8-2019

Self-Compassion and Suicide Risk in Veterans: Serial Effects of Shame, Guilt, and PTSD

Jessica McKinney
East Tennessee State University

Self-Compassion and Suicide Risk in Veterans: Serial Effects of Shame, Guilt, and PTSD

A dissertation

presented to

the faculty of the Department of Psychology

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Philosophy in Psychology

---

by

Jessica McKinney

August 2019

Jameson K. Hirsch, Ph.D., Chair

Julia Dodd, Ph.D.

Diana Morelen, Ph.D.

Stacey Williams, Ph.D.

Keywords: Suicide, Self-Compassion, Shame, Guilt, PTSD, Veterans

ABSTRACT

Self-Compassion and Suicide Risk in Veterans: Serial Effects of Shame, Guilt, and PTSD

by

Jessica McKinney

Suicide is a significant public health concern and ranks as the 10th leading cause of death in the U.S. Veterans are at a disproportionately higher risk for suicide, due to risk factors such as exposure to trauma and its negative cognitive-emotional sequalae, such as PTSD, shame, and guilt. However, not all veterans exposed to traumatic events, or who experience shame and guilt, die by suicide, perhaps as a result of the presence of individual-level protective factors such as self-compassion. Conceptualized as self-kindness, mindfulness and common humanity, self-compassion is beneficially associated with mental and physical health, including reduced suicide risk. We examined the potential serial mediating effects of shame/guilt, separated into two models, and PTSD in the relation between self-compassion and suicide risk in a sample of U.S. veterans (N = 317). Participants in our IRB-approved study provided informed consent and completed the Self-Compassion Scale - Short Form, Differential Emotions Scale-IV, PTSD Checklist-Military Version (PCL-M) for DSM-IV, and Suicidal Behaviors Questionnaire - Revised (SBQ-R). Supporting hypotheses, shame/guilt and PTSD, and PTSD alone, mediated the relation between self-compassion and suicide risk, but shame/guilt alone did not. Our results remained significant when covarying depressive symptoms. Therapeutic interventions such as Mindful Self-Compassion and Compassion-Focused Therapy may increase self-compassion and ameliorate negative cognitive-emotional sequelae, including suicide risk, in veterans.

ACKNOWLEDGMENTS

I want to express my sincerest appreciation and gratitude to those individuals who have helped me throughout this process. First, I would like to thank my advisor, Dr. Jameson Hirsch, for guiding, supporting, and advocating for me throughout this program in my academic, research, and clinical pursuits. I would also like to thank my committee, Drs. Williams, Dodd, and Morelen, for not only serving on my committee but also for being open and willing to provide guidance throughout my academic career.

I would also like to thank my peers and colleagues from the program. Without your friendship, humor, wisdom, and unending support, I would not have made it this far. You all made this time in my life some of the best and most memorable.

Finally, and most importantly, I want to thank my parents and brother for always providing unconditional love and support for me throughout this process, during both the most rewarding and difficult times. Your examples of perseverance and discipline have helped shape me and my success in this discipline.

TABLE OF CONTENTS

Page

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER 1

INTRODUCTION

Suicide is a significant public health concern, both globally (World Health Organization [WHO], 2016) and in the United States (American Association of Suicidology [AAS], 2014). Defined as the act of deliberately killing one's self, suicide ranks as the 10th leading cause of death in the U.S., with most recent reports citing over 40,000 suicides in 2014 (Drapeau & McIntosh, 2015). Suicide risk (i.e., ideation and attempts) is also a major concern, as it is a strong predictor of eventual death by suicide and is more prevalent than suicide (WHO, 2016). For military personnel and veterans, the risk for suicide is even greater. For instance, of the over 40,000 suicides in 2014, 18% were comprised of veterans, despite the fact that veterans account for only 8% of the U.S. population (Hoffmire, Kemp, & Bossarte, 2015; U.S. Census Bureau, 2016; Veterans Affairs Office of Suicide Prevention [VA OSP], 2016).

Risk factors for suicide, for the general population, are also shared with the veteran population and include depression, anxiety, and chronic pain, among other risk factors (Finley et al., 2015; McLean et al., 2017). However, veterans may be at heightened risk for suicide due to military-specific factors, including increased exposure to trauma (i.e., military sexual trauma, combat) that may lead to the development of negative cognitive-emotional factors (e.g., shame, guilt), or posttraumatic stress disorder (PTSD). Shame and guilt, in addition to PTSD symptoms, are associated with suicide risk and death by suicide in veteran samples (Litz et al., 2009; Wisco et al., 2017). However, not all veterans who experience these negative symptoms also engage in suicidal behavior (i.e., ideation, planning, attempts) or report heightened suicide risk, perhaps due to the presence of individual-level protective characteristics, such as self-compassion.

Self-compassion involves responding to oneself in a caring and helpful manner in times of agony or distress, such as that experienced after a negative life event or trauma (Neff, 2003b). Veterans who experience a traumatic event may develop high levels of shame and guilt, which are conceptualized differently. Guilt occurs when one takes responsibility for and views one's action or inactions during a negative or traumatic event as bad and, thus, experiences subsequent remorse or regret. Shame focuses on the global perception of self, rather than just an action or inaction committed by the self, and involves extreme and painful self-scrutiny, causing the individual to withdraw and hide one's perceived horrible self from others (Lewis, 1971; Tangney & Dearing, 2002). However, veterans who respond to such experiences and evaluations with self-compassion may decrease their chances of developing guilt and/or shame, as they may be more understanding toward themselves, rather than judgmental of their potential role in a distressful or traumatic event (Neff 2003a; Neff, 2003b). This ability to be kinder to, and less critical of, the self may have the potential to thwart the development, or reduce the severity, of PTSD symptoms. Another component of self-compassion, mindfulness, may facilitate the release of self-critical thoughts and the relinquishment of feelings of over-responsibility, including shame and guilt, for consequences following a negative or traumatic event. Finally, acknowledging a sense of common humanity, that others experience similar hardships, may facilitate healing and bonding with others, in the knowledge that one is not alone. However, few studies to date have examined the association between self-compassion and suicide, or the potential roles of shame/guilt and PTSD as mechanisms that might explain their linkage.

In our proposed study, we will examine the relation between self-compassion and suicide risk, and the potential serial mediating roles of shame/guilt and PTSD. That is, we will

investigate whether the beneficial impact of self-compassion on suicide risk occurs directly or indirectly via the sequential amelioration of shame/guilt and PTSD symptom severity.

Suicide

In the U.S., in the general population, approximately 93 persons died by suicide per day in 2014, an increase compared to 62 deaths by suicide per day in 2001 (Center for Disease Control [CDC], 2015). Prevalence of suicidal ideation in U.S. adults is 3.9% within the past year in 2013 (CDC, 2015), while lifetime prevalence ranges between 5.6 and 14.3% (Crosby, Han, Ortega, Parks, & Gfroerer, 2011; Nock, Borges, Bromet, Cha, Kessler, & Lee, 2008). Finally, an estimated 2.7 million adults (1.1%) made a plan to attempt suicide within the past year and 1.3 million (0.6%) attempted suicide (CDC, 2015), with lifetime estimates for planning and attempts reaching 3.9% and 1.9-8.7%, respectively (Crosby et al., 2011; Nock et al., 2008).

Disparities in suicide rates also exist, across sex, age, and race, as well as among other demographic groups (e.g., sexual orientation). For instance, women are three times more likely to attempt suicide and slightly (6.8 vs 8.1%) more likely to have suicidal thoughts within the past 12 months compared to men (CDC, 2015; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). However, men are approximately four times more likely to die by suicide compared to women (age-adjusted rate 20.7 versus 5.8, respectively) (CDC, 2015; Sullivan, Annest, & Luo, 2013). When examining age disparities, older adults age 85 and older are at highest risk for suicide, with middle-aged adults following (age 45-64). However, intersectional data shows that middle-aged women age 45-64 were at highest risk for suicide in 2014 and older women (75 and older) were at lowest risk, while, in men, those age 75 and older were at highest risk and those 18-24 at lowest risk (CDC, 2015). Regarding ethnic/racial differences, American Indian/Alaska Natives (AIAN) are the most vulnerable racial group; for

example, both men and women in this racial group have higher rates of suicide compared to their counterparts in other racial groups, and suicide was the leading cause of death in AIAN 10-34-year olds, in 2015 (Curtin, Warner & Hedegaard, 2016).

Epidemiology of Suicide in Veterans

In comparison, the veteran population has rates of suicide that are disproportionately higher than those of the civilian population. For instance, in 2014, veterans had a rate of suicide 21% higher than that of civilian adults, after covarying age and sex (VA OSP, 2016). As well, from 2001 to 2014, the age-adjusted rate of suicide for veterans was approximately 31%, compared to 25% in civilians (VA OSP, 2016). Between 3.8 and 24% of veterans across eras endorse suicidal ideation annually, and approximately 2% of veterans endorse suicide attempts during a 12-month period, with rates reaching up to 24% in psychiatric veteran populations (Ashrafioun, Pigeon, Conner, Leong, & Oslin, 2016; Guerra & Calhoun, 2011; Lemaire & Graham, 2011; Pietrzak et al., 2010). Veteran suicide deaths are also marked by differences across demographic groups, including based on age, era of service, sex, and use of Veterans Health Administration (VHA) services. For example, rates of suicide among younger veterans, ages 18 to 29, are twice that of all other age groups, with rates of 88 per 100,000 in male veterans and 33 per 100,000 in female veterans (VA OSP, 2016). However, the number of suicides among male veterans aged 50 years or older was the highest of all age groups, accounting for 65% of veteran suicide deaths. In 2014, approximately 700 veterans, ages 18 to 29, died by suicide, whereas there were 4,550 male veterans who died by suicide, who were age 50 and older. This discrepancy may be explained by older veterans accounting for the majority of veterans, leading to higher numbers, but younger veterans are dying by suicide more frequently and in greater numbers in proportion to all age groups (Kang & Bullman, 2008).

Suicide risk may also differ across sex/gender groups; for instance, the rate of suicide in male veterans was 37 per 100,000 veterans, and for females was 18.9 per 100,000, in 2014 (VA OSP, 2016). Compared to age-adjusted rates in 2001, by 2014, suicide risk increased by 30.5% for male veterans, and by 85.2% for female veterans (VA OSP, 2016). Although male veterans are at higher risk for suicide than female veterans, female veteran suicide rates are higher compared to their civilian counterparts, potentially due to increased risk of sexual assault and exposure to combat (McCarten, Hoffmire, & Bossarte, 2015). In past research, for instance, 81 to 93% of female veterans experience a traumatic event, compared to 51 to 69% of civilian women (Zinzow, Grubaugh, Monnier, Suffoletta-Maierle, & Frueh, 2007). Although these same factors help explain the difference between veteran and civilian male suicide rates, previous research indicates that limitation of activity due to trauma exposure (i.e., physical injuries) may be a primary factor differentiating veteran from civilian male suicide risk (Kaplan, Huguet, McFarland, & Newsom, 2007). In addition to biological sex, gender identity and sexual minority status may contribute to suicide risk in veterans, due to a general lack of support and climate of victimization. For example, in a study by Blosnich, Bossarte, and Silenzio (2012), 11.48% of sexual minority veterans endorsed suicidal ideation, compared to 3.48% of heterosexual veterans in the past year. In a transgender veteran sample, 57% endorsed past-year suicidal ideation and 66% endorsed a history of suicide plan or attempt (Lehavot, Simpson, & Shipherd, 2016).

Differences in rates of suicide risk may also be due, in part, to individual usage of VHA health and mental health services. As an example, from 2001 to 2014, the rate of suicide among VHA users increased by 8.8%, while the rate among non-VHA users increased by 38.6%. Despite overall non-VHA rates being higher compared to VHA rates, there are intersectional differences. For instance, much of the increase for non-VHA users is explained by female

suicide rates, which increased by 80.9% (VA OSP, 2016). Barriers to care for female veterans may include perceived lack of sensitivity to women's health issues, lack of transportation, and inability to get time off of work or from family to seek services (Runnals et al., 2014). However, when examining suicide rates in male VHA utilizers, compared to male non-VHA utilizers, in 2014, those who utilized VHA services were 24% more likely to die by suicide than non-VHA utilizing veterans (VA OSP, 2016). This pattern is not present for female veterans, however. A potential explanation for this VHA-based increase in suicide risk for male veterans may be that, those veterans who seek VHA services are more likely to be distressed and to have comorbid diagnoses that increase risk for suicide (Conner et al., 2013).

