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STIGMATIZING ATTITUDES TOWARDS MEN AND WOMEN  
COMBAT VETERANS WITH COMBAT RELATED PTSD

A Thesis Submitted to the Graduate School  
in Partial Fulfillment of the Requirements  
for the Degree of Master of Science

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STIGMATIZING ATTITUDES TOWARDS MEN AND WOMEN  
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# STIGMATIZING ATTITUDES TOWARDS MEN AND WOMEN COMBAT VETERANS WITH COMBAT RELATED PTSD

An Abstract of the Thesis by  
Heather L. Caldwell

Veterans with PTSD experience stigma and discrimination. The extent to which women combat veterans with PTSD may experience stigma and discrimination has yet to be investigated. This is critical given the increasing number of women veterans exposed to combat and combat trauma. Level of familiarity may affect stigmatizing beliefs. Gender may also affect stigmatizing beliefs. To assess this, 126 undergraduate students (men,  $n = 69$ ) were randomly assigned to view videos of a man or woman veteran describing combat experience and their PTSD symptoms. Participants completed questionnaires assessing PTSD symptoms, level of familiarity with veterans, and stigmatizing attitudes toward the veteran in the video. A series of between groups 2 (participant gender) x 2 (veteran gender) ANOVAs indicated that both men and women participants perceived the man veteran as more dangerous, provoking fear and anger, and requiring segregation than the woman veteran. Women blamed the veterans less for their PTSD than did men. There was a main effect for veteran gender on blame; the woman veteran was blamed for her PTSD more than the man veteran. Bivariate correlations showed familiarity with veterans was negatively correlated with anger towards the veteran, perceived dangerousness, and fear. Familiarity was not correlated with blame or pity. Experiencing PTSD was not correlated with blame, pity, dangerousness, or fear.

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## **CHAPTER I**

### **Introduction**

#### **Posttraumatic Stress Disorder**

Since the beginning of the war on terrorism in 2001, over 1.9 million members of the military were deployed to Iraq and Afghanistan, and have since separated from active duty service (Veterans Health Administration [VHA], & Department of Veterans Affairs [DVA], 2015). Of these, over 450,000 have been seen at Veterans Health Administration centers for possible or provisional posttraumatic stress disorder (VHA & DVA, 2015). Posttraumatic Stress Disorder (PTSD) is a mental disorder than can occur following the experience of a traumatic event. There are a large variety of experiences that could be considered traumatic, a few examples are combat, sexual assault, natural disasters, and car accidents. PTSD is characterized by the following symptoms: re-experiencing and intrusion, avoidance, negative alterations in mood and cognition, and marked alterations in arousal and reactivity (American Psychiatric Association [APA], 2013). Symptoms typically begin during the first three months following the traumatic experience; however, there can be a delay of months or even years before meeting diagnostic criteria. The lifetime risk of developing PTSD is 8.7% in the United States, with a 3.5% twelve month prevalence among adults (APA, 2013). Individuals who have PTSD can suffer from impaired functioning in social, occupational, interpersonal, developmental, and

other important areas. PTSD is associated with an increased risk of suicidal ideation and suicide attempts, and can impact physical health. Individuals with PTSD are also at an increased risk of having a comorbid substance use disorder, and are likely to have other comorbid mental disorders as well (Hamblen, Barnett, Hermann, & Schnurr, 2012).

Posttraumatic stress disorder risk is higher among combat veterans than in the general population. Studies on combat veterans from Iraq and Afghanistan suggest between 11-20% develop PTSD, with rates dependent on branch of service and the war zone served in (Hoge et al., 2004; Schell & Marshall, 2008). From the beginning of 2000 through June 2015, there were approximately 138,000 new PTSD diagnoses among military personnel who served overseas in Afghanistan, Iraq, or Syria (Fischer, 2015). In 2010, suicide rates in the U.S. Army were reported to be 20 per 100,000 per year (Ursano et al., 2010). Jakupcak et al. (2011) assessed suicidal ideation in a sample of U.S. veterans from the wars in Iraq and Afghanistan seeking services at a deployment health clinic and found that about 37% of the sample overall, regardless of whether or not they were diagnosed with PTSD, positively endorsed markers of suicide risk. In veterans who met diagnostic criteria for PTSD, the percentage of veterans who endorsed these markers was about 66%, roughly 5 times more likely than those who did not meet criteria for PTSD (Jakupcak et al., 2011). In comparison, the percentage of individuals in a civilian PTSD study reporting suicidal risk was about 54% (Tarrier & Gregg, 2004). Combat veterans with PTSD are also at increased risk for having a substance use disorder, with as many as 75% of combat veterans who have PTSD estimated to have both PTSD and a substance use disorder, compared to an estimated 21.6% to 43% of the civilian

population with PTSD likely to have comorbid substance use disorder (Jacobsen, Southwick, & Kosten, 2001).

Symptoms of PTSD affect not only those who suffer from it; it can also negatively affect loved ones. Studies have shown that trauma symptoms in combat veterans, particularly those of sleep problems, severe sexual dysfunction, and dissociation, are negatively correlated with relationship satisfaction in both the veteran and their partner (Nelson Goff, Crow, Reisbig, & Hamilton, 2007). The rate of partner violence is higher among combat-veterans with PTSD (Taft et al., 2005). Family members can also experience secondary traumatic stress due to the stress they may experience from taking care of, or wanting to help, a traumatized family member (Pearrow & Cosgrove, 2009). Combat veterans with PTSD also report significantly lower energy, emotional well-being, and poorer physical health than combat veterans without PTSD (Karney, Ramchand, Osilla, Caldarone, & Burns, 2008). In addition to the symptoms and effects of PTSD, individuals with PTSD may also feel stigmatized from others.

### **Stigma**

Goffman (1963) defined stigma as an attribute that an individual or group of people possess that is considered to be undesirable, and is therefore discredited and stereotyped. Attributes lead to the categorization of individuals into groups, which aid in determining what to expect in social interactions with individuals within each group. Stigma involves attitudes, feelings, and behaviors towards a prejudiced group (Overton & Medina, 2008). The process of stigma includes stereotypes, prejudice, and discrimination (Corrigan, Markowitz, Watson, Rowan, & Kuniak, 2003). Prejudice occurs when a

person endorses a negative stereotype. Discrimination can occur as a result of prejudice towards a group of people.

Attribution theory provides a framework for explaining the association between stigmatizing attitudes and discrimination (Weiner, 1995). Attributions are made about the cause and controllability of a stigma, which leads a person to infer whether or not an individual is responsible for the stigma. Responsibility beliefs lead to emotional reactions, such as anger, pity, and fear. Stigma has many implications for those who are stigmatized. For those who have a mental disorder, stigma may be a barrier to treatment (Corrigan et al., 2003). For those who seek treatment, stigma can be a barrier to recovery (Boyd, Katz, Link, & Phelan, 2010). Stigma can lower self-esteem if the individual believes a stereotype applies to them (Corrigan, Watson, & Barr, 2006). Individuals who have a mental disorder are already suffering with their various symptoms, and stigma appears to add to that suffering and is likely to make their situations worse.

The most commonly held stereotypes towards individuals with mental disorders are that they are dangerous, violent, unpredictable, and are to blame for causing their own conditions (Corrigan et al., 2003; Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000; Hinshaw, 2007). Common discriminative behaviors towards individuals with a mental disorder involve avoidance, withholding help, segregation, hostility, coercion, and social distance, which is defined as a desire to not have interactions with individuals with a mental disorder (Corrigan et al., 2003). Many studies have examined the stigmatization of individuals with schizophrenia. Individuals with schizophrenia tend to be negatively stereotyped in several different ways (Crisp et al., 2000; Reavely & Jorm, 2011). Individuals who have schizophrenia tend to be perceived as being unpredictable in their

behaviors (Reavley & Jorm, 2011). They may also be viewed as a danger to others (Crisp et al., 2003). Others have a tendency to not want to interact with individuals who have schizophrenia (Reavley & Jorm, 2011). Individuals with schizophrenia may also be viewed as difficult to talk to (Crisp et al., 2003).

Few studies have examined the stigmatization of PTSD, and combat-related PTSD specifically. Weiner, Perry, and Magnusson (1988) conducted a study to determine how controllable participants believed the cause of trauma was. Vignettes were used in which the controllability of disorder onset was manipulated in vignette characters. In the case of the Vietnam war syndrome vignette, participants were given either no information about control, were told the character was drafted and saw hazardous duty, or were told the character volunteered for a seek and destroy mission. Weiner et al. (1988) found that participants had higher perceptions of blame, responsibility, and anger, and decreased pity toward the character who had volunteered for a seek and destroy mission versus the character who was drafted, suggesting that when an individual volunteers for service and then experiences trauma, people will attribute higher amounts of stigma towards them, and believe that individual is more at fault for their disorder.

Another study focused on comparing the stigmatization of individuals who are experiencing PTSD due to different forms of trauma. In comparing social attitudes toward criminal assault victims to victims of a natural disaster, Mendelsohn and Sewell (2004) found that participants rated individuals who had experienced assault more positively than those who had been in a tornado on measures of the social dimensions of likability, attractiveness, and competence. Individuals who were experiencing PTSD due

to an assault were viewed as more likeable, more attractive as a friend or romantic partner, and more intelligent and competent than were individuals with PTSD as a result of a tornado.

### **Gender and Stigma**

Holzinger, Floris, Schomerus, Carta, and Angermeyer (2012) conducted a review of research studies pertaining to gender differences in public beliefs and attitudes about mental disorders. In most studies included in the review, men and women equally considered individuals with mental disorders to be dangerous. Women were found to view individuals with mental disorders as being less responsible for their condition than did men in most of the studies. Some studies suggested women as having more positive emotions and less anger towards individuals with a mental disorder than men, but more fear than men.

