes feels afraid to go out at all. In addition, he avoids talking about the attack and he sometimes has very low mood, he also feels continually “jumpy” and unable to relax.

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree

In general, do you find Rami Competent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Intelligent?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Likable?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

In general, do you find Rami Attractive?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

In general, do you find Rami Friendly?

1 2 3 4 5 6 7

In general, do you find Rami Dangerous?

1 2 3 4 5 6 7

Do you blame Rami for what happened to him?

1 2 3 4 5 6 7

Generally, how do you feel about Rami

1 2 3 4 5 6 7

(Very negative)

(Very positive)

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Appendix E

Please circle the most suitable choice

1	2	3	4	5	6	7
Strongly Disagree			Neutral			Strongly Agree
1. I believe that God exists						
1	2	3	4	5	6	7
2. Prayer to God is one of my usual practices						
1	2	3	4	5	6	7
3. Religion gives me a great deal of security in my life						
1	2	3	4	5	6	7
4. I consider myself a religious person						
1	2	3	4	5	6	7
5. My religion influences the way I choose to act in my routine life						
1	2	3	4	5	6	7
6. I feel there are many more important things in life than religion						
1	2	3	4	5	6	7
7. I am interested in religion						
1	2	3	4	5	6	7
8. Religious considerations influence my every day affairs						
1	2	3	4	5	6	7

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Appendix F

Gender: Male Female

Age:

Your nationality:

How long have you lived in Lebanon:

Have you or any of your family members experienced the following events:

- 1) Sexual assault
- 2) Experienced war as a soldier/veteran
- 3) Where at a location when a bomb occurred
- 4) Felt the effects of an explosion (ground shaking, heard the explosion, saw the smoke)
- 5) Lost someone due to war and or an explosion
- 6) Heard about a friend or family member who was at the site of the explosion
- 7) Show negative symptoms (nightmares, low mood, feeling jumpy) due to war and or an explosion

Appendix G

Thank you for participating in the study

If you have questions about this research study, or if you are interested in learning about the outcome of the study, you may contact Dr. Nadiya Slobodenyuk , ns74@aub.edu.lb, +961.1.350000 x4366 or Reem Hmaidan, rih19@aub.edu.lb

If you have any questions about research or your rights as a participant, you may contact the Social & Behavioral Sciences Institutional review Board (SBSIRB) at AUB: 01- 350 000 ext. 5445 or 5454 or irb@aub.edu.lb

If any information in the survey made you upset and you think you need to talk to someone, please contact the Counseling Center at AUB that provides free counseling services to students. You may contact them at 01-350 000 ext. 3196

To gain your 1% extra credit, please create and enter a code in the box below. Please also write it down and give it to your PSYC 201 instructor. This code can be a combination of ANY SIX NUMBERS.

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Appendix H

Table H1

Version one: Descriptive statistics

	Gender_participant	Mean	Std. Deviation
Rape	Male	4.59	.49
	Female	4.43	.88
	Total	4.51	.73
Combat	Male	4.86	.75
	Female	4.89	.68
	Total	4.88	.71
Civilian	Male	4.86	.48
	Female	4.84	.51
	Total	4.85	.50

Table H2

Version two: Descriptive statistics

	Gender_participant	Mean	Std. Deviation
Rape	Male	4.15	.61
	Female	4.41	.78
	Total	4.28	.71
Combat	Male	4.29	.58
	Female	4.64	.65
	Total	4.47	.64
Civilian	Male	4.53	.53
	Female	4.84	.59
	Total	4.69	.58

Table H3

Version three: Descriptive statistics

	Gender_participant	Mean	Std. Deviation
Rape	Male	4.35	.98
	Female	4.60	.86
	Total	4.48	.92
Combat	Male	4.90	.75
	Female	4.91	.75
	Total	4.91	.74
Civilian	Male	4.86	.66
	Female	4.93	.67
	Total	4.89	.66