General Risk Factors for Suicide

Risk factors for suicide have been extensively examined in the general population, with studies highlighting various categories including, but not limited to: cognitive-emotional factors (e.g., hopelessness, anger), psychopathology (e.g., mood disorders), life events (e.g., trauma, adverse childhood events), historical factors (e.g., previous suicide attempts, family history of mental illness), environmental factors (e.g., access to firearms), individual factors (e.g., sex and age), and social factors (e.g., low socioeconomic status, disrupted interpersonal needs) (Bostwick, Pabbati, Geske, & McKean, 2016; de Mattos Souza, Lopez, da Silva, & Jansen, 2016; Kposowa, Hamilton, & Wang, 2016; Rajalin, Hirvikoski, & Jokinen, 2013; Van Orden et al., 2010).

Models of suicide examining cognitive-emotional factors have not only found basic associations between these factors and suicide, but also potential underlying mechanisms. For example, anger is related to suicide in civilian populations, perhaps due to increased levels of impulsivity and emotional disruption characteristic of this emotion (Ammerman, Kleiman, Uyeji,

Knorr, & McCloskey, 2015; Daniel, Goldston, Erkanli, Franklin, & Mayfield, 2009). Depression has also been repeatedly linked to suicide in the literature, with potential underlying mechanisms including decreased executive functioning and poor future planning (Hirsch et al., 2006; Marzuk, Hartwell, Leon, & Portera, 2005), use of substances (Østergaard, Nordentoft, & Hjorthøj, 2017), and increased hopelessness (Hawton, Comabella, Haw, & Saunders, 2013).

Historical factors are also associated with increased suicide risk. Individuals with family history of mental illness are at heightened risk for suicide due to potential risk of developing mental illness (Qin, Agerbo, & Mortensen, 2002) and exposure to stressors (i.e., disrupted family relationships) (Holland, Vivolo-Kantor, Logan, & Leemis, 2017). Previous trauma exposure is also related to increased suicide risk via development of PTSD and other disorders (e.g., depression) (Ramberg, Stanley, Ystgaard, & Mehlum, 2015). Finally, previous suicide attempts are also related to heightened suicide risk, as these individuals may still be struggling with distress that led to their first attempts (Suominen, Isometsä, Ostamo, & Lönnqvist, 2004). Along with historical factors, adverse childhood experiences are also related to suicide, potentially due to increased risk of aggression development, maladaptive personality development, and development of psychopathology (Perez, Jennings, Piquero, & Baglivio, 2016).

Many of these civilian-identified risk factors for suicide have also been confirmed as risk factors for the veteran population. For instance, veterans are 58% more likely to die by suicide with the use of a firearm, as they often have more familiarity with, and accessibility to, firearms, compared to civilian counterparts (Kaplan et al., 2007), and not unlike rural civilians (Lu, Woodside, Chisholm, & Ward, 2014). With regard to psychosocial and psychopathological risk factors, veterans who score higher on, for instance, measures of hopelessness and depression, report increased risk for suicide (May, Overholser, Ridley, & Raymond, 2015) and exposure to

previous stressors in childhood also increased risk for suicidal behavior (Carroll, Currier, McCormick, & Drescher, 2017). Despite a similarly broad base of risk factors between civilians and military personnel, previous research also notes the existence of unique risk factors for suicidal behaviors among military and veteran populations.

Risk Factors for Suicide in Veterans

Veterans may be at increased suicide risk due to experiences and stressors specific to military careers. For instance, there may be a lack of stability, in that soldiers must adapt to separation from family and friends during training and deployments, and during changes in duty station across the U.S. or world. As well, an acculturation process occurs as soldiers adapt from civilian to military lifestyles and, for some, a shift from the end of childhood into adulthood (Burrell, Adams, Durand, & Castro, 2006). Such transitional periods for identity and relationships may be disrupted as military personnel strive to navigate the social norms that differ between civilian and military cultures (Elnitsky, Fisher, & Blevins, 2017). Indeed, in a study by Ursano et al. (2016), soldiers were at the highest risk for suicide (102 per 100,000) following basic training and while transitioning into their military occupational specialties.

In addition to such transitional changes, more intense, military-based stressors may also contribute to suicide risk. For instance, active duty personnel endure stressors related to basic and advanced training, and general strain from their military occupational specialty (Jackson, Agius, Bridger, & Richards, 2011), including, but not limited to, cognitive and physical fatigue, decreased sleep, and emotional stress resulting from separation from family. Active duty personnel are also at higher risk for exposure to traumatic events, particularly during training and combat, such as witnessing harm of fellow soldiers and/or civilians, or experiencing verbal, physical or sexual abuse from supervisors and peers. Many veterans suffer from psychological

(e.g., depression, alcohol abuse) and physical (e.g., traumatic brain injuries) injuries after engagement in, or witnessing events related to, combat and deployment (LeardMann et al., 2013; Tanelian & Jaycox, 2004).

The most commonly studied and discussed risk factors for suicide in veterans are those that are associated with trauma exposure both in and out of combat. Specifically, negative cognitive-emotional functioning, including the presence of shame and guilt, which are often inter-related (Beck et al., 2011; Dyer et al., 2017), and the development of PTSD, are commonly experienced by veterans after exposure to traumatic events (Hoge & Warner, 2014; Litz et al., 2009; Maguen et al., 2012). Indeed, it is estimated that between 19.1% and 24% of individuals exposed to a traumatic event endorse guilt and/or shame afterward (Carmassi et al., 2017; Feiring & Taska, 2005). Although the basic relations between trauma, psychopathology and suicide risk are well established in veterans, their linkage to self-compassion, as well as their potential ordering effects have not been thoroughly examined. In theory, and in non-veteran samples, however, there is some precedent for ordering effects; for instance, with cognitive-emotional factors (i.e., shame and guilt) playing a role in the development and exacerbation of PTSD, after the experience of a trauma.

Shame and Guilt**.** After exposure to a traumatic event, and depending on the nature of the trauma, veterans, as well as other individuals, may experience changes to their cognitive-emotional functioning, including perceptions of shame and guilt (Gaudet, Sowers, Nugent, & Boriskin, 2016; Pugh, Taylor, & Barry, 2015). Shame and guilt, although frequently discussed in tandem, are conceptualized and experienced differently. Shame refers to the global negative evaluation an individual makes toward one's self and may include, among other self-evaluations, perceptions of inferiority, worthlessness, and helplessness (Lewis, 1971; Tangney & Dearing,

2002). On the other hand, guilt involves feelings of regret, tension, and remorse for an action committed or omitted, either intentionally or unintentionally, that goes against one's moral beliefs (Lewis, 1971; Tangney & Dearing, 2002). Another way of viewing the distinction between the two is that shame may be expressed as "I am bad," whereas guilt may be expressed as "I did a bad thing" (Tangney & Dearing, 2002). The direction of attention differs between the two: shame focuses on the individual, while guilt emphasizes the behavior (Kim, Thibodeau, & Jorgensen, 2011).

Shame is typically conceptualized as an intrapersonal, cognitive-affective state in which one over-internalizes flaws and perceives defects to be unique to one's self (Lewis, 1971; Tangney & Dearing, 2002). Yet, there is also an interpersonal component to shame, as these perceived imperfections and negative traits are viewed through the lens of society; that is, shame involves a comparison of one's own behaviors to societal norms and, when they do not match, perceived ostracization and self-imposed isolation may occur, as a means of avoiding further perceived criticism (Tangney & Dearing, 2002). As such, shame may be implicated in the development of negative cognitive-emotional (i.e., PTSD) and health outcome factors (i.e., suicide risk), since it ultimately hyper-focuses on negative (real or perceived) aspects of the self and is often accompanied by intense, negative emotions (e.g., anger, self-disgust; Kim, Thibodeau, & Jorgensen, 2011; Parker & Thomas, 2009).

Guilt, on the other hand, is predominantly conceptualized as an interpersonal cognitive-affective state, as one demonstrates "other-oriented concern" when experiencing it (Kim, Thibodeau, Jorgensen, 2011; Tangney & Dearing, 2002). For example, an individual who feels guilt may ruminate about perceived bad behavior inflicted on others, thereby contributing to increased levels of distress (e.g., nightmares associated with PTSD) (Hendin, 2014). Like shame,

guilt is comprised of negative emotions (i.e., remorse, regret), yet may manifest in either a maladaptive or adaptive manner. As with shame, guilt may impact an individual's core sense of self, as a result of a hyper-focus on perceived responsibility for an action/inaction and its negative consequences. Alternatively, guilt may serve a constructive function, as a motivator, contributing to seeking forgiveness, atonement, and reconciliation (Parker & Thomas, 2009). Given its potential for constructive utilization, the person experiencing guilt, as compared to shame, may be able to develop positive cognitions about the self (i.e., thoughts of being able to take corrective action), experience adaptive affect (i.e., empathy), and engage in positive behaviors (i.e., socialization; reparative action). In contrast, shame involves cognitive perceptions of worthlessness, negative affectivity (e.g., anger), and behavioral avoidance (e.g., withdrawal from others) (Parker & Thomas, 2009). Such differences may be, in part, why shame is sometimes viewed as a more-intense, and negative, emotion than guilt (Kim, Thibodeau, & Jorgensen, 2011).

Indeed, previous research has highlighted differential effects of shame and guilt. For instance, shame is related to negative health outcomes including depression and anxiety (Shorey et al., 2011), reductions in treatment seeking behavior (Regan, Cachelin, & Minnick, 2017), and increased stress (Lupis, Sabik, & Wolf, 2016). As well, guilt is associated with negative outcomes, including increased depression (Tilghman-Osborne, Cole, & Felton, 2012) and anxiety (Tone & Tully, 2014), but has also been related to positive outcomes including posttraumatic growth and prosocial behaviors used to bolster relationships (Dekel, Mamon, Solomon, Lanman, & Dishy, 2016; Graton, Ric, & Gonzalez, 2016). However, in general, shame and guilt appear to exacerbate negative self-perceptions and emotions, disrupt interpersonal

functioning, and impact one's desire to punish the self or escape, thereby contributing to suicide risk.

A positive association between shame and suicide risk has been found, for example, in adolescents (Werbart Törnblom, Werbart, & Rydelius, 2015), individuals diagnosed with borderline personality disorder (Brown, Linehan, Comtois, Murray, & Chapman, 2009), community samples (Arditte, Morabito, Shaw, & Timpano, 2016), and suicide attempters (Wiklander et al., 2012). In a sample of patients diagnosed with borderline personality disorder, self-harm was more likely if they experienced shame regarding previous self-harming behaviors (Brown et al., 2009). Shame is also linked to the thwarting of interpersonal needs via perceived burdensomeness and thwarted belongingness. Individuals may consider themselves to be bad or immoral due to their involvement in socially-taboo activities (i.e., bondage and discipline, dominance and submission, sadomasochism), or exposure to and participation in traumatic events and, thus, may feel like a burden or outcast from their loved ones and society, perhaps facilitating self-harm or suicidal behavior as a means of escaping intense feelings of negative self-scrutiny (Rogers, Kelliher-Rabon, Hagan, Hirsch, & Joiner, 2017; Roush, Brown, Mitchell, & Cukrowicz, 2017). On a broader interpersonal scale, feelings of shame about one's sexuality is associated with higher suicide risk, perhaps because some LGBTQ persons may feel that something is inherently wrong with them and that they are unwanted based on their sexuality (Cover, 2012). These patterns of findings support the escape/punishment-motivated theory of suicide (Baechler, 1979; Gunn, Lester, & Yang, 2014), which suggests that individuals who lose an integral part of the self, such as social standing or rank, may want to escape the associated pain and, thus, view suicide as a viable option (Kim, Thibodeau, & Jorgensen, 2011; Mokros, 1995). Further, some individuals experiencing shame may feel extreme emotions, such as

embarrassment, and a sense of failure and worthlessness, and may engage in suicidal behavior as an escape from both socially-imposed and self-generated negative critiques (Baechler, 1979; Gunn, Lester, & Yang, 2014; Kim, Thibodeau, & Jorgensen, 2011).