In regards to gender of the individual with a mental disorder, Pescosolido, Monahan, Link, Steuve, and Kikuzawa (1999) found women patients with a mental disorder were perceived as less dangerousness than men patients. Holzinger et al. (2012) found women patients with a mental disorder were perceived as being less dangerous only if she suffered from depression, and not schizophrenia. Regarding self-responsibility, several studies found that gender did not make a difference in perceived responsibility for mental disorders (Schnittker, 2000; Wirth & Bodenhausen, 2009). Mendelsohn and Sewell (2004) found women criminal assault victims were rated more positively than were men criminal assault victims, and men and women tornado victims. Reavely and Jorm (2011) found that men with PTSD were more likely than women to be perceived as unpredictable, dangerous, and best avoided. Participants in this study also

had a greater desire for social distance from men with PTSD than women; participants had less desire to live next door to a man with PTSD, and to have a man with PTSD marry into their family (Reavely & Jorm, 2011). Mittal et al. (2013) examined perceived stigma in 16 combat veterans with PTSD, and found the veterans most commonly perceived that others thought they were violent, dangerous, crazy, and as being responsible for their illness.

### **Familiarity and Stigma**

Studies have shown that familiarity with mental disorders may modify the attitudes toward individuals with a mental disorder (Angermeyer & Matschinger, 1996; Boyd et al., 2010; Corrigan, Green, Lundin, Kubiak, & Penn, 2001). Boyd et al. (2010) found that as contact with mental disorders increased, blame and anger towards an individual with a mental disorder decreased. The desire for social distance from an individual with a mental disorder has also been found to decrease as familiarity increases (Boyd et al., 2010; Corrigan et al., 2001). Relatives of individuals with a mental disorder were found to have a tendency to react in a less anxious manner towards individuals with a mental disorder than did a person who did not have a relative with a mental disorder, or those who only had a friend with a mental disorder (Angermeyer & Matschinger, 1996). As familiarity with mental disorders increases, the belief that an individual with a mental disorder is dangerous decreases (Corrigan et al., 2001).

### **World Assumptions**

World assumptions are an individual's basic beliefs about the world and the self (Janoff-Bulman, 1989). They are learned and shaped by the experiences one has in life. World assumptions consist of three basic categories: benevolence of the world,

meaningfulness of the world, and worthiness of the self. These beliefs encompass the following assumptions: the goodness of people and the world; the probability and distribution of good versus bad events and what controls the distribution of those events; and how worthy an individual believes their self to be. World assumptions are typically not challenged unless an event occurs that may call into question those beliefs (Janoff-Bulman, 1989).

Experiencing trauma may change an individual's beliefs about the world. Individuals that experience trauma may view themselves less positively than individuals who have not experienced trauma (Janoff-Bulman, 1989). They may also see the world more negatively than those who have not had a traumatic experience. Individuals with chronic PTSD may have lower levels of self-worth and perceive themselves and others less favorably than individuals without PTSD. (Dekel, Solomon, Elklit, & Ginzburg, 2004). Veterans with PTSD have been found to perceive the world as being more random than veterans without PTSD (Dekel et al., 2004).

Individuals who have a mental disorder in general may have a lower belief in a just world for self (Rüsch, Todd, Bodenhausen, & Corrigan, 2010). Rüsch et al. found that in individuals who did not have a mental disorder, there was a marginal relationship between a just world belief for others and responsibility for mental disorders, with a stronger belief in just world for others being related to a higher perception of responsibility.

## **Purpose**

The purpose of the study was to explore stigmatizing beliefs associated with combat-related PTSD. Few studies have explored the stigma associated with PTSD in

relation to other mental disorders (Arnabas, 2008; Reavley & Jorm, 2011; Weiner, Perry, & Magnusson 1988). Fewer have looked at stigma associated specifically with combat-related PTSD (Hipes, Lucas, & Kleycamp, 2014; Mittal, et al., 2013).

This study examined stigma associated with combat-related PTSD. It also explored the association between world assumptions and stigmatizing attitudes. Gender of participant was taken into consideration as a control method due to previous research showing gender differences in stigmatizing attitudes towards individuals with mental disorders. Participant symptoms of PTSD were assessed to control for the experience of PTSD in the sample, as this may lead to a difference in stigmatizing attitudes. Gender of the veteran suffering from PTSD was examined to determine if they elicit different levels of stigmatizing attitudes. This research explored the following question: Do men and women veterans differ on the amount of stigma that is attributed to them for their combat-related PTSD? There is a gap in the research in this area, as some studies of combat-related PTSD have focused solely on men. Men have been the primary force in combat. However, in recent wars, women have been found in combat in increasing numbers. Of the military personnel that served in Operation Enduring Freedom and Operation Iraqi Freedom, 12.65% were women; the number of women veterans has doubled in the past 20 years (Maguen, Ren, Bosch, Marmar, & Seal, 2010). The U.S. military currently consists of an all-volunteer force, with its members aware of the risks of going into combat before they ever enlist as a service member. It is unclear how much veterans from the most recent wars are blamed for their combat-related PTSD given this fact.

This research explored the following hypotheses: 1) Because past research shows that women overall tend to attribute less stigma towards mental disorders than do men, it was hypothesized that women will hold less stigmatizing attitudes toward veterans than men. 2) In past research, men with PTSD have been perceived as more dangerous than women, so it was hypothesized that a man veteran will be seen as more dangerous than a woman veteran. 3) It was hypothesized that the veterans will be perceived as being to blame for their PTSD because the U.S. military is an all-volunteer force, and past research showed participants placed more blame on a veteran for their condition when they volunteered to go to war. 4) Because past research has shown that participants perceive more blame when they believe the onset of a condition was controllable, and veterans volunteer to join the military, it was hypothesized that the attribution of blame will be positively correlated with the world assumption of controllability of events. 5) Because familiarity with mental disorders has been found in past studies to be associated with lesser degrees of stigmatization, it was hypothesized that level of familiarity will be negatively correlated with attributions of blame, anger, dangerousness, and fear. 6) It was hypothesized that level of familiarity will be positively correlated with pity. 7) Because experiencing symptoms of PTSD may represent a form of familiarity, it was hypothesized that PTSD symptoms would be negatively correlated with blame, dangerousness, and fear, and a positive correlation with pity.

## CHAPTER II

### Review of the Literature

#### Posttraumatic Stress Disorder

Posttraumatic Stress Disorder (PTSD) can develop after the experience of a traumatic event, and is characterized by clusters of four types of symptoms (APA, 2013). According to the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5), to be diagnosed with PTSD an individual must have first experienced a traumatic event that involved actual or threatened death, serious injury, or sexual violence. The individual must have either experienced the trauma themselves, witnessed it happening to others, learned that it happened to a close family member or friend, or have experienced repeated exposure to the details of traumatic events, such as in the case of first responders. Examples of traumatic events include, but are not limited to, combat exposure, actual or threatened physical or sexual assault, a terrorist attack, a natural disaster, or a car accident. Following the traumatic event, the individual must experience a cluster of four different types of symptoms. The first cluster involves reexperiencing and intrusion symptoms that start after the event has occurred, and include involuntary intrusive and distressing memories of the event; distressing dreams related to the event; flashbacks; and intense or prolonged psychological distress or reactions when exposed to cues that symbolize or resemble the event. The second cluster involves the avoidance of

stimuli associated with the event, which includes persistently either avoiding memories, thoughts, or feelings associated with the event; and/or avoiding reminders that bring up those thoughts, feelings, and memories. The third cluster involves negative alterations in mood or cognition. This includes the inability to remember certain aspects of the event. There may also be persistent, exaggerated, negative beliefs or expectations about oneself, others, or the world. The individual may experience persistent, distorted cognitions about the cause or consequences of the event that leads to self-blame or blame of others. They may have negative emotional states that are persistent, such as fear, horror, shame, anger or guilt. They may experience diminished interest in activities that used to be enjoyed. The individual may also feel detached or estranged from others, and may have a persistent inability to experience positive emotions. The fourth cluster involves marked alterations in arousal and reactivity, and includes anger and irritable outbursts; reckless or self-destructive behavior; hypervigilance (heightened sensitivity); an exaggerated startle response; problems concentrating; and sleep disturbances. In order to be considered PTSD, the symptom clusters must last longer than one month in duration and cause clinically significant distress or impairment in important areas of functioning, and not be attributable to a medical condition or the physiological effects of a substance.

Posttraumatic stress disorder was first introduced as a diagnosis in the DSM-III, published in 1980. Prior to being known by this name, PTSD was named Gross Stress Reaction in DSM-I in 1952, and then disappeared as a diagnosis in the second edition of the DSM in 1968 (Andreasen, 2010). Early accounts of this stress related disorder are linked to warfare. In World War I, the psychological consequences of war were referred to as shell shock. The term later resurfaced during World War II, when veterans with

long exposure to combat experienced a syndrome that included anxiety, reliving of combat events, autonomic arousal, and sensitivity to stimuli that reminded them of their combat experiences. Other names for this syndrome included combat fatigue, traumatic war neurosis, and battle stress. The Vietnam War era represented a turning point for the assessment and treatment of psychological distress due to combat experiences.

Posttraumatic stress disorder was officially recognized as a mental disorder in 1979 as a means to categorize and diagnose the often debilitating mental health challenges of the veterans returning from the Vietnam War (Tanielian, Jaycox, Adamson, & Metscher, 2008).