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Table H4

Version four: Descriptive statistics

	Gender_participant	Mean	Std. Deviation
Rape	Male	4.38	.84
	Female	4.62	.75
	Total	4.51	.80
Combat	Male	4.44	.74
	Female	4.54	.55
	Total	4.49	.64
Civilian	Male	4.72	.64
	Female	4.73	.62
	Total	4.72	.63

Table H5

Levene's Test of Equality of Error Variances

	F	df1	df2	Sig.
Rape	1.30	7	242	.25
Combat	1.48	7	242	.18
Civilian	.69	7	242	.68

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Table H6

Main effect: Tthe type of trauma and interaction effects of the independent variables

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Trauma	Huynh- Feldt	5.98	1.86	3.21	7.99	.00	.03
Trauma * Presence_PTSD	Huynh- Feldt	3.17	1.86	1.70	4.24	.02	.02
Trauma * gender_victim	Huynh- Feldt	.06	1.86	.03	.08	.91	.00
Trauma * Gender_participant	Huynh- Feldt	.13	1.86	.07	.17	.83	.00
Trauma * Presence_PTSD * gender_victim	Huynh- Feldt	.63	1.86	.34	.84	.42	.00
Trauma * Presence_PTSD * Gender_participant	Huynh- Feldt	.05	1.86	.03	.07	.92	.00
Trauma * gender_victim * Gender_participant	Huynh- Feldt	1.47	1.86	.79	1.96	.15	.01
Trauma * Presence_PTSD * gender_victim * Gender_participant	Huynh- Feldt	.09	1.86	.05	.11	.88	.00
Error(Trauma)	Huynh- Feldt	180.24	449.20	.40			

Table H7

Pairwise comparison for type of trauma (1=Rape, 2=Combat and 3=Civilian)

(I) Trauma	(J) Trauma	Mean Difference		Sig. ^a	95% Confidence Interval for Difference ^a	
		(I-J)	Std. Error		Lower Bound	Upper Bound
1	2	-.24 [*]	.06	.00	-.39	-.09
	3	-.34 [*]	.06	.00	-.48	-.21
2	1	.24 [*]	.06	.00	.09	.39
	3	-.10	.05	.07	-.21	.01
3	1	.34 [*]	.06	.00	.21	.48
	2	.10	.05	.07	-.01	.21

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Table H8

Main effect and interaction effects of religiosity, gender of victim, presence or absence of PTSD and gender of participant

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	973.37	1	973.37	1409.11	.00
Religiosity	.85	1	.85	1.23	.27
gender_victim	.44	1	.44	.64	.43
Presence_PTSD	10.05	1	10.05	14.56	.00
Gender_Participant	2.86	1	2.86	4.15	.04
gender_victim *	.25	1	.25	.37	.54
Presence_PTSD					
gender_victim *	.00	1	.00	.00	.99
Gender_participant					
Presence_PTSD *	1.58	1	1.58	2.28	.13
Gender_participant					
gender_victim *	1.39	1	1.39	2.02	.16
Presence_PTSD *					
Gender_paticipant					
Error	166.48	241	.69		

Table H9

Version one: Main effect of type of trauma

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Trauma	Sphericity Assumed	5.07	2.00	2.53	7.65	.00
	Greenhouse-Geisser	5.07	1.86	2.73	7.65	.00
	Huynh-Feldt	5.07	1.94	2.61	7.65	.00
	Lower-bound	5.07	1.00	5.07	7.65	.01
Error(Trauma)	Sphericity Assumed	40.40	122.00	.33		
	Greenhouse-Geisser	40.40	113.16	.36		
	Huynh-Feldt	40.40	118.47	.34		
	Lower-bound	40.40	61.00	.66		

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Table H10

Version one: Pairwise comparison for type of trauma (1=Rape, 2=Combat and 3=Civilian)

(I) Trauma	(J) Trauma	Mean Difference			95% Confidence Interval for Difference ^a	
		(I-J)	Std. Error	Sig. ^a	Lower Bound	Upper Bound
1	2	-.36 [*]	.12	.01	-.65	-.08
	3	-.33 [*]	.09	.00	-.57	-.10
2	1	.36 [*]	.12	.01	.08	.65
	3	.03	.10	1.00	-.21	.27
3	1	.33 [*]	.09	.00	.10	.57
	2	-.03	.10	1.00	-.27	.21