Similar to shame, the relation between guilt and suicide risk is well-established across a variety of populations, including in sexual minority youth (Puckett et al., 2017), women with a history of childhood sexual abuse (Kealy, Spidel, & Ogrodniczuk, 2017), community adults (Li et al., 2014), male prisoners (Mandelli, Carli, Roy, Serretti, & Sarchiapone, 2011), political prisoners (Lopez-Munoz, Cuerda-Galindo, & Krischel, 2017), and survivors of genocide (Bursztein Lipsicas, Levav, & Levine, 2017). As examples, in two studies involving patients diagnosed with affective disorders, guilt, specifically inappropriate guilt, was a significant predictor of suicide risk (Pawlak et al., 2013; Stange et al., 2016). Although these studies did not explore underlying mechanisms or define the construct of inappropriate guilt, findings from other studies suggest that guilt may be related to suicide risk via its association with psychopathology (i.e., depressive symptoms) (Jovanović et al., 2013; Puckett et al., 2017). Potential explanations for the guilt-suicide linkage also align with the escape/punishment-motivated theory of suicide. For example, in a sample of outpatient adults, religious-based feelings of guilt were associated with increased suicidal ideation, as belief in the commission of a sin and subsequent distress prompted a view of suicide as a potential escape (Exline, Yali, & Sanderson, 2000). Further in line with this, political prisoners who endorsed distress related to guilt from committing atrocities were more likely to die by suicide (Lopez-Munoz et al., 2017). These potential linkages and mechanisms are also beginning to be explored in the military/veteran population.

For veterans, shame and guilt may develop after experiencing traumatic events that involve participation in or witnessing events, both in and out of combat, that are in opposition to their moral, ethical, societal, and/or spiritual belief systems. Examples often encountered include killing during combat, witnessing the death of innocent civilians and/or fellow soldiers, and failing to prevent injury to or mistreatment (e.g., sexual harassment) of fellow soldiers (Buchanan, Settles, Hall, & O'Connor, 2014; Maguen et al., 2010; Schell & Marshal, 2008). These events may involve ethical dilemmas that the individual struggled to resolve in the moment, as well as difficulty coping with the subsequent consequences (Frankfurt & Frazier, 2016; Thompson & Jetly, 2014). A soldier, for example, may have to choose between the moral ideal of not harming individuals versus defying military training, values, and orders (Vargas, Hanson, Kraus, Drescher, & Foy, 2013). Military personnel and, later, veterans, may criticize themselves for their action/inaction during these experiential dilemmas. For example, veterans may develop shame if they judge themselves to be "monsters" or "evil" for not preventing the deaths of children or civilians, despite orders by commanding officers, or may view themselves as worthless, cowardly soldiers for not following orders (Maguen et al., 2009). Individuals in such situations may also, later, feel guilt, blaming themselves and ruminating on their action or inaction and, thus, may assume a disproportionate amount of responsibility, and potential self-punishing thoughts, for the occurrence and after-effects of the event (e.g., "I should have died instead") (Litz et al., 2009; Ross, 2013). The resulting self-deprecation and self-blame may contribute to increased vulnerability to suicide risk.

Indeed, there are a few studies that examine the association between shame, guilt and suicide risk in veterans exposed to these types of events. Wisco et al. (2017) found that veterans exposed to these types of traumatic events had higher levels of shame and guilt and were at

higher risk for suicide. However, the authors do not explicitly separate the constructs of shame and guilt, making it difficult to see individual effects. Further, in a military outpatient sample, both shame and guilt were independent predictors of suicidal ideation (Bryan et al., 2013). In another study with Vietnam veterans, using semi-structured interviews, feelings of shame related to societal reactions during homecoming (i.e., cruel treatment of veterans including name calling, mistreatment) were endorsed by individuals who also reported suicide risk (i.e., ideation and history of attempts); however, the authors did not run statistical analyses and only relied on self-report (McCormack & Joseph, 2014).

Specifically, the guilt-suicide linkage may also reflect the tenets of the escape/punishment-motivated theory of suicide in veterans as with civilians. For example, Vietnam combat veterans who reported re-examining ways they could have handled their behaviors and emotions during battle to prevent atrocities (i.e., death of fellow soldiers), often felt that they should have died instead and, thus, engaged in suicidal behaviors to both escape these negative emotions as well as to be able to join their fellow soldiers in death (Hendin & Haas, 1991). Veterans who experience guilt may also engage in self-harm or suicidal behavior as a means to express remorse or to pay penance for their actions, particularly related to killing innocent civilians (Hendin, 2014; Singer, 2004).

As noted, guilt and shame are often intertwined within the literature, and previous studies suggest they may interact. For instance, a veteran who takes responsibility for a traumatic event or its aftermath may experience guilt for the action/inaction (e.g., I *did* something wrong) and, as a result, may also experience shame for their perceived role (e.g., *I* did something wrong; Something is wrong with *me*), both of which, as noted previously, are risk factors for suicide (McLean et al., 2017; Selby et al., 2010). As well, individuals with greater shame may be more

likely to blame themselves for actions/inactions in traumatic situations, as their negative self-perceptions contribute to a ruminative focus on their, and not others', roles in the event (Parker & Thomas, 2009). This potential cyclical relation highlights an area of contention in the extant literature (Kim, Thibodeau, & Jorgensen, 2011; Tangney & Dearing, 2002; Parker & Thomas, 2009), in that some previous studies have failed to distinguish the two concepts when examining their impact on outcomes (e.g., PTSD, suicide), making it imperative to focus on their separate impact, particularly in populations vulnerable to their experience, such as military personnel and veterans.

This cluster of psychosocial symptoms has much in common with another psychiatric disorder commonly found in military personnel and veterans – posttraumatic stress disorder, and it may be that shame and guilt exacerbate the likelihood of development, or complicate the trajectory, of PTSD after a trauma (Gaudet et al., 2016; Pugh et al., 2015). In previous research, an association exists between shame/guilt and PTSD across samples, including college students (La Bash & Papa, 2014), veterans (Bryan, Roberge, Bryan, & Ray-Sannerud, 2015; Freeman, Roca, & Moore, 2000), outpatient adults (Harman & Lee, 2010), and refugees (Stotz, Elbert, Muller, & Schauer, 2015). Further, a strong link exists between PTSD and suicide, including in veterans, suggesting potential ordering effects.

Posttraumatic Stress Disorder. Posttraumatic stress disorder, which is characterized by avoidant (e.g., avoiding certain places) and intrusive symptoms (e.g., nightmares), negative cognitions and moods (e.g., inability to experience positive emotion), and arousal symptoms (e.g., hypervigilance) (American Psychological Association, 2013), is one of the most frequently diagnosed disorders in U.S. veterans. It is estimated that lifetime prevalence of PTSD is approximately 7-8% in the general U.S. population (Kilpatrick et al., 2013), and ranges from 8-

31% in U.S. veterans across all eras and branches of service (Gates et al., 2012). These numbers may also be an underestimation of the true rate of PTSD among U.S. veterans, as stigma and potential negative consequences associated with disclosure of symptoms (i.e., barriers to job attainment/promotion) may contribute to underreporting of symptoms (Gates et al., 2012; Hoge et al., 2004).

Posttraumatic stress disorder, as well as sub-clinical trauma-related symptoms, is associated with poor physical and mental health in veterans, including increased suicide risk (Asnaani, Reddy, & Shea, 2014; Gill et al., 2014; Jakupcak et al., 2011; Pietrzak, Russo, Ling, & Southwick, 2011; Wisco et al., 2014). For example, veterans with PTSD are approximately three times more likely to report suicidal ideation than those without PTSD (Jakupcak et al., 2011), and up to 70.6% of those with PTSD endorse suicidal ideation (Pietrzak et al., 2010). In a sample of older veterans, 31.1% of those with PTSD endorsed a previous suicide attempt while only 1.8% without PTSD endorsed a previous attempt. Further, 24.2% of those with PTSD endorsed suicidal ideation while only 1% of those without PTSD endorsed ideation (Fanning & Pietrzak, 2013).

There are multiple models that attempt to explain the relation between PTSD and suicide that include comorbid mental diagnoses (e.g., depression; Panagioti, Gooding, Taylor, & Tarrier, 2012), frequency and type of trauma (LeBouthillier, McMillan, Thibodeau, & Asmundson, 2015), combat exposure (Maguen et al., 2012), and interpersonal difficulties (Davis, Witte, & Weathers, 2014). Models focusing on comorbid mental diagnoses (e.g., depression, anxiety, substance use disorders) have yielded results suggesting multiple pathways. For example, previous research suggests that PTSD is associated with suicide risk via its exacerbating effects on depression and anxiety (Fordwood, Asarnow, Huizar, & Reise, 2007; Holtzheimer, Rousso,

Zatzick, Bundy, & Roy-Byrne, 2005; McKinney, Hirsch, & Britton, 2017; Stevens et al., 2013). Other models, however, suggest that individuals with co-occurring PTSD and substance use diagnoses tend to use substances as a coping mechanism for PTSD-related distress, resulting in impaired executive functioning, increased impulsivity, and greater suicide risk (Lineberry & Brady, 2014; Maloney, Degenhardt, Darke, Mattick, & Nelson, 2007; McCauley, Killeen, Gros, Brady, & Back, 2012). Yet other studies note distinct pathways, indicating the existence of independent contributions to suicide risk, for PTSD, depression, and substance abuse (Panagioti, Gooding, & Tarrier, 2009; Ramsawh et al., 2014). Although these studies contribute to knowledge of potential explanations for the PTSD-suicide linkage, the existence of distinct mechanisms of action for other disorders and symptoms, underscore the notion that PTSD is a complex disorder, with numerous etiological and trajectory pathways (Panagioti et al., 2012).

In models examining frequency and types of trauma, including combat exposure, significant associations exist between PTSD and suicide. For example, positive associations between PTSD and suicide have been found in persons experiencing childhood abuse (Lopez-Castroman et al., 2015), intimate partner violence (Bradley, Schwartz, & Kaslow, 2005; Seedat, Stein, & Forde, 2005), sexual and physical abuse (Dixon-Gordon, Tull, & Gratz, 2014; Thompson, Kaslow, Lane, & Kingree, 2000), and combat (Maguen et al., 2012). Many of these studies posit that trauma acts via facilitation of comorbid symptoms (e.g., anxiety), cognitive-affective factors (e.g., anger), and the type of coping (e.g., avoidance/withdrawal from others), often negative, utilized to deal with PTSD symptoms. However, other studies have found that type of trauma (i.e., childhood sexual abuse) is directly linked to suicide risk, regardless of the presence of PTSD (de Mattos Souza et al., 2016; Joiner et al., 2007).

Some past research suggests that trauma (i.e., killing in combat, general childhood trauma) may also be linked to suicide via multiple pathways, including intrapersonal (e.g., guilt, shame) and interpersonal factors (e.g., thwarted belongingness, and the interpersonal nature of many traumas) (Milligan & Andrews, 2005; Rice & Sher, 2013; You, Talbot, He, & Conner, 2012). This is consistent with interpersonal models of PTSD and suicide, which posit that feeling like a burden and feeling ostracized from one's social network, may be a potential mechanism of action for the PTSD-suicide linkage (Davis et al., 2014).

Despite being implicated as factors contributing to both interpersonally-based risk for suicide and posttraumatic stress disorder, previous models of suicide have rarely examined the interrelations between these variables (Gaudet et al., 2016; Pugh et al., 2015). Given the increasing support for the associations between shame, guilt, and PTSD, and the current research interest in moral injury, it is critical that future models of PTSD and suicide address the shared associations between, and combined effects of, these variables (Stern, 2014).

Shame/Guilt and PTSD. Simple, positive associations between shame, guilt, and PTSD have been established in refugee (Stotz et al., 2015), college student (La Bash & Papa, 2014), adult outpatient (Harman & Lee, 2010), and veteran samples (Bryan et al., 2013; Freeman et al. 2000; Held, Owens, & Anderson, 2015). In addition to their basic relations, shame and guilt may serve as potential contributors to, and predictors of severity of, PTSD in veteran and trauma-exposed adults (Brewin, Andrews, & Rose, 2000; Hathaway, Boals, & Banks, 2010; Leskela, Dieperink, & Thuras, 2002; Van Dam, Sheppard, Forsyth, & Earleywine, 2011).