There have been many studies aimed at determining the prevalence rates of PTSD in military troops returning home from war. Hoge et al. (2004) reported the rate of PTSD in military units returning home from combat operations in Iraq was 18% in Army units and 19.9% in Marine units, when assessed three to four months post-deployment. For units returning from Afghanistan, the rate was 11.5% in Army units. The report found a direct relationship between the risk of PTSD and the number of combat experiences (such as killing an enemy soldier, seeing or knowing someone who was killed, handling dead bodies, or being shot at). Enlisted personnel, women, and Hispanics are more likely to develop PTSD as a result of combat service than are officers, men, and non-Hispanics (Tanielian, Jaycox, Schell, Marshall, & Vaina, 2008). Military members who had lengthier deployments with more extensive exposure to various types of combat trauma have a higher risk of developing PTSD (Tanielian, Jaycox, Schell, et al., 2008). Twenty years after the Vietnam War, 15.2% of Vietnam combat veterans continued to suffer from PTSD (Van der Kolk & McFarlane, 1996).

Women have a higher prevalence of PTSD than men; however, men are more likely to experience trauma (Breslau, 2012). Women experience PTSD at almost twice the rate than do men (Halligan & Yehuda, 2000). The risk for experiencing PTSD may be higher in women due to their higher vulnerability to assaultive violence (Breslau, 2012). Individuals who have experienced prior trauma, and developed PTSD as a result, are at a higher risk for developing PTSD in subsequent traumas. The risk of developing PTSD symptoms varies across trauma types. Assaultive violence (rape, and sexual or physical assault) and military combat have the highest risk of developing PTSD. The trauma with the second highest risk is sudden, unexpected death. Other forms of injury or shock have the third highest risk. Learning about trauma happening to others has been found to be the event with the lowest risk. Up to 80% of individuals who have PTSD also have another mental disorder, and between 30-40% meet criteria for a substance use disorder (Hamblen, Barnett, Hermann, & Schnurr 2012).

Several factors have been identified as risks for developing PTSD (Breslau, 2012; Halligan & Yehuda, 2000). Minority groups who live in inner cities, men, and young individuals tend to have a higher lifetime risk of being exposed to assaultive violence (Breslau, 2012). Individuals who have experienced an unstable family life in the past may have increased prevalence rates of PTSD (Halligan & Yehuda, 2000). There may be transmission of PTSD within families, with trauma survivors who developed PTSD being more likely to have close relatives that have had mood, anxiety, and substance use disorders than individuals who have experienced trauma but not developed PTSD. Individuals who have a lower socioeconomic status have a higher risk, as well as individuals with lower education levels. Low social support may be a risk factor for

symptom severity. A history of psychological as well as behavioral problems has also been found to be an increased risk. Intellectual functioning is also a factor, with those who have lower functioning being at increased risk (Halligan & Yehuda, 2000).

### **Mental Health Stigma**

Goffman (1963) used the term stigma to refer to an attribute that an individual has that is discrediting and undesirable, and therefore stereotyped. Mental health illness is an attribute that leads to stigmatization and stereotypes about an individual with a mental disorder. Goffman's (1963) stigma-theory is that those people who are "normal" (as in they do not possess the discredited attribute, and are non-stigmatized), act in ways that are discriminating towards a stigmatized individual. A person categorizes others based on attributes, determining the category an individual is placed in helps in determining how to interact with, and what to expect from that individual. The non-stigmatized construct a theory to explain the inferiority of a discredited individual and to account for any danger that individual may represent. Other assumptions of imperfections are made based on the original stigmatized attribute. The discriminatory treatment towards a stigmatized individual becomes justified in the mind of the non-stigmatized when that stigmatized individual responds to their situation in a manner that is believed to be an expression of the undesirable attribute, and the attribute is seen as being justly caused for something they have done in the past.

Link and Phelan (2001) conceptualize stigma as existing when several interrelated components occur together. One component involves labeling, where people distinguish differences in each other and label those differences (particularly those differences that matter in a social context). A second component is the linking of a labeled

individual/group to characteristics that are believed by the dominant culture to be undesirable. This component is the one in which negative stereotyping takes place. In the third component, individuals who are labeled are categorized into distinct categories and placed in to out-groups (“them”) so as to achieve some separation between them and the in-group (“us”). During this component, other undesirable characteristics are attributed to the labeled individuals. The fourth component is that the labeled individuals experience a loss of status as well as discrimination, due to being labeled and separated, and linked to other characteristics considered undesirable. These four elements can be termed stigma when they occur together and there is differential access to political, social, and economic power, all of which give the power to stigmatize. Those in power determine what characteristics are desirable, and which are not.

Stigma involves feelings, attitudes, and behaviors (Overton & Medina, 2008).

There are three elements in the stigma process: stereotypes, prejudice, and discrimination (Corrigan et al., 2003). Stereotypes are beliefs that are held about the members of a certain social group. The beliefs are collectively held and serve to categorize the members of that group. A prejudice is when a person believes and endorses a negative stereotype, and may result in negative emotional reactions. For example, a person who is prejudiced towards an individual with a mental disorder may make a statement such as “They are dangerous and I’m afraid of them” (Overton & Medina, 2008, p. 144).

Prejudice can lead to discrimination. Discrimination is a behavioral response towards an individual based on a prejudice. Discriminatory behaviors are generally negative and may harm the members of a stigmatized group.

Attribution theory presents a framework for explaining how stigmatizing attitudes and discriminatory behavior are related (Weiner, 1995). Attribution theory posits that a stigma is associated with an attribution (such as responsibility), and the perception of the cause of a stigma aids in determining affective reactions towards the individual being stigmatized, as well as what to expect of that individual in the future. This in turn affects behavior towards that individual. Corrigan et al. (2003) found when a person believes that an individual is responsible for their condition, they experience less pity, increased anger, and are more fearful of that individual. A person who believes that an individual is responsible for their condition is also less likely to help them. When it is believed that the cause of an individual's condition was out of that individual's control, a person is less likely to blame the individual for their condition and are more likely to show pity and less likely to show anger and fear (Corrigan et al., 2003).

Stigma towards individuals with mental disorders occurs largely due to a person's lack of understanding of mental disorders (Hinshaw, 2007). There are several different ways in which individuals react towards behaviors that are characteristic of a mental disorder. Some behavioral or emotional patterns can cause a fearful response from others, particularly if the behaviors are frightening and are seen as deviating from social norms, or is disturbed behavior perceived to be evil (Hinshaw, 2007). This can lead to the stigma that individuals with mental disorders are dangerous. When an individual exhibits frightening behaviors, a person is more likely to distance themselves from that individual. A person may look for causes that explain behavior or unexpected events in that individual, in other words, a person makes attributions to explain these behaviors or events.

Crisp, Gelder, Rix, Meltzer, and Rowlands (2000) surveyed a sample of British adults about their attitudes concerning severe depression, schizophrenia, dementia, panic attacks, drug addiction, alcoholism, and eating disorders. Participants were interviewed on eight topics concerning seven mental disorders. Crisp et al. found that approximately 70% of participants rated individuals who had alcoholism, drug addiction, and schizophrenia as being dangerous, and 80% believed those with these disorders engaged in unpredictable behaviors. Participants often believed that those with alcoholism (about 59%) or drug addiction (about 67%) were to blame for their condition, while only 7% of respondents believed those with schizophrenia were to blame. About 23% of responders rated individuals with depression as dangerous. The majority of participants thought that individuals with schizophrenia (77%), drug addiction (77.8%), alcohol addiction (70%), severe depression (56%), and dementia (52%), were unpredictable.

Link, Phelan, Bresnahan, Stueve, and Pescosolido (1999) researched conceptions of mental disorders, specifically beliefs of causes, dangerousness, and social distance. Vignettes were used that depicted individuals with schizophrenia, major depressive disorder, alcohol dependence, cocaine dependence, and a “troubled person” who was experiencing normal every day troubles. Participants rated vignette characters on what they thought the cause of the character’s condition was, how dangerous they thought the character was, and how much social distance they would desire from the character. The most common cause endorsed for each condition was stressful circumstances, and over 90% of participants believed that stress contributed in some way to each condition with the exception of cocaine dependence. When asked how likely it was that the character would be violent towards someone else, even though there was no mention of violence in

any of the vignettes, 87% of participants believed the character with cocaine dependence would be violent, versus 71% with alcohol dependence, 61% with schizophrenia, 33% with major depressive disorder, and 17% with the troubled character. In regards to social distance, 90% of respondents desired distance from the character with cocaine dependence, versus 70% for alcohol dependence, 63% for schizophrenia, 47% for major depressive disorder, and 29% for the troubled character. A positive correlation was found between the belief the character would be violent, and the desire of participants to distance themselves socially from that character.

**Gender.** Gender can moderate mental disorder stigma (Corrigan et al., 2003; Mann & Himelien, 2004; Schnittker, 2000; Wirth & Bodenhausen, 2009). Mann and Himelien (2004) found that women showed less stigmatizing attitudes towards mental disorders than did men. Wirth and Bodenhausen (2009) conducted an experiment to determine if gender moderated the degree to which an individual experiences stigma. Wirth and Bodenhausen looked at alcohol abuse, which was deemed a male-typical disorder because the symptoms of alcohol abuse were found to map onto stereotypical male gender expectations, and major depression, which was considered a female-typical disorder because its symptoms were found to map onto stereotypical female gender expectations. Participants completed online surveys after they read a case summary of an individual who was experiencing a mental disorder. The case summary was either of a man or a woman who had been diagnosed with either alcohol abuse or major depression. After reading the case summary, participants completed scales that measured affective reactions, how likely they would be to help the character in the case summary, and whether or not they thought the character had a mental disorder and what they thought

was the cause. Wirth and Bodenhausen found that when a case summary presented a gender-typical case (male with alcohol abuse or female with major depression), there was greater negative affect towards the individual than when the case was not gender typical (male with major depression or female with alcohol abuse). Cases that were gender atypical produced greater sympathy from participants, and participants were also more inclined to help in gender atypical cases. In regard to gender of participant, men were more inclined to help in gender-atypical cases, and women were inclined to help regardless of whether the case was gender-typical or not.