Table H11

Version two: Main effect of type of trauma

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Trauma	Sphericity Assumed	5.10	2.00	2.55	8.15	.00
	Greenhouse-Geisser	5.10	1.71	2.98	8.15	.00
	Huynh-Feldt	5.10	1.79	2.85	8.15	.00
	Lower-bound	5.10	1.00	5.10	8.15	.01
Error(Trauma)	Sphericity Assumed	37.54	120.00	.31		
	Greenhouse-Geisser	37.54	102.71	.37		
	Huynh-Feldt	37.54	107.19	.35		
	Lower-bound	37.54	60.00	.63		

Table H12

Version two: Pairwise comparison for type of trauma (1=Rape, 2=Combat and 3=Civilian)

(I) Trauma	(J) Trauma	Mean Difference			95% Confidence Interval for Difference ^a	
		(I-J)	Std. Error	Sig. ^a	Lower Bound	Upper Bound
1	2	-.18	.12	.39	-.48	.11
	3	-.41 [*]	.09	.00	-.62	-.19
2	1	.18	.12	.39	-.11	.48
	3	-.22	.09	.06	-.45	.01
3	1	.41 [*]	.09	.00	.19	.62
	2	.22	.09	.06	-.01	.45

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Table H13

Version three: Main effect of type of trauma

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Trauma	Sphericity Assumed	7.67	2.00	3.83	7.42	.00
	Greenhouse-Geisser	7.67	1.49	5.14	7.42	.00
	Huynh-Feldt	7.67	1.54	4.97	7.42	.00
	Lower-bound	7.67	1.00	7.67	7.42	.01
Error(Trauma)	Sphericity Assumed	64.05	124.00	.52		
	Greenhouse-Geisser	64.05	92.43	.69		
	Huynh-Feldt	64.05	95.71	.67		
	Lower-bound	64.05	62.00	1.03		

Table H14

Version three: Pairwise comparison for type of trauma (1=Rape, 2=Combat and 3=Civilian)

(I) Trauma	(J) Trauma	Mean Difference		Sig. ^a	95% Confidence Interval for Difference ^a	
		(I-J)	Std. Error		Lower Bound	Upper Bound
1	2	-.43 [*]	.14	.01	-.79	-.08
	3	-.42 [*]	.14	.02	-.77	-.06
2	1	.43 [*]	.14	.01	.08	.79
	3	.01	.08	1.00	-.19	.21
3	1	.42 [*]	.14	.02	.06	.77
	2	-.01	.08	1.00	-.21	.19

Table H15

Version four: Main effect of type of trauma

Source		Type III Sum of Squares	df	Mean Square	F	Sig.
Trauma	Sphericity Assumed	2.06	2.00	1.03	3.00	.05
	Greenhouse-Geisser	2.06	1.88	1.09	3.00	.06
	Huynh-Feldt	2.06	1.98	1.04	3.00	.05
	Lower-bound	2.06	1.00	2.06	3.00	.09
Error(Trauma)	Sphericity Assumed	40.54	118.00	.34		
	Greenhouse-Geisser	40.54	111.11	.36		
	Huynh-Feldt	40.54	116.60	.35		
	Lower-bound	40.54	59.00	.69		

ATTITUDES TOWARDS TRAUMA VICTIMS AND PTSD

Table H16

Version four: Pairwise comparison for type of trauma (1=Rape, 2=Combat and 3=Civilian)

(I) Trauma	(J) Trauma	Mean Difference		Sig. ^a	95% Confidence Interval for Difference ^a	
		(I-J)	Std. Error		Lower Bound	Upper Bound
1	2	.01	.11	1.00	-.27	.29
	3	-.22	.11	.16	-.49	.05
2	1	-.01	.11	1.00	-.29	.27
	3	-.23 [*]	.09	.05	-.46	.00
3	1	.22	.11	.16	-.05	.49
	2	.23 [*]	.09	.05	.00	.46