With regard to shame, for instance, Andrews, Brewin, Rose, and Kirk (2000), found that shame predicted levels of PTSD six months after exposure to a violent crime in an adult sample and these, and other, authors suggest that shame influences PTSD specifically by increasing

levels of avoidance and comorbid negative emotions, such as anger. Indeed, each of the criteria comprising a PTSD diagnosis may be influenced by shame in a different way. For instance, re-experiencing symptoms, specifically intrusive memories, is thought to occur when an individual struggles with the conflict (i.e., shame) between prior beliefs about one's self (e.g., I am a good person) and thoughts during/after the traumatic event (e.g., I did not prevent harm to that individual, thus I am a bad person) (Stein et al., 2012). Such cognitive dissonance can also lead to anger, which is linked to increased physiological arousal (Gilbert, 2000; Stein et al., 2012; Taft et al., 2007), PTSD (Renshaw & Kiddie, 2015), and suicide risk (Jang et al., 2014). Another criterion for PTSD, avoidance, may be influenced by shame, in that shame prevents individuals from disclosing shame-related cognitions and emotions to others, leading to isolation (Forbes, Creamer, Hawthorne, Allen, & McHugh, 2003; Mason et al., 2001; Rangganadhan & Todorov, 2010). Finally, shame has a strong influence on the negative cognitions and mood criteria of PTSD; for instance, shame has a positive relation with negative rumination, a symptom shared by both PTSD and depression (Speckens, Ehlers, Hackmann, Ruths, & Clark, 2007), which consists of feelings of helplessness, hopelessness, and inadequacy (Kim et al., 2011).

Compared to studies examining the relation between shame and PTSD, fewer have examined the linkage between guilt and PTSD (Kim et al., 2011) and, as well, these models also often include shame (McLean & Foa, 2017). For instance, in a sample of victims of interpersonal violence, both guilt and shame were related to higher levels of PTSD (Beck et al., 2011). These basic associations have been replicated in other samples including journalists (Browne, Evangeli, & Neil, 2012), recovering addicts (Langman & Chung, 2013), former child soldiers (Klasen, Reissmann, Voss, & Okello, 2015), patients undergoing PTSD treatment (Oktedalen, Hoffart, &

Langkaas, 2015), trauma-exposed individuals (Dewey, Shuldberg, & Madathil, 2014), and veterans (Brown, Trim, Myers, & Norman, 2015; Huang & Kashubeck-West, 2015).

Other studies delve further into potential explanatory mechanisms, suggesting that guilt, like shame, may impact PTSD via its effects on cognitive-emotional functioning and coping abilities. For example, in a study of trauma-exposed substance users by Held, Owens, and Anderson (2015), both shame and guilt indirectly increased PTSD severity via emotion-focused disengagement coping (i.e., emotional and interpersonal avoidance). As with shame, this finding suggests that individuals who experience guilt may isolate from others due to self-blame and a desire to not repeat mistakes, or because they do not want to reveal distress to others as it may serve as a reminder of culpability, thereby increasing guilt-related distress (Kim et al., 2011).

Guilt may also influence intrusive symptoms, as the individual experiencing guilt may ruminate on the "what if" questions, repeatedly berating oneself for the perceived failure or offense (Henning & Frueh, 1997; Kubany & Watson, 2003). It should be noted, however, that several studies have indicated a lack of association between guilt and PTSD. For example, in samples of former prisoners of war (Leskela et al., 2002) and youth diagnosed with HIV (Bennett, Hersh, Herres, & Foster, 2016) shame, but not guilt, was related to PTSD symptoms. In the extant literature, some studies also fail to separate guilt from shame in analyses, making it difficult to discern guilt's potential contribution to negative outcomes (i.e., PTSD, suicide) (Pugh et al., 2015). These findings suggest a need for continued examination of guilt in different contexts (i.e., trauma), and exploration of the independent effects of guilt and shame on PTSD.

This ordering, of shame and guilt as a foundation for the development and exacerbation of PTSD, has some precedent, as previous research indicates that residual symptoms of shame and guilt exist after evidence-based treatments are utilized to address PTSD symptoms (Lee,

Scragg, & Turner, 2001). As well, despite treatment, PTSD symptoms may increase without addressing shame and guilt, as these emotions are not readily targeted by current evidence-based treatments (Dalgleish, 2004). However, the extant literature, despite evidence of basic associations and ordering effects, has failed to extend this investigation to suicide risk (Bryan et al., 2013; Tripp & McDevitt-Murphy, 2017) and have, largely, failed to examine shame and guilt separately, as we do in the current study.

As well, most research on PTSD and suicide, as we have reviewed, focuses on negative characteristics and risk factors associated with the person experiencing a trauma, which has driven a historical focus on symptom reduction. However, addressing negative outcomes, to the exclusion of bolstering adaptive characteristics and coping, does not always reduce symptoms and subsequent maladaptive outcomes (i.e., suicide; Najavits, 2015). As well, not all veterans who are exposed to traumatic events develop negative cognitive-emotional factors, or symptoms of PTSD, or engage in suicidal behavior, perhaps as a result of factors of resiliency, such as hope (Hassija, Luterek, Naragon-Gainey, Moore, & Simpson, 2012). Currently, researchers and clinicians are beginning to focus on potential protective, often "positive psychological," factors that some veterans may possess, or that may be cultivated, in order to reduce risk for psychopathology and suicide-related outcomes (Joseph & Linley, 2008; Wingate et al., 2006).

Protective Factors for Suicide in Veterans

In many areas of psychosocial research, there has been a paradigm shift toward acknowledgment of the potential benefits of protective factors and their roles in preventing or reducing psychopathology and suicide. As with risk factors, veterans and civilians share many of the same protective factors against suicide risk. For example, dispositional optimism is associated with decreased risk of developing PTSD, perhaps because optimistic persons tend to

utilize adaptive and proactive coping strategies (i.e., cognitive reframing), and hold the expectation that good outcomes will occur, which may counteract some negative beliefs held by individuals with PTSD (i.e., the world is not safe, so I am not safe) (Gil & Weinberg, 2015; Thomas, Britt, Odle-Dusseau, & Bliese, 2011). Other shared protective factors include spirituality/religiousness (Currier, Holland, & Drescher, 2015; Gerber, Boals, & Schuettler, 2011), cognitive flexibility (Keith, Velezmoro, & O'Brien, 2015; Park, Chang, & You, 2015), and secure attachment to family (Armour, Elklit, & Shevlin, 2011; Wisco et al., 2014). However, some protective factors are examined more often in veterans due to increased relevance in the military culture. For example, a sense of connectedness may play a major role in decreasing suicide risk, as veterans can bond over common experiences (i.e., hardships endured during training and combat, sense of brother/sisterhood) and help one another cope with distressing symptoms (i.e., shame, guilt, PTSD) (Lemaire & Graham, 2011; Pietrzak et al., 2010). As well, having a sense of purpose and agency can alleviate suicidal ideation in military personnel (Bryan, Andreski, McNaughton-Cassill, & Osman, 2014; Pietrzak et al., 2010), as a result of increased levels of self-confidence and sense of living a meaningful life. In addition to these protective factors, other characteristics, such as self-compassion, are being explored as potential clinical resources for use in the treatment of psychopathology.

Self-Compassion

Self-compassion, which is conceptualized as opening up to one's own suffering non-judgmentally and providing kindness to the self to alleviate suffering, is comprised of three components: self-kindness, mindfulness, and a sense of common humanity. Self-kindness focuses on how individuals respond, emotionally, to pain and failure, and involves being kind and understanding toward one's suffering and inadequacies without judgment and self-criticism

(Neff, 2003a; Neff, 2003b). Having a sense of common humanity allows the individual to see that he/she is not alone in his/her suffering but, rather, is a part of the larger human experience and involves how one cognitively conceptualizes one's suffering (Neff, 2003a). Finally, mindfulness focuses on how one pays attention to suffering and involves balanced awareness of thoughts and feelings, rather than over-identification with suffering (Neff, 2003a; Neff, 2003b).

Each of these components contains an opposing component: self-judgment, versus self-kindness, involves berating one's self, and thinking of one's suffering in a judgmental way; isolation, versus common humanity, involves viewing one's suffering in an egocentric manner; and, over-identification, versus mindfulness, involves focusing only on the negative aspects of one's self and experiences (Neff, 2003a, Neff, 2016). These three components, although separate, interact to enhance each other's effects. For example, the embrace of a nonjudgmental stance of mindfulness results in a decrease of self-criticism, and an increase in self-understanding and kindness (Neff, 2003b). As well, acknowledging that others share similar suffering may promote self-kindness (Neff, 2003b). Finally, if one is able to engage in mindful awareness and, thus, maintain distance from negative experiences of the self, disconnection from feelings of isolation and an embrace of feelings of interconnectedness (e.g., common humanity) may be possible (Neff, 2003a). Although self-compassion is measured across these three factors, Neff (2003b, 2016) argues that self-compassion requires the "synergistic state of interaction" between the components and their opposite poles.

Self-compassion may arise, or may be more likely to be needed, during difficult experiences, or after exposure to a traumatic event, as it is both hypothesized and empirically supported as being more salient during times of distress (Leary et al., 2007; Neff, 2003a; Neff, 2003b). During distressful times, the ability to engage in self-compassion may allow an

individual to access and utilize adaptive coping skills such as cognitive reframing (e.g., being self-kind rather than self-critical) or mindfulness/relaxation rather than avoidant ones, including self-blame and behavioral disengagement, as a way of attempting to ameliorate effects emerging from trauma exposure, such as the development or exacerbation of trauma-related symptoms (i.e., shame/guilt, PTSD; Allen & Leary, 2010; Neff, Hseih, & Dejitthirat, 2005; Rabon, Brooks, Kaniuka, Sirois, & Hirsch, 2017; Sirois, Molnar, & Hirsch, 2015). Such effects may extend to suicide risk, in the face of trauma. As examples, self -compassion is beneficially related to trauma-related symptoms and suicidal ideation in adolescents (Zeller, Yuvai, Nitzan-Assayag, & Bernstein, 2015) and survivors of childhood maltreatment (Tanaka, Wekerle, Schmuck, Paglia-Boak, 2011; Tarber, Cohn, Casazza, Hastings, & Steele, 2016). With regard to military application, self-compassion is related to lower suicide risk through its bolstering effect on other protective factors, such as spirituality (Bryan, Graham, & Roberge, 2015).

Self-Compassion and Suicide

In preliminary research, many of the independent components of self-compassion are related to suicide risk. Very little research has focused on the relation between self-kindness, as conceptualized by Neff, and suicide risk; however, related constructs, such as self-forgiveness, may reduce this risk (Bryan, Theriault, & Bryan, 2015; Nagra, Lin, & Upthegrove, 2016). In previous research, holding a positive perception of the self (i.e., self-esteem) is negatively related to suicide risk, in adolescents (Martin, Richardson, Bergen, Roeger, & Allison, 2005), college students (Lin, 2015), psychiatric outpatients (Bhar, Ghahramanlou-Holloway, Brown, & Beck, 2008), and prisoners (Gooding et al., 2015). Potential mechanisms of action for this relation have been explored, including self-esteem's positive impact on depression (Bhar, Ghahramanlou-Holloway, Brown, & Beck, 2008), as a mediator of the relation between social support and

suicide, and as a moderator of the relation between gratitude and suicide (Kleiman & Riskind, 2013; Lin, 2015).

Regarding self-judgment, in previous research by Joiner, Gencoz, Gencoz, Metalsky, & Rudd (2001), self-hatred, but not depressive symptoms, were associated with higher suicide risk. Further, in a sample of undergraduate students, negative self-evaluation was associated with increased suicidal ideation (Selimbegović & Chatard, 2013). One's judgment of the self, including perceptions of self-worth, is also linked to greater suicide risk, as negative self-perceptions tend to exacerbate depressive symptoms (Robinson, Kissane, Brooker, Hempton, & Burney, 2017; Wild, Flisher, & Lombard, 2004). Self-compassion may work by decreasing the tendency to view one's self and experiences in a negative light, and by enhancing ability to engage in self-kindness instead of self-criticism, thereby engendering a sense of autonomy, self-worth and self-confidence, and decreasing risk for suicide (Ehret, Joorman, & Berking, 2015; Korner et al., 2015; Matos, Carvalho, Cunha, Galhardo, & Sepodes, 2017; Wong & Mak, 2013).