Schnittker (2000) also conducted a study to determine the extent to which gender moderates reactions towards individuals with psychological problems, and whether or not the gender of the individual experiencing the problem elicits a different response. Study participants were asked to evaluate a vignette about a situation of a character that had symptoms of a mental disorder. Participants rated the character on social tolerance and perceived dangerousness. Schnittker found that overall, participants were more willing to interact with a woman with a psychological problem than a man portrayed with a similar problem. Women participants were less willing than men to interact with characters who were men, and were more willing than men to interact with characters who were women. Both men and women participants rated women characters as less dangerous than men characters.

**Personal Experience.** Personal experience of mental disorders, or contact with individuals with mental disorders have been found to moderate attitudes towards individuals suffering from a mental disorder (Angermeyer & Matschinger, 1996; Boyd et al., 2010). Angermeyer and Matschinger (1996) conducted survey research in Germany

to determine if and how personal experience influences attitudes towards individuals who have a mental disorder. Participants were presented with a vignette that depicted a character that had either schizophrenia or major depressive disorder; the diagnosis was not presented in the vignette. Participants were then asked about their emotional reaction towards the character, including aggressive emotions, prosocial reactions, and feelings of anxiety. Prosocial reactions included a desire to help, and to experience sympathy, compassion, and concern. Angermeyer and Matschinger also looked at social distance, specifically what type of relationship or contact they would have with the character, including working with them, living in the same neighborhood as them, being related through marriage, and having common friends. Finally, participants were asked how much experience they had with individuals with mental disorders. Experience was looked at on several levels, including having a mental disorder, having a family member with a mental disorder, knowing or working with someone with a mental disorder, or having no experience with mental disorders at all. A positive correlation was found between level of mental disorder exposure and prosocial attitudes toward the individuals with mental disorders, with increasing level of exposure related to increased willingness to act prosocially. There was a negative correlation between exposure and desire for social distance, with increased levels of exposure being associated with a decrease in desire for social distance. Anxiety towards an individual with a mental disorder followed a similar pattern, with those having a relative with a mental disorder tending to react less anxiously than someone without any personal experience. However, survey responders who at one time had a mental disorder tended to act more anxiously than those who only had relatives with a mental disorder.

Boyd et al. (2010) looked at the relationship between contact with an individual who had been hospitalized for a mental disorder and stigma measures of blame, anger, sympathy, persistence and seriousness of mental disorders, social distance, and reproductive restriction. Social distance was defined as a willingness to have children with the character, being friends, and working at a job with the character. Contact was scored by determining if the participant had been hospitalized with a mental disorder, had a member of the family who had been hospitalized, had a friend who had been hospitalized, or had no contact with someone who had been hospitalized with a mental disorder. Participants read a vignette depicting a character with either schizophrenia or major depressive disorder. Boyd et al. found that increased contact with an individual with mental disorders was associated with less blame, less anger, and less desire for social distance towards the character with a mental disorder represented in a vignette. Sympathy for the character did not differ significantly across levels of contact. The more contact a person had with mental disorders the more serious they judged the character's problem to be.

Mann & Himelein (2004) conducted a study to determine the impact of diagnosis and attitudes about treatment on the stigma associated with mental disorders. Participants read vignettes about two characters, one depicting an individual with schizophrenia, and another of an individual with depression. They then completed a social distance scale, which was used as the measure of stigma. The scale assessed how comfortable participants would be in different situations such as if the character were their neighbor, or if they were dating them. Participants also completed a measure of attitudes toward treatment, where they rated the following items: there is little that can be done for an

individual with schizophrenia; there are good treatments available to help most individuals cope with depression; and most treatments of mental disorders are painful and ineffective. A correlation was found between treatment expectations and stigma, in which participants who had a more positive expectation of treatment had less stigmatizing attitudes toward mental disorders than those who had a more negative expectation of treatment. When people believed that mental disorders are treatable, they were less likely to exhibit stigmatizing attitudes towards individuals with mental disorders.

**Implications.** Stigma has several implications for individuals with mental illness and affects those who are stigmatized in many different ways. Stigma is considered a barrier to treatment, and many individuals who have a mental illness hesitate to seek treatment because they do not want the labels and stigma that tend to accompany mental illness (Corrigan et al., 2003; Mittal et al., 2013; Reavley & Jorm, 2011). There are also worries that treatment will not be kept confidential and will negatively impact current and future career placement and advancement (Tanielian, Jaycox, Schell et al., 2008). When a mental disorder is left untreated, the symptoms can become worse over time and may affect physical health, especially because individuals with mental disorders are more likely to engage in unhealthy behaviors such as smoking and eating poorly (Tanielian et al., 2008). Not seeking treatment can also cause an individual's relationships with others to suffer (Tanielian et al., 2008).

Stigma may lower self-esteem (Corrigan et al., 2006; Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001). Corrigan et al. (2006) conducted a study to determine the relationship between self-esteem, self-efficacy, and depression. They created a self-

stigma scale and had participants with psychiatric disabilities complete the scale, along with measures of self-esteem, self-efficacy, and depression. The self-stigma scale measured stereotype awareness, which was being aware of the negative stereotypes held about individuals with a mental disorder; stereotype agreement, which is believing in the same stereotypes the general public holds; self-concurrence, which means the individual believed the stereotype applies to the them; and self-esteem decrement, which is diminished self-esteem due to agreement with a negative stereotype. Positive correlations were found between stereotype agreement and self-concurrence, and stereotype agreement and self-esteem decrement. Self-concurrence and self-esteem decrement had a high positive correlation. Individuals who applied the stereotype to themselves were more likely to experience lower self-esteem. Stereotype awareness also had a significant negative correlation with self-esteem and self-efficacy. Self-esteem decrement and self-concurrence were negatively associated with self-efficacy and self-esteem.

Link et al. (2001) researched the consequences of stigma on self-esteem. Participants who had suffered from a mental disorder completed measures of self-esteem and stigma. Link et al. used perceived devaluation-discrimination as their stigma measure, which measures the extent to which a person believes that those with a psychiatric illness are going to be devalued and discriminated against. A stigma withdrawal measure was used to determine the extent to which a participant withdraws from individuals they believe would reject them, as a way to avoid rejection. Link et al. found that 73% of participants endorsed two or more low items on the self-esteem scale. Most participants believed that individuals with a psychiatric history would experience

rejection, and 63% indicated they would likely avoid an individual they believed would reject them because of their psychiatric history. Stigma withdrawal and perceived devaluation-discrimination were both found to be negatively associated with self-esteem.

Individuals with a mental disorder are often discriminated against in the areas of jobs, housing, and social interactions, due to stigma (Mann & Himelein, 2004). Because a history of mental disorders can be concealable, unlike for example, a physical deformity that can be seen, individuals with mental disorders also face the dilemma of when and to whom they should disclose their mental disorder, which can invoke anxiety (Hinshaw, 2007). Those with concealable stigmas may also face more distress and negative emotions than those whose might be more noticeable. They may also experience internalized shame, isolation, and social rejection.

Stigma may be a barrier to recovery (Ilic et al., 2012). Ilic et al. (2012) conducted a study to determine consequences of stigma on recovery from mental disorders. Participants were individuals who wanted treatment for their mental disorder. They filled out measures of self-esteem, symptom severity, quality of life, perceived stigma, and stigma experiences prior to, and after receiving treatment. Ilic et al. found that amount of stigma experiences was negatively correlated with quality of life and self-esteem. Stigma experiences was positively correlated with symptoms and perceived stigma. Stigma was also a predictor of mental health prior to treatment, and of change in mental health after treatment, with initial mental health and rate of improvement being negatively correlated with stigma experiences.

## **PTSD Stigma**

A study found PTSD to be less stigmatized than other mental disorders, specifically schizophrenia (Reavely & Jorm, 2011). Reavely and Jorm (2011) researched mental health stigma in Australia through the use of a national survey. Through the use of vignettes, Reavely and Jorm found that 40% of respondents who read a vignette depicting an individual with PTSD believed that the individual would be discriminated against, versus 84% of respondents who read a vignette depicting an individual with schizophrenia. Respondents believed that an individual with schizophrenia would be more dangerous and unpredictable than would someone with PTSD. A person was also found to desire more social distance from someone with schizophrenia versus someone with PTSD. Overall, PTSD was found to be less stigmatizing than schizophrenia. Gender of the individual in the vignette was also compared, with results being that men with PTSD were more likely than women to be seen as dangerous, unpredictable, and best avoided. Respondents also expressed a greater desire to not live next to men than women, as well as a greater desire for a man with PTSD to not marry into their family.

Mittal et al. (2013) conducted a qualitative study to determine the types of self-perceived stigma among combat veterans seeking treatment for their combat-related PTSD. They interviewed combat veterans from Operation Enduring Freedom and Operation Iraqi Freedom (OEF/OIF) who had been diagnosed with combat-related PTSD and were currently in treatment. Their findings indicated that the most common perceived stigmatizing stereotypes included labels such as crazy, violent, and dangerous. A common belief among the veterans in this study was the public would believe combat veterans were responsible for their own mental disorders because they volunteered to

serve in the military, knowing the possible risks of their service. There was also a belief that veterans with PTSD would be perceived as unpredictable in addition to dangerous, in part due to their experiences in the military, and the experience and knowledge of combat in particular. Many of the veterans who participated in this study were at first reluctant to receive treatment for their PTSD because they did not want to be stigmatized.