The development of mindfulness is also related to decreased suicide risk, in community adults (Zeng, Ma, & Li, 2017), undergraduate students (Anastasiades, Kapoor, Shweta, Wootten, & Lamis, 2017), adolescents (Heath, Carsley, De Riggi, Mills, & Mettler, 2016), and veterans (Gallegos, Cross, Pigeon, 2015; Walser et al., 2015). Mindfulness appears to facilitate adaptive, emotion-focused coping, including a focus on, and acceptance of, the fleeting nature of stressors and distressful feelings, thereby attenuating rumination and the intensity of negative cognitive-emotional factors that contribute to suicide risk (Diedrich, Hofmann, Cuijpers, & Berking, 2016; Johnson & O'Brien, 2013; Melyani, Allahyari, Falah, Ashtiani, & Tavoli, 2015; Trompetter, Kleine, & Bohlmeiher, 2016). For example, mindfulness is indirectly related to lower levels of suicidal ideation, via decreases in depressive symptoms, in college students, perhaps because

more-mindful students are able to defuse from negative thoughts (Lamis & Dvorak, 2014). Mindfulness is also related to decreases in perceived stress in older adults, suggesting that awareness and processing of stressors, rather than avoidance, may facilitate adaptive self-soothing (Zeng, Ma, & Li, 2017). Another way that mindfulness may decrease suicide risk is through its impact on the satisfaction of interpersonal needs. For instance, in a study of college students experiencing thwarted belongingness and perceived burdensomeness, mindfulness-based techniques (i.e., guided meditation) were associated with a reduction in the feeling of need to escape from interpersonal adversities via suicide (Collins, Best, Stritzke, & Page, 2016; Collins, Stebbing, Stritzke, & Page, 2017).

On the other hand, over-identification with the negative aspects of a traumatic event is also related to suicide risk. For instance, rumination, or focusing on negative emotional thoughts, and its subtypes (i.e., brooding), are related to increased suicide risk via increasing stress levels (Cole et al., 2015). In a recent meta-analysis indicating an association between rumination and its sub-types (i.e., brooding) and suicide, it is suggested that a continuous focus on negative mood and stressors increases depressive symptoms and subsequent suicide risk (Rogers & Joiner, 2017).

Finally, common humanity is also associated with well-being and mental health outcomes, although research has been minimal to date. For example, in a sample of postpartum women, normative feedback about the prevalence of postpartum depression promoted sense of common humanity (e.g., that others go through similar struggles), potentially enabling them to seek out assistance (Scrandis, 2005). Although conceptualized as an existentially-oriented construct, common humanity is also more-literally related to a sense of interdependence, concern for others, and social conformity, as noted in a study of undergraduate students from Thailand,

Taiwan, and the U.S. (Neff, Pisitsungkagarn, & Hsieh, 2008). Indeed, isolation in the context of interpersonal relations, and feeling as if one cannot connect with others, is related to increased suicide risk in adolescents (Zamora-Kapoor et al., 2016), community adult women (Tsai, Lucas, & Kawachi, 2015), and rural-dwelling adults (Hirsch, 2006; Manoranjitham et al., 2010; Van Orden et al., 2010). Social networks and relationships (e.g., marriage, family support) can provide emotional and instrumental support, serving as potential buffers against suicide risk, in a wide array of populations including college students (Tran et al., 2015), U.S. adults (Kleiman & Liu, 2013), and veterans (Weisenhorn, Frey, van de Venne, & Cerel, 2017).

Although the extant research suggests independent, beneficial associations between self-compassion and an array of physical and mental health outcomes, including suicide risk, this work is limited in veterans and few studies have elaborated on potential mechanisms of action between self-compassion and suicide, particularly in the context of trauma. For instance, given the aforementioned benefits of self-compassion for cognitive-emotional and psychological functioning, it may be that the constellation of self-kindness, mindfulness, and common humanity also has utility for the sequelae of trauma, including potential amelioration of feelings of shame or guilt and symptoms of PTSD.

Shame, Guilt, and Self-Compassion

Across a variety of samples, self-compassion, particularly the component of self-kindness, is related to lower levels of shame (Castilho, Carvalho, Marques, & Pinto-Gouveia, 2017; Kelly, Carter, & Borairi, 2014). For instance, in samples of patients with eating disorders, those with higher levels of self-compassion reported less self-criticism and, in turn, less shame (Kelly & Tasca, 2016). Similarly, in patients diagnosed with borderline personality disorder, the effect of self-compassion on self-criticism attenuated the experience of shame and reduced

engagement in self-harm, when patients were instructed to recount previous stories of self-harm using compassionate language (Warren, 2015). With regard to common humanity, in a study utilizing a group therapy format, participants who were victims of war, but not necessarily endorsing PTSD, were able to recognize that others were also victimized by atrocities and, thus, were able to forgive themselves for being unable to assist (Urlic & Simunkovic, 2009). As well, common humanity, perhaps enacted via meaningful interpersonal interactions, may beneficially impact shame. For instance, in a sample of college students, social connectedness was related to decreased levels of shame, as individuals who feel more connected with others may be able to recognize the existence of, and have access to, others going through similar hardships, instead of differentiating themselves or isolating from others (Williamson, Sandage, & Lee, 2007). Supporting this premise, in a study by Matos, Gouveia, and Duarte (2015), adults who had established safe and validating social networks, were less likely to develop shame when reflecting on memories laden with shame-oriented themes. Finally, self-compassion, particularly the component of mindfulness, may help to reduce the effects of negative rumination, a major component of shame that involves over-identification with previous actions and a reduction of self-worth, by allowing the individual to approach such thoughts and feelings in a non-judgmental and present-moment manner, thereby disrupting the ruminative cycle (Woods & Proeve, 2014).

The beneficial relation of self-compassion to shame is also evident in trauma-exposed individuals. In a study by Shahar (2014), individuals exposed to interpersonal trauma who developed more self-compassion via emotion-focused therapy, were also able to develop a more positive view of the self, accompanied by decreased shame. Self-compassion may also reduce shame via its impact on shame-based traumatic memories; as an example, individuals who were

able to recount traumatic memories utilizing self-kindness and decreased self-judgment experienced lower levels of shame related to the memory (Ferreira, Matos, Duarte, & Pinto-Gouveia, 2014).With regard to veteran samples, Au et al. (2017) found that self-compassion-based therapy used to address trauma-related shame and PTSD in veterans was successful in reducing levels of both. Some authors have argued for the use of self-compassion strategies for couples who have experienced trauma (Karris & Caldwell, 2015), and for victims of intimate partner violence (Tesh, Learman, & Pulliam, 2015), as mindful self-compassion strategies may help to alleviate symptoms of shame in trauma populations.

Self-compassion is also beneficially associated with guilt, including in persons with personality disorders (Schanche, Stiles, McCullough, Svartberg, & Nielsen, 2011), college students (Doehring, 2017), restrictive eaters (Adams & Leary, 2007), and veterans (Bryan et al., 2013). Some studies have explored potential underlying mechanisms between guilt and suicide. For example, Held and Owens (2015) examined the effects of a self-compassion protocol on trauma-related guilt in a sample of homeless veterans, finding that recipients of the intervention experienced reductions in guilt, perhaps as a result of common humanity (e.g., others shared responsibility; others have experienced similar events) or self-kindness (e.g., realizing they could not control the situation). The component of mindfulness is also beneficially related to guilt (Friese & Hofmann, 2016). In a sample of adults with depression, for instance, utilization of mindfulness techniques alleviated feelings of guilt, as these individuals were able to view their negative experiences in a balanced, and not ruminative, way (Stotter et al., 2013). Common humanity also has a potential association with guilt; for instance, in a study of a caregiver support group, participant guilt decreased as they learned of the similar experiences of others (Riley et al., 2011). Finally, in a sample of college students, self-kindness was related to less

guilt, perhaps because self-kindness facilitates development of a positive perception of the self, rather than negative (Hall & Fincham, 2008). Such negative self-judgment has previously been linked to poor mental health. For example, self-hatred is linked to guilt in veterans (Singer, 2004) and in depressed patients (Hendin, Maltsberger, & Szanto, 2007).

Yet, despite empirical support for the basic associations between self-compassion, shame and guilt, PTSD and suicide risk, including in veterans, and despite theoretical and empirical support for potential ordering effects between these variables, comprehensive models of potential mechanism of action are lacking. It may be, however, that self-compassion beneficially impacts PTSD, perhaps via amelioration of some of the negative cognitive-emotional factors (e.g., shame, guilt) associated with trauma.

Self-Compassion and PTSD

Despite the influence of negative cognitive-emotional factors (i.e., shame and guilt) on PTSD symptoms, there are numerous protective factors that might aid in the reduction of PTSD symptom severity, including marriage prior to deployment (Weisenhorn, Frey, van de Venne, & Cerel, 2017), social support (Zang et al., 2017), optimism (Gil & Weinberg, 2015), future orientation (Israel-Cohen, Kashy-Rosenbaum, & Kaplan, 2016), cognitive flexibility (Joseph, Moring, & Bira, 2015; Keith et al., 2015), religiosity and spirituality (Currier et al., 2015; Hasanovic & Pajevic, 2010), and forgiveness (Currier, Drescher, Holland, Lisman, & Foy, 2016).

One of the more recent protective factors being investigated in relation to PTSD is self-compassion. Self-compassion serves as a buffer against symptoms of PTSD, such as anger, and comorbid disorders, including depression and anxiety (Jang et al., 2014; Novaco, Swanson, Gonzalez, Gahm, & Reger, 2012), as well as against PTSD itself. Indeed, self-compassion is

associated with decreased PTSD symptom severity in veterans (Dahm et al., 2015; Hiraoka et al., 2015), college students (Barlow, Goldsmith, & Gerhart, 2017; Thompson & Waltz, 2008), trauma-exposed adolescents (Zeller et al., 2015), trauma-exposed community adults (Maheux & Price, 2016), and victims of intimate partner and intentional violence (Tesh et al., 2015; Valdez & Lilly, 2016). These studies propose different mechanisms by which self-compassion might influence PTSD severity. For example, it may be that the mindfulness and self-kindness components of self-compassion prevent the use of emotional numbing commonly seen in individuals with PTSD and instead, promote the use of awareness and tolerance of negative emotions, allowing for processing and alleviation of these symptoms (Thompson & Waltz, 2008; Valdez & Lilly, 2016).

Consistent with these explanations, Germer and Neff (2015) have proposed a model indicating how each component of self-compassion targets distinct symptom clusters of PTSD. The most common symptom clusters found in PTSD are arousal (i.e., hypervigilance, increased startle response), avoidance (i.e., utilizing distractions, avoiding triggers), and intrusive symptoms (i.e., nightmares, day time memories). These clusters map onto the fight-flight-freeze response and are experienced as self-criticism (arousal), self-isolation (avoidance), and self-absorption (intrusions) when threatened by internal emotions of shame, guilt, and dread that arise after trauma exposure and further development of PTSD. When self-compassion develops, its three components help alleviate arousal and negative cognition and mood (self-kindness), and the avoidant (common humanity) and intrusive (mindfulness) symptoms of PTSD.

Self-kindness may facilitate the attenuation of the severity and presence of arousal, and negative cognition and mood symptoms, associated with PTSD, by allowing for greater tolerance of the anxiety symptoms. As an example, victims of interpersonal violence able to develop self-

kindness had lower levels of anxiety, as these individuals were able to engage in less self-criticism, thereby halting the cyclical role of self-criticism that would ordinarily heighten anxiety (Valdez & Lilly, 2016). Further, individuals who utilize self-kindness techniques (e.g., positive self-talk) may ease negative self-talk associated with PTSD (e.g., "I deserve to feel like this…I should have prevented this from happening," "I should not be like this, I was trained better…I failed my country"), allowing development of a more-accepting self-perspective and greater likelihood of engaging in treatment of PTSD (Hoffart, Oktedalen, & Tomas, 2015). In contrast, self-judgment is positively related to PTSD symptoms. For example, in a sample of adults, self-criticism was associated with increased levels of PTSD, potentially due to self-criticism's exacerbating influence on shame (Harman & Lee, 2010), and lower levels of self-worth are associated with greater risk for PTSD in police offers (Yuan et al., 2011) and assault victims (Ali, Dunmore, Clark, & Ehlers, 2002).

Although not thoroughly examined in relation to PTSD and suicide risk, constructs similar to common humanity may buffer against the development or exacerbation of PTSD. For example, in interviews with non-Western translators exposed to trauma, developing a sense of shared suffering and trauma helped to facilitate a feeling of normalization and a decrease in trauma reactions (Johnson, Thompson, & Downs, 2009). Further, in a study of veterans undergoing group therapy for PTSD, sharing trauma experiences facilitated normalization of the experience, and decreased the sense of being alone (Mott et al., 2013). Veterans also acknowledged that they feel more able to express their emotions to other veterans who have shared similar experiences (Mittal et al., 2013). Although not explored in the study by Mittal and colleagues, expression of emotion is related to a reduction of PTSD symptoms (Hassija et al., 2012). Finally, the ability to increase sense of social connectedness, which may stem from

common humanity, may help to alleviate avoidant symptoms of PTSD, via enhancement of perceived and actual human connections. Much clinical research indicates that social connectedness is related to decreased PTSD symptoms, as those who feel they have a strong social support system, to which they belong and can relate, are less likely to become isolative (Pietrzak & Cook, 2013). Further, engagement in these social groups may provide evidence that they are not alone in their struggles, thereby reducing maladaptive and isolation-inducing cognitive-emotional factors, such as shame and guilt (Dahm et al., 2015).

Finally, mindfulness may assist in the reduction of the intrusive symptoms of PTSD, as it promotes present-moment awareness and balance of one's current emotions, rather than a focus on past memories. Intrusive memories typically occur in the context of nightmares or day-time intrusive memories that replay traumatic situations in one's head, often intertwined with punitive emotions such as shame and guilt (e.g., "I should have/could have done something differently," "This shows exactly why I am a bad person") (Kleim, Graham, Bryant, & Ehlers, 2013). In the absence of mindfulness, a sense of over-identification with the trauma and its negative emotional sequelae may occur which can, cyclically, contribute to increased likelihood of nightmares and intrusive memories, in samples including traffic accident survivors (Ehring, Frank, & Ehlers, 2008), outpatient adults (Birrer & Michael, 2011), and breast cancer patients (Yu, Chen, & Chang, 2008). However, individuals who, instead, are able to engage in mindfulness, can focus on the present-moment in a non-judgmental manner, perhaps providing counterfactual evidence that one is not reliving the traumatic situation and promoting a balance between the presence, and resolution, of negative emotions, as they are replaced with more-neutral, positive, and self-kind reflections toward the self (Maheux & Price, 2015).

Further supporting these assertions, studies implementing compassion-based treatments in trauma-samples have found great efficacy in the reduction of PTSD symptoms. For instance, in a sample of adult patients undergoing prolonged exposure modified to include self-compassion components, self-compassion increased and was associated with decreased PTSD symptoms (Hoffart et al., 2015). Similarly, Au et al. (2017) found that the use of compassion-based therapy in a trauma-exposed community adult sample significantly reduced PTSD severity, specifically through the reduction of shame. The authors argue that the use of a self-compassion driven therapy, rather than those oriented in reasoning and logic, can provide a distinct sensory-based experience that combats against critical feelings toward oneself which, in turn, reduces the intensity of PTSD symptoms.

In summary, it may be that self-compassion contributes to the amelioration of PTSD symptoms, and consequent suicide risk, by allowing individuals to tolerate negative emotions in the moment, rather than ruminate on traumatic events and, thereby, intensify distressful emotions. Self-compassion may also allow an individual to be kinder to the self when experiencing distressful emotions, such as shame and guilt. Finally, self-compassion may help to facilitate an adaptive world view of common humanity; that is, the acknowledgment that others have also experienced trauma and its negative repercussions.

Statement of the Problem

Suicide is a major concern within the veteran population, particularly as growing evidence demonstrates its strong, positive relation with PTSD, one of the most common diagnoses found in veterans (Wisco et al., 2014). Further, negative cognitive-emotional factors such as shame and guilt are contributors to suicide risk and may, in fact, exacerbate other psychopathological risk factors (i.e., PTSD) that worsen suicide risk (Bryan et al., 2015; Gaudet

et al., 2016). However, not every veteran who experiences shame, guilt, and PTSD engages in suicidal behavior, perhaps due to the presence of protective factors, such as self-compassion, which has beneficial relations with other psychological outcomes (Neff, 2003a; Neff, 2003b).

Although scarce, previous research indicates a potential relation between self-compassion and suicide (Bryan et al., 2015; Zeller et al., 2015); however, the underlying mechanisms of action are still unclear. Self-compassion appears to beneficially impact risk factors for suicidal risk in veterans, including levels of shame and guilt, and PTSD symptoms (Held & Owens, 2015; Hiraoka et al., 2015; Shahar, 2014). As well, there may be potential ordering effects of this linkage, with self-compassion impacting suicide via its association with shame and guilt and, sequentially, PTSD (Au et al., 2017).

Veterans are at heightened risk for experiencing feelings of shame and guilt as they are often placed in situations where they face ethical dilemmas and traumatizing situations, both in and out of combat (Maguen et al., 2012). Because military culture has historically promoted the suppression of emotions and stigmatizes seeking mental health services (Rosen et al., 2011), many veterans may be self-critical of their suffering, internalizing their feelings of self-hatred and taking on more responsibility for past traumatic events and subsequent emotions, rather than processing these thoughts and emotions (Litz et al., 2009). This process can lead to further exacerbation of PTSD symptoms (Neff, 2003a). The promotion of healthier, self-caring attitudes toward oneself after a traumatic event may allow the veteran to engage in proactive behaviors (e.g., cognitive reframing, reaching out to social support networks), thereby decreasing suicide risk (Neff, 2003a). Although self-compassion has been examined as an independent predictor of shame, guilt, and PTSD, and the latter three as predictors of suicidal behavior, a comprehensive model including all these factors has yet to be examined.

Hypotheses

As such, our study examined the serial mediating roles of shame, in Model 1, and guilt, in Model 2 (first order mediators) and PTSD symptoms (second order mediator) in the relation between self-compassion and suicidal behavior within a veteran sample. We hypothesize the following:

1. At the bivariate level, we hypothesize that self-compassion will be inversely related to shame, guilt, PTSD symptoms, and suicidal behavior. Suicidal behavior, shame, guilt, and PTSD symptoms will all be positively related to one another.
2. At the multivariate level, we hypothesize that shame/guilt and PTSD symptoms will mediate the relation between self-compassion and suicidal behavior in a serial fashion, such that higher levels of self-compassion will be associated with lower levels of shame and guilt and, in turn, to lower levels of PTSD symptoms and less consequent suicide risk.

CHAPTER 2

METHOD

Participants and Procedures

The study utilized a pre-existing, cross-sectional data set, comprised of data from 612 United States veterans. The study was approved by the ETSU Institutional Review Board (IRB), and was administered online, via secure server, through Survey Monkey [www.surveymonkey.com]. Participants were recruited via online invitations sent to veteran-related social media groups (e.g., veteran-oriented Facebook groups) as well as national organizations (e.g., Veterans of Foreign Wars [VFW] chapters). Participants provided electronic informed consent prior to completing online self-report measures and were entered into a drawing for a chance to win an Amazon gift card.

After excluding cases with missing data, our sample was comprised of 317 United States veterans. The average age was 47.5 years old (SD = 16.3), with a range of 22 to 92 years old. Additional demographic information is provided below (Table 1).

Table 1

Characteristics of Participants

	Percentage of participants (%)	*n*
Sex		
Male	65.6%	208
Female	33.1%	105
No Response	1.3%	4
Ethnicity		
Caucasian	83.6%	265
African American	1.9%	6
American Indian/Alaska Native	0.6%	2
Asian	0.0%	0
Multiracial	8.8%	28
Other	1.3%	4
No response	3.8%	12
Branch of Service		
Army	39.4%	125
Navy	15.2%	48
Air Force	14.5%	46
Marine Corps	8.8%	28
National Guard	3.5%	11
Army Reserves	1.9%	6
Coast Guard	0.6%	2
Multiple Branches	15.5%	49
No response	0.6%	2
Era of Service		
September 2001 or later	29.7%	94
August 1990 to August 2001	8.8%	28
May 1975 to July 1990	5.0%	16
August 1964 to April 1975	14.2%	45
February 1955 to July 1964	0.0%	0
July 1950 to January 1955	0.3%	1
December 1941 to December 1946	0.0%	0
Multiple eras	42.0%	133
VHA Usage		
Yes	55.2%	175
No	44.8%	142

Table 1 (continued)

	Percentage of participants (%)	*n*
Education Level		
Less than High School	0.3%	1
12 years; High School/GED	25.2%	80
14 years; Associate's Degree	24.3%	77
16 years; Bachelor's Degree	23.7%	75
18 years; Master's Degree	19.2%	61
22 years; Doctorate or other Professional Degree	4.4%	14
Don't Know	1.0%	3
No Response	1.9%	6
Income Level		
Less than $10,000	5.4%	17
$10,000 - $19,999	6.9%	22
$20,000-$29,999	11.4%	36
$30,000-$39,999	11.4%	36
$40,000-$49,999	7.3%	23
$50,000-$59,999	10%	32
$60,000-$69,999	8.2%	26
$70,000-$79,999	8.2%	26
$80,000-$89,999	7.3%	23
$90,000-$99,999	4.4%	14
$100,000-$150,000	8.2%	26
More than $150,000	4.7%	15
Don't Know	1.3%	4
No Response	5.3%	17

Measures

Demographic information was collected utilizing a questionnaire that assessed for characteristics including age, sex, race, ethnicity, branch of service, era of service, and use of Veterans Health Administration (VHA) medical services (see Table 1). These variables were included as covariates in all analyses, given their strong association with suicide risk in the veteran population (Eaton, Messer, Wilson, & Hoge, 2006; Fanning & Pietrzak, 2013; Hoffmire, Kemp, & Bossarte, 2015; Pietrzak, Russo, Ling, & Southwick, 2011; Wisco et al., 2014).

Self-compassion was assessed using the *Self-Compassion Scale – Short Form* (SCS-SF; Raes, Pommier, Neff, & Van Gucht, 2011), a 12-item scale, which assesses three components of dispositional self-compassion, including self-kindness (e.g., "When I'm going through a very hard time, I give myself the caring and tenderness I need"), common humanity (e.g., "I try to see my failings as part of the human condition"), and mindfulness (e.g., "When something upsets me I try to keep my emotions in balance"). Participants are asked to indicate how often they behave in accordance to the statement, utilizing a 5-point Likert-scale ranging from 1 ("almost never") to 5 ("almost always"). A total self-compassion score, which we use in our study, is calculated by reverse scoring the negative items (i.e., self-judgment, isolation, and over-identified items), summing the items, and computing a total mean. Higher scores indicating greater levels of self-compassion, with a minimum mean score of 1 and maximum mean score of 5. The SCS-SF has a strong correlation with the 26-item version of the SCS ($r \geq 0.97$) and has shown good internal consistency ($\alpha = 0.86$) in community adult samples (Raes et al., 2011), trauma-exposed adults ($\alpha = 0.89$; Beaumont, Durkin, McAndrew, & Martin), and veterans ($\alpha = 0.89$; Rabon, Brooks, Kaniuka, Sirois, & Hirsch, 2017). In the current sample, internal consistency was good (Cronbach's $\alpha = .89$).