Hipes, Lucas, and Kleykamp (2014) were interested in determining if there was a loss of status (specifically esteem and respect) associated with veterans experiencing combat-related PTSD. Participants interacted with fake partners via a computer to determine if partners would be disadvantaged as a result of being in combat or having been hospitalized for PTSD. The partner was described as having no military service, having military service only, having military service with deployment, or having military service with combat deployment and hospitalization for PTSD (all partners were described as men). Hipes et al. found that participants accepted the influence of their partner (changed their answers to match) significantly less when they believed their partners had been hospitalized for PTSD than when they were just told their partner had been in the military. Hipes et al. also sought to determine if participants' previous contacts with veterans would moderate any negative effects of PTSD associated with influence. Contact with veterans was found to have a positive influence on how often a participant accepted a partner's influence when that partner had been hospitalized for PTSD. Contact with veterans appeared to lessen the loss of status they had found to otherwise be associated with PTSD. There was a positive correlation between the amount of close friends and family members who were veterans, and how often the participant accepted their partners influence.

Weiner, Perry, and Magnusson (1988) conducted a couple of experiments to determine how controllable a person perceived the causes of stigmas related to several different physical (Alzheimer's disease, blindness, cancer, heart disease, and paraplegia) or mental-behavioral conditions (Vietnam War syndrome, AIDS, child abuse, drug abuse, and obesity). In the first experiment, it was found that Vietnam War syndrome (a precursor to PTSD), although having a mental-behavioral origin, was perceived as uncontrollable, much as the physical origin conditions were. The character from the Vietnam War syndrome condition was perceived as less responsible and was blamed less for their condition than were the other conditions of mental-behavioral origin (AIDS, child abuse, drug abuse, and obesity). Vietnam War syndrome also elicited more likability, more pity, greater assistance, and less anger than the other mental-behavioral conditions. In the second experiment, the responsibility of the stigma onset was manipulated to determine if it changed perceived responsibility, blame, liking, pity, anger, and assistance. For the Vietnam War syndrome vignettes, this meant that the presented character was drafted and had seen hazardous duty (onset uncontrollable), or had volunteered for an additional tour knowing they would be in seek-and-destroy missions (onset controllable), or there was no information given for controllability. As in the first experiment, Vietnam War syndrome once again fell into the category of uncontrollable, along with the physical origin conditions. However, in regards to the manipulation of controllability of the stigma, for Vietnam War syndrome, when the stigma was presented as onset controllable, there were increased perceptions of responsibility, blame and anger, and decreased pity, and assistance, and they were liked less than in the onset uncontrollable condition.

## **World Assumptions**

World assumptions refer to an individual's basic assumptions (beliefs) of the world and the self (Janoff-Bulman, 1989). These views are strongly held by the individual and aid in determining how one thinks and acts. They are learned and further shaped by life experiences. World assumptions generally go unquestioned and are rarely challenged. Individuals tend to have positive assumptions in relation to the world and the self; however, negative and stressful life events may challenge world assumptions and may cause them to be altered and become more negative.

There are three basic categories of world assumptions: benevolence of the world, meaningfulness of the world, and worthiness of the self (Janoff-Bulman, 1989).

Benevolence of the world encompasses the benevolence of people and the benevolence of the impersonal world. It involves the extent that an individual views the world as being positive or negative, and includes how common a good event is versus a bad event and good outcomes versus bad outcomes. An individual who has a more benevolent view of the world is more likely to believe the world is basically good and misfortune is uncommon, and that generally people are kind, caring, helpful, and good overall.

Meaningfulness of the world involves beliefs concerning the distribution of good versus bad outcomes (Janoff-Bulman, 1989). There are three different assumptions that guide distributional principles: justice, controllability, and chance. Janoff-Bulman believed that these beliefs were not mutually exclusive and that an individual could believe in all three, but likely place more emphasis on one belief than the others. Individuals who believe that justice dictates outcome distribution are likely to believe that good outcomes are distributed among those whose characters are good and decent (in

other words, are of good moral character). Individuals who believe that outcomes are controlled by the individual are likely to believe that people can control what will happen to them based on how they behave, and the more proper behavior a person engages in, the more good outcomes will happen to them. The distributional principle of chance refers to randomness of outcomes. Those who believe outcomes are distributed randomly were likely to believe there is nothing a person can do to prevent a negative outcome from happening to them.

Worthiness of the self involves beliefs about oneself (Janoff-Bulman, 1989). It involves the belief in one's own self-worth, self-controllability, and perceptions of chance. The belief in one's own self-worth involves a person's belief about their own goodness, morality, and worthiness. An individual who believes they are good is likely to believe that good outcomes will come to them. Self-controllability refers to the extent individuals perceive themselves as the kind of person who engages in behaviors that are appropriate, yet precautionary. An individual who believes they engage in these behaviors likely believes they can control their own outcomes. Perceptions of chance refer to luck, and the extent to which an individual views themselves as lucky or unlucky. An individual who believes they are lucky may believe the world operates on chance, but they are lucky in that they receive good outcomes.

Janoff-Bulman (1989) conducted a study to determine if world assumptions are different in individuals who have experienced traumatic events versus those who have not. Participants were asked if they had experienced any extremely negative events, and then completed the world assumptions measure. It was found that individuals who had experienced trauma significantly differed from individuals who had not experienced

trauma on the assumptions of perceived self-worth, benevolence of the impersonal world, and the distributional principle of chance. Individuals who had experienced trauma viewed themselves less positively and the world as more negative than did individuals who had not experienced trauma. There was an interaction for trauma experience and gender in the case of chance. Men who had experienced trauma believed that outcomes were distributed by chance more than men who had not; women who had experienced trauma believed that outcomes were distributed by chance less than women who had not. Both women who had experienced trauma and women who had not viewed other individuals as more positive than both men who had experienced trauma and those who had not.

Similar findings to the Janoff-Bulman (1989) research were found in a study by Dekel et al. (2004), who examined veterans who had PTSD versus those who did not. Participants completed a PTSD inventory to determine if they met criteria for PTSD, either currently or in the past, and also completed the world assumptions scale. Dekel et al. found that participants who had PTSD in the past but not currently, had less favorable views of themselves and others, and saw the world as less benevolent and more random than did those who never had PTSD. Veterans who currently had PTSD had lower levels of self-worth than those who did not have PTSD.

## CHAPTER III

### Methodology

#### Participants

Participants were recruited using sign-up sheets placed outside of the Psychology and Counseling Department. All participants were 18 years of age or older ( $M = 20.07$ ,  $SD = 4.78$ ). There were 126 participants total, 55% were men ( $n = 69$ ) and 45% were women ( $n = 57$ ). Seventy-eight participants indicated they were white (65.9%), while remaining participants reported they were Asian American (11.9%), Black (7.9%), Latino or Hispanic (5.6%), American Indian or Alaskan Native (4.8%), or other (4%). Fifty-eight participants (46.8%) were unemployed, 42.1% were employed part-time, 8.7% were employed full-time, and 1.6% were homemakers. Mean years of education was 13.81 ( $SD = 2.70$ ). Eighty-two participants were freshmen in college (65.1%), 15.9% were sophomores, 7.9% were seniors, and 6.3% were juniors.

#### Materials

**The Posttraumatic Stress Disorder Checklist for *DSM-5* (PCL-5).** The Posttraumatic Stress Disorder Checklist for *DSM-5* (PCL-5) is a 20-item self-report measure used to assess PTSD symptoms (Blevins, Weathers, Davis, Witte, & Domino, 2015). The PCL-5 asks participants to rate common responses to stressful experiences on a Likert-type scale of 0 (not at all), to 4 (extremely). Item scores are added together to

create a single, continuous measure of the severity of PTSD symptoms. Examples of items are repeated, disturbing dreams of the stressful experience; feeling upset when something reminded you of the stressful experience; avoiding memories, thoughts, or feelings related to the stressful experience. The full list of scale items can be found in Appendix A. Blevins et al. found the PCL-5 to have strong statistically significant correlations with the Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Herman, Huska, & Keane, 1993), the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1997), and the Detailed Assessment of Posttraumatic Stress (DAS; Briere, 2001). The PCL-5 was also found to have a high internal consistency, with  $\alpha = .94$  (Blevins et al., 2015). The coefficient alpha for this sample was .96.

In addition to the PCL-5, a trauma event checklist was used to assess what types of trauma participants had experienced, witnessed, or been confronted by that would qualify as a traumatic event for PTSD symptom criteria. Because many participants endorsed several traumatic events, but were not endorsing PTSD symptoms, this measure was not used in any data analysis.

**Attribution Questionnaire (AQ-27).** The Attribution Questionnaire created by Corrigan et al. (2003) is a 27-item questionnaire used to assess stigma. It evaluates the following nine stereotypes: blame (I would feel that it were this veteran's own fault that he/she is in their present condition), anger, pity (How much sympathy would you feel for this veteran?), help, dangerousness (how dangerous would you feel this veteran is?), fear, avoidance, segregation, and coercion. Participants rate the items based on the extent to which they agree with each item. Each item is rated using a nine point Likert-type scale, with responses ranging from 1 (not at all) to 9 (very much). Items on the help scale are

reverse scored, and higher scores indicate increased desire to withhold help. Items are also reverse scored on the avoidance scale, with higher scores indicating more desire to avoid. In their study, Corrigan et al. (2003) found this measure to have high reliability, with coefficient alphas for all scales ranging from .70 to .96. With this sample, the mean coefficient alpha for all scales was .78, with a range of .61 to .89. To determine convergent validity with other scales, Brown (2008) calculated correlations between the nine factors and three other stigma measures: the Social Distance Scale (SDS; Link, Cullen, Frank, & Wozniak, 1987), the Dangerousness Scale (DS; Link et al., 1987), and the Affect Scale (AS; Penn, Guynan, Daily, Spaulding, Garbin, & Sullivan, 1994). The following statistically significant correlations were found with  $p < .001$ . Fear and dangerous factors were found to have good convergent validity with the SDS ( $r = .49$ ), the DS ( $r = -.54$ ), and the AS ( $r = -.60$ ). The help factor had good convergent validity with the SDS ( $r = -.62$ ), the DS ( $r = .56$ ), and the AS ( $r = .62$ ). The anger factor had good convergent validity with the SDS ( $r = .48$ ), the DS ( $r = -.47$ ), and the AS ( $r = -.47$ ). The segregation and coercion factor was found to have good convergent validity with the SDS ( $r = .49$ ), the DS ( $r = -.58$ ), and the AS ( $r = -.51$ ). The original questionnaire included vignettes for a character with schizophrenia, but as this was not the purpose of the current study, the questionnaire was modified by removing the original vignettes, and substituting “this veteran” for the name “Harry” in each item. The full list of items in the AQ-27 is included in Appendix B.