Symptoms of shame and guilt were assessed using the Differential Emotions Scale-IV, trait form (DES-IV-B; Izard, 1979). The 36-item scale measures discrete trait emotions, including shame and guilt, with each subscale (i.e., emotion) utilizing three items. Participants are prompted to answer how often they feel shame (e.g., "Feel embarrassed when anybody sees you make a mistake") and guilt (e.g., "Feel regret, sorry about something you did") in their daily life, utilizing a Likert scale ranging from 1 ("Rarely or never") to 5 ("Very often"). Items are summed to create a total score for each subscale, with a minimum score of 3 and maximum score of 15 on each subscale, and with higher scores indicating greater levels of shame and guilt. In previous research, the DES-IV has shown acceptable to good internal consistency ($\alpha = 0.70$, shame; $\alpha = .73$-81, guilt) in community adult samples and good test-retest reliability ($r = .70$) (Akande, 2002; Blumberg & Izard, 1985; Izard, Libero, Putnam, & Haynes, 1993). In a recent study with veterans, the shame subscale exhibited good internal consistency ($\alpha = 0.83$; Rabon, Brooks, Kaniuka, Sirois, & Hirsch, 2017). The guilt subscale has not been examined in veterans but has good internal consistency in trauma-exposed populations ($\alpha = 0.88$; Gasparre, Bosco, & Bellelli, 2010). In the current sample, internal consistency was good for both shame (Cronbach's $\alpha = .83$) and guilt (Cronbach's $\alpha = .86$) subscales.

PTSD symptoms were measured using the PTSD Checklist-Military Version (PCL-M) for DSM-IV (Weathers, Huska, & Keane, 1991), which prompts participants to respond to items while thinking about stressful military experiences. No other Criteria A trauma specifier was assessed. The PCL-M is comprised of 17 items that measure different types of PTSD symptoms including re-experiencing the event (e.g., "Repeated, disturbing memories, thoughts, or images of a stressful military experience), avoidance (e.g., "Avoid activities or talking about a stressful military experience or avoid having feelings related to it), numbing (e.g., "Feeling distant or cut

off from other people"), and hyperarousal (e.g., "Feeling irritable or having angry outbursts) symptoms. Participants rate each item on a Likert scale that ranges from 1 ("Not at all") to 5 ("Extremely"), based on how intensely they are bothered by these symptoms over the past month. Item scores are summed to yield a severity score, which ranges from 0 (lowest) to 75 (highest), with higher scores indicating greater severity of symptoms. The scale has excellent internal consistency in military samples ($\alpha = .97$), and adequate sensitivity (.82; proportion of those with PTSD who were correctly identified as having PTSD by the measure) and specificity (.83; proportion of those without PTSD who were correctly identified as not having PTSD by the measure), with a suggested clinical cut-off score of 50 in U.S. Vietnam and Gulf War veterans (Horowitz, Wilner, & Alvarez, 1979; Keane, Caddell, & Taylor, 1988; Weathers, Litz, Herman, Huska, & Keane, 1993; Yarvis, Yoon, Amenuke, Simien-Turner, & Landers, 2012). In the current sample, internal consistency was excellent (Cronbach's $\alpha = .96$).

Suicide risk was measured using the Suicidal Behaviors Questionnaire-Revised (SBQ-R). The scale is comprised of four items that measure suicidal thoughts and behaviors including the following: suicidal ideation and attempts (i.e., "Have you ever thought about or attempted to kill yourself?"), suicidal ideation within the past year (i.e., "How often have you thought about killing yourself in the past year?"), intent (i.e., "Have you ever told someone that you were going to commit suicide, or that you might do it?"), and the chance of attempting suicide in the future (i.e., "How likely is it that you will attempt suicide someday?"). Participants answer each question using a Likert scale that differs for each question, but all follow the trend that higher scores indicate greater suicide risk, with a minimum score of 3 and maximum score of 18. Suggested cut-off scores of 7 in non-suicidal samples and 8 in clinical samples, represent significant suicide risk (Osman et al., 2001). Internal consistency is acceptable to good in veteran

samples (α = .76-.84: Currier, Holland, Drescher, & Foy, 2015; Rudd, Goulding, & Bryan, 2011), and sensitivity (individuals with established suicide risk were correctly identified as positive for suicide ideation or attempts) and specificity (individuals established as non-suicidal were correctly identified as not having suicidal ideation or attempts) are adequate to excellent at .87 and .93, respectively (Osman et al., 2001). In the current sample, internal consistency was good (Cronbach's α = .81).

Depressive symptoms were assessed using the Multidimensional Health Profile-Psychosocial Functioning screening tool (MHP-P) (Ruehlman, Lanyon, & Karoly, 1998). The MHP-P is comprised of 58 items assessing mental health, social resources, coping skills, and life stress. The depression subscale of the mental health scale asks respondents to indicate how they felt over the past two weeks in response to three items (e.g., "How depressed have you felt?) rated on a Likert scale from 1 ("not at all") to 5 ("very"). Higher scores indicate greater levels of depressive symptoms, with a minimum score of 3 and maximum score of 15. Internal consistency is good in trauma-exposed individuals (Cronbach's α = .85; Williams, McDevitt-Murphy, Fields, Weathers, & Flood, 2011), with test-retest coefficients ranging from .76-.79 in a sample of community adults, over a period of three weeks (Ruehlman, Lanyon, & Karoly, 1998). In the current sample, internal consistency was good (α = .86).

Statistical Analyses

Bivariate Analyses

Pearson's product-moment correlations were used to examine linear order associations between self-compassion, shame, guilt, PTSD symptoms, and suicide risk (Piovani, 2008). The recommended cut off for multicollinearity (r > .80) will be used to determine excessive degree of association (Katz, 2006).

Serial Mediation Analyses

We conducted two serial mediation models using Hayes (2013) PROCESS Model 6 to examine the association between self-compassion and suicide risk, and the potential, sequential mediating effects of shame (1st order mediator) and PTSD (2nd order mediator) in Model 1, and guilt (1st order mediator) and PTSD (2nd order mediator) in Model 2.

Serial mediation models assume that the mediators have direct effects on each other; further, the independent variable influences the mediators serially and, subsequently, the dependent variable. These models may yield both direct and indirect effects.

Results found in simple mediation models are also found in serial models. The total effect (i.e., *c*) is the relation between the independent and dependent variables without controlling for the mediators and accounts for all direct and indirect effects. The direct effect (i.e., *c'*), in contrast, is the relation between the independent and dependent variables while holding the mediators constant. Finally, a total indirect effect (i.e., *ab*) is also calculated; this provides information on the role of all mediating variables in the relation between the independent and dependent variables. These effects are utilized to help provide information about the presence of mediation. Finally, an indirect-only effect is found when *ab* is significant, but neither *c* nor *c'* are significant.

In addition to these results, serial mediation also yields specific indirect effects. A serial mediation with two mediators can have three specific indirect effects. These effects provide information regarding the role of a specific mediator in the relation between the independent and dependent variables in the following ways: 1) though the 1st order mediator alone (a_1b_1), 2) through both the 1st and 2nd order mediators in serial fashion ($a_1a_3b_2$), and 3) through the 2nd order mediator alone (a_2b_2). Figure 1 provides a visual and detailed description of the relations tested.

Hayes' mediation models assess indirect effects without relying on statistically significant relations between the independent and dependent variables. This technique also utilizes bootstrapping, a non-parametric resampling technique that randomly and repeatedly samples data (10,000 times). This process provides estimations of indirect effects without the assumption of normally distributed data, which aids in maintaining power (Preacher & Hayes, 2008). Bootstrapping yields a 95% confidence interval, which aids in determining the significance of indirect effects; significance occurs when the 95% confidence interval does not contain zero.

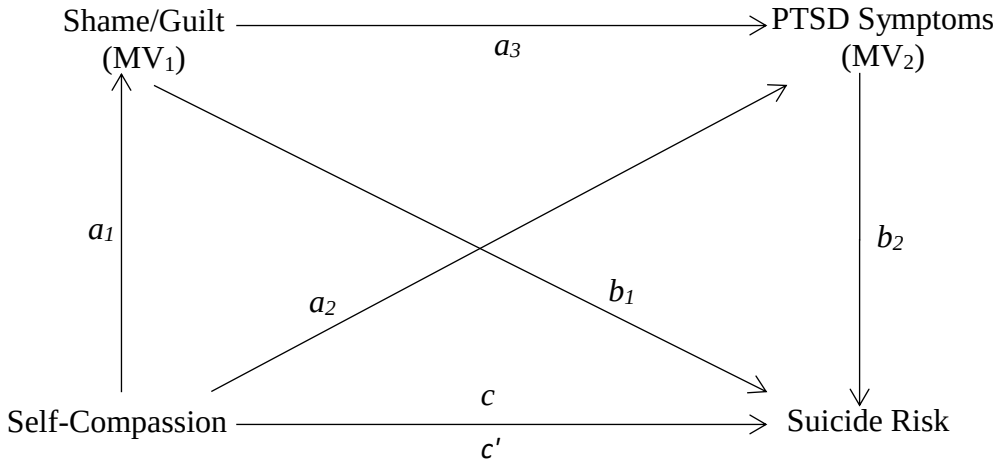

Figure 1. Indirect Effects: Serial Mediation Model
Note. MV = mediator variable. a_1 = direct effect of Self-Compassion on Shame (Model 1)/Guilt (Model 2); a_2 = direct effect of Self-Compassion on PTSD symptoms; a_3 = direct effect of Shame (Model 1)/Guilt (Model 2) on PTSD symptoms; b_1 = direct effect of Shame (Model 1)/Guilt (Model 2) on suicide risk; b_2 = direct effect of PTSD symptoms on suicide risk; c = total effect of Self-Compassion on suicide risk, without accounting for Shame (Model 1)/Guilt (Model 2) and PTSD symptoms; c' = direct effect of Self-Compassion on suicide risk when accounting for Shame (Model 1)/Guilt (Model 2) and PTSD symptoms; Total Indirect Effect = a_1b_{1+} $a_1a_3b_{1+}$ a_2b_2 (Self-Compassion effect suicide risk through various specific effects); a_1b_1 = specific indirect effect through Shame (Model 1)/Guilt (Model 2); $a_1a_3b_1$ = specific indirect effect through Shame (Model 1)/Guilt (Model 2) and PTSD symptoms; a_2b_2 = specific indirect effect through PTSD symptoms. Adapted from Preacher and Hayes (2012).

CHAPTER 3

RESULTS

Descriptive Results

Bivariate Correlations

Our bivariate hypothesis, tested utilizing Pearson's product-moment correlation analysis, was supported, with all study variables significantly associated in the predicted directions (see Table 2). Self-compassion was significantly, negatively associated with shame (r = -.672, p < .001), guilt (r = -.726, p < .001), PTSD symptoms (r = -.583, p < .001), and suicide risk (r = -.442, p < .001). Regarding our dependent variable, suicide risk was significantly, positively associated with shame (r = .374, p < .001), guilt (r = .449, p < .001), and PTSD symptoms (r = .491, p < .001). Similarly, PTSD symptoms were significantly, positively associated with shame (r = .578, p < .001) and guilt (r = .590, p < .001).

Regarding covariates, age (p < .001) and era of service (p < .01) were significantly, negatively associated with suicide risk, suggesting that younger veterans and veterans from earlier conflicts reported greater suicide risk. Additionally, VHA usage was significantly, positively related to suicide risk (p < .01), suggesting that veteran-focused medical centers are, indeed, providing healthcare service to veterans with greater severity of suicide risk. Finally, clinical cut-off scores for the PCL-M (i.e., greater than 50) and SBQ-R (i.e., greater than 7) are suggested in the extant literature. In our sample, 168 participants (53%) scored a 50 or more on the PCL-M and 194 participants (61.2%) scored a 7 or more on the SBQ-R.

Table 2

Means, Standard Deviations, and Correlations Among Variables of Interest (*N* = 317)

Variable	*M*	SD	Min/Max Scores	Self-Compassion	Shame	Guilt	PTSD Symptoms	Suicide Risk
1. Self-Compassion	2.72	0.84	1 - 5	-	-	-	-	-
2. Shame	8.18	3.11	3 - 15	-.672	-	-	-	-
3. Guilt	9.02	3.06	3 - 15	-.726	.720	-	-	-
4. PTSD Symptoms	49.66	18.80	0 - 75	-.583	.578	.590	-	-
5. Suicide Risk	8.15	3.31	3 - 18	-.442	.374	.449	.491	-
6. Depressive Symptoms	9.51	1.86	3 - 15	-.413	.381	.428	.597	.444

Note. Self-Compassion = Self-Compassion Scale - Short Form; shame and guilt = Differential Emotions Scale-IV; PTSD symptoms = PTSD Checklist-Military Version (PCL-M) for DSM-IV; suicide risk = Suicidal Behaviors Questionnaire - Revised (SBQ-R); and depressive symptoms = Multidimensional Health Profile- Psychosocial Functioning (MHP-P). All values are $p \leq .001$

Serial Mediation Analyses

Serial mediation hypotheses were partially supported. Model 1 (Table 3; Figure 2) utilized shame (MV_1) and PTSD symptoms (MV_2) as mediators. For our first model, a significant total effect was observed (c = -1.18, $p < .001$, CI = -1.62 to -.733). Further, the direct effect of self-compassion on suicide risk was reduced, but remained significant, when shame and PTSD symptoms were added as mediators (c' = -846, p = .002, CI = -1.39 to -.306), indicating significant mediation. The total indirect effect of self-compassion on suicide risk was also significant (ab = -.333, CI = -.670 to -.022).