**World Assumptions Questionnaire (WAQ).** The World Assumptions Questionnaire is a 22-item scale created by Kaler (2009) that measures an individual’s basic assumptions of the world. The WAQ consists of four subscales: the Controllability

of Events (CE), (I don't feel in control of the events that happen to me); Comprehensibility and Predictability of People (CPP), (People often behave in ways that are unpredictable); Trustworthiness and Goodness of People (TGP), (Most people can be trusted); and Safety and Vulnerability (SV), (Anyone can experience a very bad event). Items are rated using a six point Likert-type scale, with responses ranging from 1 (strongly disagree) to 6 (strongly agree). Items 1, 3, 9, 10, 12, 18, and 20 are reversed scored. The WAQ has been found to have good internal reliability for each of the subscales, with coefficient alphas ranging from a low of .64 to .83. With this sample, the alpha coefficients ranged from .56 to .81, with the mean of all subscales being .69. Convergent validity was assessed by comparing the WAQ to other theoretically relevant measures. The following statistically significant correlations were found at a  $p < .05$  level. TGP was found to have a positive correlation with measures of trust ( $r = .69$ ). Controllability of events was found to be positively correlated with perceived control over stressful events ( $r = .38$ ), and control related beliefs of the Mastery Scale (Pearlin & Schooler, 1978), with  $r = .60$ . All subscales had a statistically significant negative correlation with PTSD symptoms, with correlations ranging from  $-.26$  to  $-.36$ . Trustworthiness and Goodness of People had a strong negative correlation ( $r = -.70$ ) with trauma related cognition measured by the Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999). The CE, CPP, and SV subscales also had statistically significant negative correlations with the PTCI, with  $r = -.37$ ,  $-.27$ , and  $-.48$ , respectively. The full list of items on this scale can be found in Appendix C.

**Level of Familiarity Scale-Veterans (LOF-V).** The level of familiarity scale-veterans was used to measure how familiar participants are with veterans. The original

LOF scale was created by Holmes et al. (1999) for use in their stigma research. For the purpose of this study, the original scale was modified to measure level of familiarity with veterans. The scale consists of 11 items that ask the participants about their contact with individuals who have a mental disorder. Each item is ranked based on level of intimacy, with 11 being the highest level of intimate contact with an individual with mental illness (I have a severe mental illness), and 1 being the lowest (I have never observed a person that I was aware had a severe mental illness). Participants put a check mark next to all items on the list that they have experienced. Holmes et al. (1999) determined familiarity scores by using the score of the item the participant endorsed that had the highest level of intimacy ranking. For the purpose of this study all endorsed items were added together to create a single, continuous score of familiarity. For the original scales, Holmes et al. (1999) had three mental illness and psychiatric rehabilitation experts rank the items for level of intimacy, and found an inter-rater reliability for rank order correlations to be .83. Here are examples of items on this scale: I am a veteran (modified from I have a severe mental illness); A friend of the family is a veteran (modified from a friend of the family has a severe mental illness); I have observed veterans on a frequent basis (modified from I have observed persons with a severe mental illness on a frequent basis). The full scale can be found in Appendix D.

**Videos.** Two videos were made depicting actual combat veterans who had PTSD, one woman and one man. The video of the man was made using a video from YouTube (Atexasmw, 2012). The video of the woman was made with two videos found on YouTube (Department of Defense, 2011; Veterans Health Administration 2013). The videos of the woman were spliced and edited to make one video. The videos of the

veterans were edited to make them similar in length and content, with the focus being on the events that led to their developing PTSD, and their experience of PTSD symptoms. The completed videos were uploaded to YouTube. The video of the man can be found at [https://i.ytimg.com/vi\\_webp/\\_A14bsT8-to/mqdefault.webp](https://i.ytimg.com/vi_webp/_A14bsT8-to/mqdefault.webp). The video of the woman can be found at [https://i.ytimg.com/vi\\_webp/RIV3CwoNJCUC/mqdefault.webp](https://i.ytimg.com/vi_webp/RIV3CwoNJCUC/mqdefault.webp). While past studies have primarily used vignettes, this study used videos because it was believed they would convey the emotions of the veterans better than a vignette.

### **Procedure**

This study was done in classrooms with groups of participants. Participants were brought into a classroom in groups and randomly assigned to watch one of the videos. They were briefed on the study and asked to give informed consent. They were then given a packet that contained the questionnaires and questions regarding demographics. They filled out the demographic information and then completed the PTSD checklist, world assumption scale, and the level of familiarity scale. The WAQ and LOF-V were given prior to watching the video to ensure the video had no effect upon their responses. Upon completion of the initial questionnaires, participants were shown one of the two videos. After watching the video, participants completed the attribution questionnaire. Once they completed the final questionnaire, the packets were collected. They were then debriefed and thanked for their participation, and dismissed.

### **Data Analysis Plan**

A 2 (participant gender) x 2 (veteran gender) analysis of variance (ANOVA) was used to analyze Hypothesis 1, which assessed differences in stigmatizing attitudes between men and women. A 2 x 2 ANOVA was also used to assess Hypothesis 2, which

assessed if the man veteran was seen as more dangerous than the woman veteran, and Hypothesis 3, which assessed if the veterans were perceived as being to blame for their PTSD. In the ANOVA's, the first independent variable was gender of participant, and the second independent variable was the gender of the veteran in the video. The dependent variable was the amount of stigma participants attributed to the veteran in the video. Bivariate correlations were used to assess Hypothesis 4, which assessed the association between stigma and the world assumption of controllability of events. Bivariate correlations were used for Hypotheses 5 and 6, which assessed the relationship between stigma and familiarity with veterans, and Hypothesis 7, which assessed the relationship between PTSD symptoms and blame, dangerousness, fear, and pity.

## Results

To answer the research question of whether men and women veterans differ on the amount of stigma (fear, withholding help, segregation, anger, avoidance, and coercion) attributed to them for their combat-related PTSD, several 2 (participant gender) x2 (veteran gender) ANOVA's were computed. A probability level of .05 was used to determine statistical significance. Means and standard deviations are shown in Table 1. The total model for the stigmatizing attribution of fear was statistically significant,  $F(3,122) = 6.87, p < .001, R^2_{adj} = .123$ . A statistically significant main effect of veteran gender was found,  $F(1, 122) = 19.29, p < .001, \eta_p^2 = .137$  (partial eta squared), and had a medium effect size. The man veteran was feared more than the woman veteran. There was no main effect of participant gender and no statistically significant interaction between participant gender and veteran gender. The total model for the stigmatizing attribution for withholding help was not statistically significant,  $F(3, 122) = .922, p =$

.432. The total model for the stigmatizing attribution of segregation was statistically significant,  $F(3, 122) = 2.74, p = .063, R^2_{adj} = .040$ . A statistically significant main effect of veteran gender was found,  $F(1, 122) = 7.04, p = .009, \eta_p^2 = .055$ , and had a small effect size. Segregation was higher for the man veteran than for the woman veteran. There was no main effect of participant gender and no statistically significant interaction between participant gender and veteran gender. The total model for the stigmatizing attribution of anger was not statistically significant,  $F(3, 122) = 1.42, p = .240$ ; however, there was a statistically significant main effect of veteran gender,  $F(1, 122) = 4.25, p = .042, \eta_p^2 = .034$ , and had a small effect size. There was more anger towards the man veteran than the woman veteran. There was no main effect for participant gender and no statistically significant interaction. The total model for the stigmatizing attribute of avoidance was not statistically significant,  $F(1, 122) = .534, p = .660$ . The total model for the stigmatizing attribute of coercion was not statistically significant,  $F(1, 122) = .769, p = .514$ .

A 2 (participant gender) x 2 (veteran gender) ANOVA was computed to analyze data for Hypothesis 2, which assessed if the man veteran was seen as more dangerous than the woman veteran. A probability level of .05 was used to determine statistical significance. The overall model for dangerousness was statistically significant,  $F(1, 122) = 7.10, p < .001, R^2_{adj} = .128$ . Hypothesis 2 was supported, as there was a main effect for veteran gender,  $F(1, 122) = 19.10, p < .001, \eta_p^2 = .135$ , and had a medium effect size. The man veteran was perceived as more dangerous than the woman veteran. There was no main effect for gender of participant and no statistically significant interaction between gender of veteran and gender of participant.

A 2 (participant gender) x 2 (veteran gender) ANOVA was computed to analyze data for Hypothesis 3, which assessed if the veterans were believed to be to blame for their PTSD. An alpha level of .05 was used to determine significance. Hypothesis 3 was supported. The overall model for the stigmatizing attribute of blame was statistically significant,  $F(1, 122) = 4.07, p = .009, R^2_{adj} = .069$ , and had a small effect size. A main effect for veteran gender was found  $F(1, 122) = 5.51, p = .021, \eta_p^2 = .043$ , and had a small effect size. The woman veteran was blamed more than the man veteran. There was also a main effect for participant gender  $F(1, 122) = 6.38, p = .013, \eta_p^2 = .050$ . Men were more blaming towards the veterans than women. There was no statistically significant interaction between participant gender and veteran gender,  $F(1, 122) = 1.03, p = .313$ .

To determine the association between the world assumption of controllability of events and the stigmatizing attitude of blame addressed in Hypothesis 4, a hierarchical linear regression model was used in place of a bivariate correlation due to the gender effects found for blame. In this regression model, the prediction of controllability by blame was assessed after statistically controlling for gender. A probability level of .05 was used to determine statistical significance. Hypothesis 4 was not supported. The overall model was not statistically significant  $F(1, 124) = .670, p = .415, R^2_{adj} = -.003$ , and blame was not a statistically significant predictor of controllability ( $\beta = -.157, t(124) = -1.73, p = .086$ ).

Pearson bivariate correlations were used to assess the association between level of familiarity with veterans and the stigmatizing attitudes of anger, dangerousness, fear, blame, and pity addressed in Hypotheses 5 and 6, and the association between PTSD

symptoms and blame, pity, dangerousness, and fear. An alpha level of .05 was used to determine significance for all correlations. Correlations for these hypotheses are shown in Table 2. Hypothesis 5 was partially supported, as level of familiarity with veterans was found to have a statistically significant, negative correlation with anger, dangerousness, and fear. However, there was no statistically significant correlation found between level of familiarity with veterans and blame,  $r(119) = -.143, p = .110$ . Hypothesis 6 was not supported, as level of familiarity was found to have no significant correlation with pity,  $r(124) = .018, p = .842$ . Hypothesis 7 was not supported, as there were no statistically significant correlations between PTSD symptoms and blame, pity, dangerousness, and fear.

### **Discussion and Limitations**

The stigma of mental disorders has been widely studied, however, there is only limited research on the stigma of combat-related PTSD. There is also a gap in the research on the stigma of women combat veterans who experience PTSD as a result of combat trauma, as not many studies include women combat veterans. The aim of this study was to fill that gap by determining the extent to which both men and women combat veterans experiencing combat-related PTSD are stigmatized, and if men and women veterans experience different amounts of stigma. The results revealed the man veteran provoked more fear and anger, and there was a greater desire for segregation of the man veteran than the woman veteran. No differences were found between the veterans in the stigmatizing attitudes of coercion and avoidance. Consistent with Hypothesis 1, men were more blaming of both veterans than were women. However, apart from blame, men and women participants did not significantly differ in their

stigmatizing attitudes towards veterans. Consistent with Hypothesis 2, results revealed the man veteran was believed to be more dangerous than the woman veteran. Consistent with Hypothesis 3, the woman veteran elicited more blame than the man veteran. Inconsistent with Hypothesis 4, the world assumption of controllability of events was not correlated with blaming the veterans. Consistent with Hypothesis 5, higher levels of familiarity were associated with lower stigmatizing attitudes of anger, dangerousness, and fear. Inconsistent with Hypothesis 6, familiarity was not associated with blame or pity. Inconsistent with Hypothesis 7, the stigmatizing attitudes of blame, pity, dangerousness, and fear were not associated with PTSD symptoms.

The finding that the man veteran was perceived to be more dangerous than the woman veteran was consistent with previous research, where men with mental disorders were perceived to be more dangerous than women with mental disorders (Pescosolido et al., 1999). Women in this study blamed the veterans less for their condition than did men, which was consistent with previous research in which women felt an individual with a mental disorder was less responsible for their disorder than did men (Holzinger, 2012).

Segregation was higher for the man veteran than for the woman veteran, indicating participants had more of a desire to separate the man veteran from the community than the woman veteran. However, because avoidance was not higher for the man veteran than the woman, avoidance does not appear to have been a factor in the desire for segregation. The higher perception of dangerousness, and anger/fear provocation from the man veteran may be factors that contributed to a higher belief in segregation for the man veteran as opposed to the woman veteran. Past research has

found that fear is positively associated with the desire for segregation (Corrigan et al., 2003). Another factor that may have contributed to this are the items in the segregation scale itself, which focus on segregating the man from the community in order to get treatment. Segregation may have been higher for the man veteran if participants believed he needed treatment more than the woman veteran.

Interestingly, the woman veteran received more blame for her combat-related PTSD than did the man veteran. This finding is in line with research on rape victims, in which women rape victims are more likely than men rape victims to be perceived as being at fault for their victimization when they engaged in an incautious behavior, while that same behavior may be considered legitimate for a man (Pollard, 1992). In following this line of thinking, being at war may be considered acceptable behavior for a man, as men have always served in the military and fought in wars. However, the presence of women in combat and in the military in general has been rarer, and this behavior in women (their service) may be considered more dangerous, or more incautious, so women may be seen as more to blame for their PTSD.

There are a couple of other factors that may have also contributed to the woman veteran receiving more blame. Past research has found more blame towards an individual for their mental disorder when the cause of the disorder was considered controllable. The United States military is an all-volunteer force, and there is some understanding when an individual enlists that they may see hazardous duty during their enlistment. The woman video was of a combat photographer who was in Iraq. Her job was to take pictures of the various missions her unit participated in, whether peaceful or involving combat. She may have received more blame because she chose a job that may have been perceived as

dangerous, which may have led participants to believe that because she chose it, she was responsible for her trauma. While these factors may have contributed to the woman receiving more blame, additional research into this area is required to better determine the cause of this response, to determine how to approach and combat this stigma for women veterans. This is particularly important given the increasing presence of women in the military, and the opening up of combat and infantry roles to women. What is of particular concern is that being blamed may affect a woman's willingness to seek treatment for her PTSD because if she feels like she will be blamed, she may not want to admit she is having difficulties. Past studies of combat veterans from Iraq and Afghanistan have found that 51% of combat veterans who met screening criteria for a mental disorder did not want to seek treatment because they felt others would blame them for their problems, and 65% felt others would view them as weak (Hoge et al., 2004).

In addition to the woman veteran being blamed more than the man veteran, men participants were more blaming towards both veterans than women participants, which is consistent with previous research in that men place more blame on an individual with a mental disorder than women (Holzinger et al., 2012). There was no statistically significant interaction between gender of participant and gender of veteran. This may have been due to the size of the sample, which may not have been large enough to detect a significant interaction, as well as there being more men than women participants.

Apart from blame, men and women did not significantly differ in their stigmatizing attitudes towards veterans. Consistent with previous research, men and women were similar in their ratings of dangerousness (Holzinger et al., 2012). The finding that men and women were not different in their ratings of fear and anger was

inconsistent with previous findings in which women had less anger and more fear than men (Holzinger et al., 2012). There are several reasons that may explain why the finding that men and women were not different in their ratings of fear and anger is not consistent with previous research. One reason may be because there were more men than women in this study. In an ANOVA, when cell sizes are unequal, there can be a loss of statistical power, which reduces the likelihood of detecting a difference if one exists. Had the cell sizes been equal, there may have been a higher chance of detecting a difference, if it exists. Another reason is because this study was not just about individuals with PTSD, but about veterans with PTSD. A Gallup poll in 2001 showed 73% of veterans reported feeling they receive the respect and appreciation they feel they have earned for their service, indicating that currently in the U. S., veterans tend to be respected and supported for their service to their country (Saad, 2002). Members of the military are thought to, and expected to protect the country and its people. When an individual is labeled as both a veteran and as an individual with PTSD, this may bring about conflicting appraisals with regards to stigma. The protection that veterans are thought to afford their country may be why women did not indicate more fear of the veterans than did men; they may not be fearful of a person who they believe would protect them. Another factor that may contribute to this is the increasing presence of veterans' health issues in the media, specifically the recent corruption in Veterans Health Administration hospitals (Saad, 2014). A Gallup poll in 2014 stated that 87% of Americans polled believed it was extremely or very important to improve the provision of healthcare services to veterans, indicating that the population is aware of the health issues veterans face (Saad, 2014).

As predicted and consistent with previous research, level of familiarity with veterans was negatively correlated with anger, fear, and dangerousness (Angermeyer & Matschinger, 1996; Boyd et al., 2010; Corrigan et al., 2001). When an individual was more familiar with veterans, they feared them less, had less anger toward them, and thought they were less dangerous. This finding is also consistent with the findings of anti-stigma program research, in that contact with an individual with a mental disorder reduces the belief of dangerousness (Corrigan et al., 2002). The finding that familiarity was not associated with blame was inconsistent with previous research by Boyd et al. (2010). This may be due to the difference in type of contact measured; while this study looked at familiarity with veterans, Boyd et al. measured contact with a person hospitalized for a psychiatric condition. With this sample, familiarity with veterans did not necessarily mean familiarity with combat-related PTSD because not all veterans have been in combat, nor do all veterans have PTSD. However, the finding that familiarity was not associated with pity is consistent with results from Boyd et al., where contact was not associated with sympathy.

In regards to PTSD symptom severity, experiencing PTSD symptoms would suggest an increased familiarity with PTSD (or mental disorders in general). However, consistent with previous research, PTSD symptoms were not correlated with pity (Boyd et al., 2010) or fear (Corrigan et al., 2001). Inconsistent with previous research were the findings that PTSD symptoms were not correlated with blame (Boyd et al., 2010) or dangerousness (Corrigan et al., 2010). In this sample, the overall amount of PTSD symptom experience was low which may have resulted in a range restriction; this may

explain the lack of an association between PTSD symptoms and dangerousness and blame.

The world assumption of controllability of events had no association with the stigmatizing attribution of blame. Because no other studies were found to have examined how world assumptions were associated with stigmatizing attitudes, the prediction that there would be an association was based on studies that assessed the perceived amount of controllability of the mental disorder and blame. Those studies showed when an individual believed a mental disorder was under the control of that individual, they received more blame (Corrigan et al., 2003; Weiner et al., 1998). This study assessed how much an individual believed that the events that happened to them were under their control. While an individual may believe they control what happens to them, they may have a different belief for others, which may explain why controllability was not correlated with blame in this sample.

Because many findings are consistent with those from the research on other mental disorders, programs aimed at increasing familiarity with veterans and the symptoms and experience of combat related PTSD through frequent contact with veterans may help to decrease stigma (Corrigan, 2011). Corrigan has also found that talking about the effects of stigma on individuals with mental disorders, along with providing messages of recovery, has been effective at reducing stigma, and may also work for veterans. Reducing stigma for combat veterans is important because stigma has been found to be a barrier to treatment. In the case of men veterans, because the military exhibits a culture of masculinity in general, and mental illness within the military has been considered to be a sign of weakness, men veterans may be less inclined to seek

treatment if they are worried that their fellow service members and superiors will view them as weak. Additional stigma from the general public may further reduce their willingness to seek treatment. In the case of women veterans, developing programs aimed at increasing familiarity with women veterans and their experiences, and reasons behind their choice of enlisting in the military, which is likely similar to that of men (such as feeling a call to serve their country), may help to decrease stigma, particularly that of blame. Veterans have a unique skill set due to their military experiences, skills that can be valuable to society, but symptoms of PTSD may leave them unable to function well in society. It is important for veterans to seek treatment for their PTSD symptoms in order to lessen symptom severity, improve functioning, and minimize other negative effects, such as effects on physical health.

There are limitations to this study which may affect the results and the generalizability of those results. One limitation is there were more men than women, which may have affected the ability to detect certain gender differences in stigmatizing attitudes. Also, this study sampled undergraduates from a Midwestern university, which may affect the generalizability to other populations. The sample size was on the small side, with only 126 participants. Future studies should include a larger and more diverse sample, with a more equal number of men and women participants.

This study used videos depicting veterans as opposed to the vignettes that have been typical of stigma research. This approach was used because it was believed that watching a veteran talking about their experience of PTSD would be more impactful for participants. The videos were made from pre-existing videos, and although they were edited so that the man and woman veteran spent a similar amount of time talking about

their experiences leading to their PTSD as well as their experience of symptoms, there were differences in symptom expression. Each veteran's experience of PTSD was different, and while those experiences were true to life, demonstrating how symptom presentation can differ between men and women, as well as from person to person, these differences may have elicited different responses from participants. This needs to be taken into account when considering the results. Future studies into this area that choose to use videos should try to use veterans whose experiences were similar. They could also evaluate written vignettes versus video use to determine if one is more impactful than the other.

Future research in this area should focus on blame, particularly in the case of women veterans, to determine what factors may contribute to the woman being blamed more so that this stigma may be addressed. Because the blaming of women veterans is in line with the victim blame commonly found in sexual assault research, conducting studies based on the victim blame perspective may help to determine those factors that result in blaming women veterans more than men. Segregation could also be looked at for men veterans, to determine what causes it. In this study, questions related to segregation focused on hospitalizing the veteran to keep him apart from the community while he received treatment. Because of that focus, the wish for segregation may be more about wanting the man to get treatment. Additional research would help determine if the wish for segregation is for purposes of treatment, or if other factors are contributing to this, such as wishing to keep a man veteran away from a community due to perceptions of dangerousness.

Future studies could also focus on stigmatizing attitudes within the military and veteran population. This study focused on attitudes of the general public and likely would not generalize to veterans and members of the military. Individuals suffering from combat-related PTSD may be hesitant to seek treatment for their symptoms if they feel they will be stigmatized by their fellow service members. To determine how best to address the stigma, we need to know how and why military members stigmatize mental illness. By seeking early treatment while still in the military, service members may minimize the long term effects that PTSD may have on their social, occupational, and other areas of functioning, as well as the effects on relationships and physical health.

Table 1

*Differences in Stigmatizing Attitudes Towards Veterans By Men and Women*

Stigma	Man Veteran <i>M (SD)</i>	Woman Veteran <i>M (SD)</i>	Men <i>M (SD)</i>	Women <i>M (SD)</i>
Blame	2.66 (1.25)	3.21 (1.60)	3.18 (1.46)	2.61 (1.37)
Pity	6.44 (1.51)	6.55 (1.80)	6.28 (1.72)	6.75 (1.54)
Help	2.67 (1.54)	2.67 (1.48)	2.79 (1.48)	2.51 (1.54)
Anger	2.26 (1.49)	1.74 (1.29)	2.03 (1.46)	2.00 (1.38)
Dangerousness	2.94 (1.68)	1.76 (1.18)	2.51 (1.71)	2.21 (1.38)
Fear	2.60 (1.69)	1.47 (0.99)	2.13 (1.63)	1.97 (1.34)
Avoidance	3.22 (1.90)	2.88 (1.62)	3.00 (1.80)	3.13 (1.75)
Segregation	2.26 (1.65)	1.57 (1.06)	2.03 (1.54)	1.81 (1.31)
Coercion	4.13 (1.54)	3.80 (1.67)	3.88 (1.61)	4.09 (1.54)

Table 2

*Correlations Between Level of Familiarity Scores and Attributions*

	Blame	Anger	Danger	Fear	Pity
LOF-V Total	-.143	-.328**	-.343**	-.383**	.018
PCL5 Total	.020	.165	.098	.076	-.062

*Note.* \*\*  $p < .001$ .

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## APPENDIX

## Appendix A

### PCL-5 Items

1. Repeated, disturbing, and unwanted memories of the stressful experience?
2. Repeated, disturbing dreams of the stressful experience?
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?
4. Feeling very upset when something reminded you of the stressful experience?
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?
6. Avoiding memories, thoughts, or feelings related to the stressful experience?
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?
8. Trouble remembering important parts of the stressful experience?
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?
10. Blaming yourself or someone else for the stressful experience or what happened after it?
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?
12. Loss of interest in activities that you used to enjoy?
13. Feeling distant or cut off from other people?
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?
15. Irritable behavior, angry outbursts, or acting aggressively?
16. Taking too many risks or doing things that could cause you harm?
17. Being “superalert” or watchful or on guard?
18. Feeling jumpy or easily startled?
19. Having difficulty concentrating?
20. Trouble falling or staying asleep?

## Appendix B

### Attribution Questionnaire Items

1. I would feel aggravated by this veteran.
2. I would feel unsafe around this veteran.
3. This veteran would terrify me.
4. How angry would you feel at this veteran?
5. If I were in charge of this veteran's treatment, I would require him/her to take their medication.
6. I think this veteran poses a risk to his/her neighbors unless they are hospitalized.
7. If I were an employer, I would interview this veteran for a job.
8. I would be willing to talk to this veteran about their problems.
9. I would feel pity for this veteran.
10. I would think that it was this veteran's own fault that he/she is in their present condition.
11. How controllable, do you think, is the cause of this veteran's present condition?
12. How irritated would you feel by this veteran?
13. How dangerous would you feel this veteran is?
14. How much do you agree that this veteran should be forced into treatment with his/her doctor even if they do not want to?
15. I think it would be best for this veteran's community if he/she were put away in a psychiatric hospital.
16. I would share a car pool with this veteran every day.
17. How much do you think an asylum, where this veteran can be kept away from his/her neighbors, is the best place for him/her?
18. I would feel threatened by this veteran.
19. How scared of this veteran would you feel?
20. How likely is it that you would help this veteran?
21. How certain would you feel that you would help this veteran?
22. How much sympathy would you feel for this veteran?
23. How responsible, do you think, is this veteran for his/her present condition?
24. How frightened of this veteran would you feel?
25. If I were in charge of this veteran's treatment, I would force him/her to live in a group home.
26. If I were a landlord, I probably would rent an apartment to this veteran.
27. How much concern would you feel for this veteran?

## Appendix C

### World Assumption Items

1. Most people can be trusted.
2. I don't feel in control of the events that happen to me.
3. You usually can know what is going to happen in your life.
4. It is difficult for me to take most of what people say at face value.
5. It is very difficult to know what others are thinking. .
6. Anyone can experience a very bad event.
7. People often behave in unpredictable ways.
8. People are less safe than they usually realize.
9. For the most part, I believe people are good.
10. I have a great deal of control over what will happen to me in my life.
11. You never know what's going to happen tomorrow.
12. Other people are usually trustworthy.
13. People's lives are very fragile.
14. It is hard to know exactly what motivates another person.
15. Most people cannot be trusted.
16. People fool themselves into feeling safe.
17. It is hard to understand why people do what they do.
18. Most of what happens to me happens because I choose it.
19. Terrible things might happen to me.
20. It is ultimately up to me to determine how events in my life will happen.
21. It can be very difficult to predict other people's behavior.
22. What people say and what they do are often very different things.

## Appendix D

### Level of Familiarity –Veterans

- I have watched a movie or television show in which a character depicted was veteran.
- My job involves providing services/treatment for veterans.
- I have observed, in passing, a person I believe may be a veteran.
- I have observed veterans on a frequent basis.
- I am a veteran.
- I have worked with a veteran at my place of employment.
- I have never observed a person that I was aware was a veteran.
- A friend of the family is a veteran.
- I have a relative who is a veteran.
- I have watched a documentary on television about veterans.
- I live with a person who is a veteran.