As well, significant specific indirect effects were found for two pathways. First, a significant specific indirect effect was found for self-compassion through shame and PTSD symptoms ($a_1a_3b_2$ = -.116, CI = -.228 to -.049). Self-compassion was associated with lower levels of shame and, sequentially, decreased levels of PTSD symptoms and, in turn, reduced suicide risk. A significant indirect pathway was also found for self-compassion through PTSD symptoms (a_2b2 = -.187, CI = -.387 to -.066). Higher levels of self-compassion were associated with reduced levels of PTSD symptoms and, in turn, reduced suicide risk. The specific indirect effect through shame was not significant.

Table 3

Serial Mediation: Specific Indirect Effects of Shame and PTSD Symptoms in the Relation between Self-Compassion and Suicide Risk (*N* =317)

		BCa 95% CI	
Effect	*b*	Lower	Upper
ab	-.333	-.670	-.022
a_1b_1	-.030	-.354	.284
$a_1a_3b_2$	-.116	-.228	-.049
a_2b_2	-.187	-.387	-.066
Suicide Risk Total Effect Model R^2 = .293*			

Note. *a*, *b*, *c*, and *c'* represent unstandardized regression coefficients: a_1 = direct effect of self-compassion symptoms on shame; a_2 = direct effect of self-compassion on PTSD symptoms; a_3 = direct effect of shame on PTSD symptoms; b_1 = direct effect of shame on suicide risk; b_2 = direct effect of PTSD symptoms on suicide risk; *c* = total effect of self-compassion on suicide risk, without accounting for shame and PTSD symptoms; *c'* = direct effect of self-compassion on suicide risk when accounting for shame and PTSD symptoms; *ab* = Total Indirect Effect; a_1b_1 = specific indirect effect through shame; $a_1a_3b_1$ = specific indirect effect through shame and PTSD symptoms; a_2b_2 = specific indirect effect through PTSD symptoms. BCa 95% CI = bias corrected and accelerated 95% confidence interval; 10,000 bootstrap samples; covariates included age, sex, ethnicity, branch of service, era of service, VHA usage, and depressive symptoms. * $p \leq .001$.

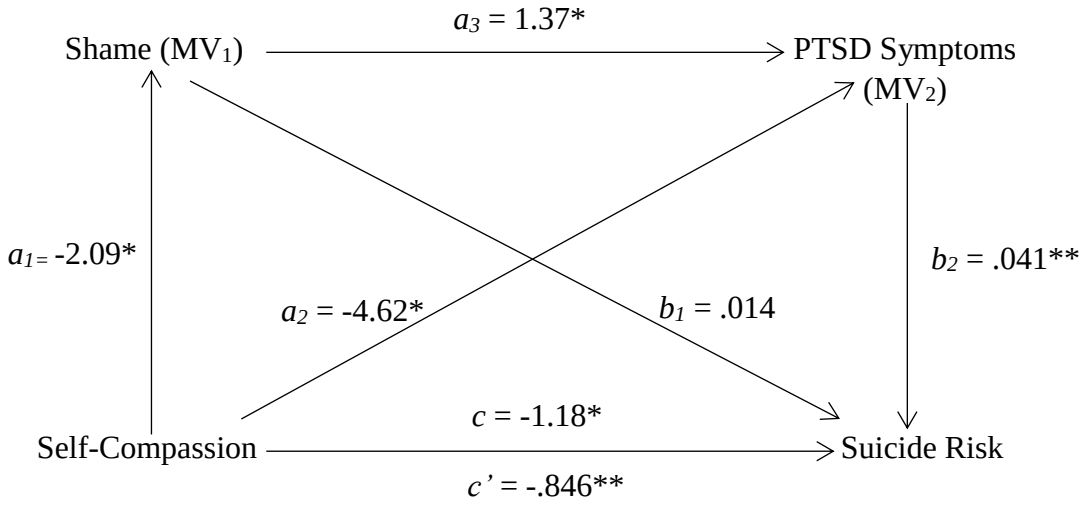

Figure 2. Illustration of the Indirect Effects of Shame and PTSD Symptoms in the Relation between Self-Compassion and Suicide Risk.
Note. MV = mediator variable. a_1 = direct effect of self-compassion on shame; a_2 = direct effect of self-compassion on PTSD symptoms; a_3 = direct effect of shame on PTSD symptoms; b_1 = direct effect of shame on suicide risk; b_2 = direct effect of PTSD symptoms on suicide risk; c = total effect of self-compassion on suicide risk, without accounting for shame and PTSD symptoms; c' = direct effect of self-compassion on suicide risk when accounting for shame and PTSD symptoms; Total Indirect Effect = $a_1b_1 + a_1a_3b_1 + a_2b_2$ (self-compassion affects suicide risk through various specific effects); a_1b_1 = specific indirect effect through shame; $a_1a_3b_1$ = specific indirect effect through shame and PTSD symptoms; a_2b_2 = specific indirect effect through PTSD symptoms. Adapted from Preacher and Hayes (2012). * $p \leq .001$, ** $p \leq .01$

In Model 2 (Table 4; Figure 3), guilt (MV_1) and PTSD symptoms (MV_2) were examined as mediators. In this model, a significant total effect was observed (c = -1.18, p < .001, CI = -1.62 to -.733). The direct effect of self-compassion on suicide risk was reduced, but remained significant, when guilt and PTSD symptoms were added as mediators (c' = -.588, p = .043, CI = -1.15 to -.020), indicating significant mediation. The total indirect effect of self-compassion on suicide risk was also significant (ab = -.591, CI = -.991 to -.226).

Significant specific indirect effects were also found for two pathways. A significant specific indirect effect was found for self-compassion through guilt and PTSD symptoms ($a_1a_3b_2$ = -.100, CI = -.220 to -.033); self-compassion was serially associated with lower levels of guilt and decreased levels of PTSD symptoms and, in turn, reduced suicide risk. Second, there was a significant specific indirect pathway for self-compassion through PTSD symptoms (a_2b2 = -.175, CI = -.377 to -.055). Higher levels of self-compassion were associated with lower levels of PTSD symptoms and, in turn, reduced suicide risk. The specific indirect effect through guilt was not significant.

Table 4

Serial Mediation: Specific Indirect Effects of Guilt and PTSD Symptoms in the Relation between Self-Compassion and Suicide Risk (*N* =317)

		BCa 95% CI	
Effect	*b*	Lower	Upper
ab	-.591	-.991	-.226
a_1b_1	-.317	-.684	.048
$a_1a_3b_2$	-.100	-.221	-.033
a_2b_2	-.175	-.377	-.055
Suicide Risk Total Effect Model R^2 = .324*			

Note. *a*, *b*, *c*, and *c'* represent unstandardized regression coefficients: a_1 = direct effect of self-compassion symptoms on guilt; a_2 = direct effect of self-compassion on PTSD symptoms; a_3 = direct effect of guilt on PTSD symptoms; b_1 = direct effect of guilt on suicide risk; b_2 = direct effect of PTSD symptoms on suicide risk; *c* = total effect of self-compassion on suicide risk, without accounting for guilt and PTSD symptoms; *c'* = direct effect of self-compassion on suicide risk when accounting for guilt and PTSD symptoms; *ab* = Total Indirect Effect; a_1b_1 = specific indirect effect through guilt; $a_1a_3b_1$ = specific indirect effect through guilt and PTSD symptoms; a_2b_2 = specific indirect effect through PTSD symptoms. BCa 95 % CI = bias corrected and accelerated 95% confidence interval; 10,000 bootstrap samples; covariates included age, sex, ethnicity, branch of service, era of service, VHA usage, and depressive symptoms. * $p \leq .001$.

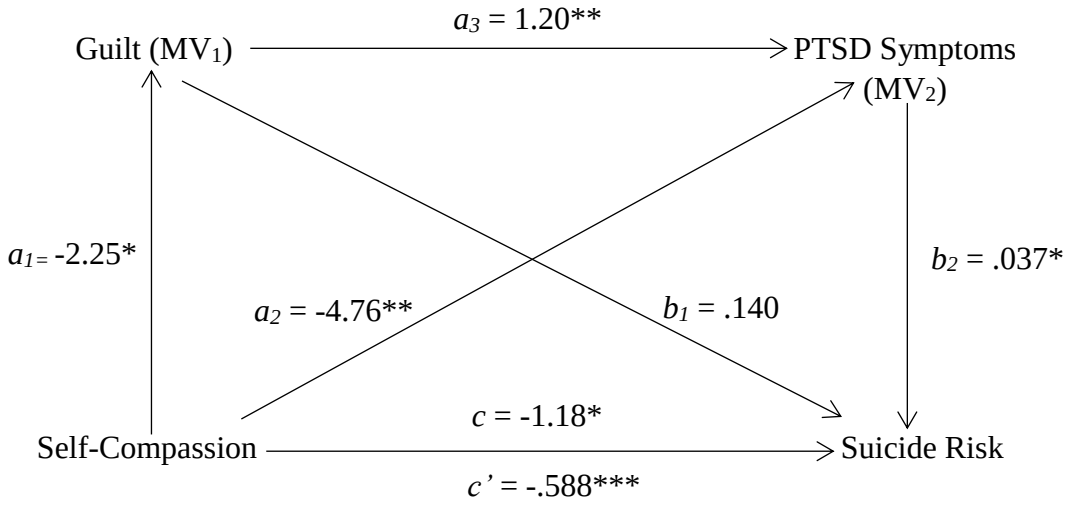

Figure 3. Illustration of the Indirect Effects of Guilt and PTSD Symptoms in the Relation between Self-Compassion and Suicide Risk.
Note. MV = mediator variable. a_1 = direct effect of self-compassion on guilt; a_2 = direct effect of self-compassion on PTSD symptoms; a_3 = direct effect of guilt on PTSD symptoms; b_1 = direct effect of guilt on suicide risk; b_2 = direct effect of PTSD symptoms on suicide risk; c = total effect of self-compassion on suicide risk, without accounting for guilt and PTSD symptoms; c' = direct effect of self-compassion on suicide risk when accounting for guilt and PTSD symptoms; Total Indirect Effect = $a_1b_1 + a_1a_3b_1 + a_2b_2$ (self-compassion affects suicide risk through various specific effects); a_1b_1 = specific indirect effect through guilt; $a_1a_3b_1$ = specific indirect effect through guilt and PTSD symptoms; a_2b_2 = specific indirect effect through PTSD symptoms. Adapted from Preacher and Hayes (2012). * $p \leq .001$, ** $p \leq .01$, *** $p \leq .05$

CHAPTER 4

DISCUSSION

Suicide is a significant health concern for veterans and may often occur as a result of negative cognitive-emotional sequelae following exposure to a traumatic event (Fanning & Pietrzak, 2013; Jakupcak et al., 2011; Wisco et al., 2017). Yet, the presence of protective factors, such as self-compassion, may help to reduce suicide risk in the context of trauma. In fact, self-compassion may be most salient during times of distress, with beneficial downstream effects on shame, guilt and psychopathology, making it an ideal candidate for therapeutic promotion (Leary et al., 2007; Neff, 2003a; Neff, 2003b).

Overview of Main Findings

Bivariate Analyses

In our sample of United States veterans, we examined the bivariate associations between self-compassion, shame, guilt, PTSD symptoms, and suicide risk. In support of hypotheses, shame, guilt, PTSD symptoms, and suicide risk were significantly, positively related, and all of these variables were negatively related to self-compassion.

To begin, our findings support the well-established linkages between maladaptive cognitive-emotional functioning, psychopathology and suicide risk (Freeman et al. 2000; Held, Owens, & Anderson, 2015; Pietrzak et al., 2010; Wisco et al., 2014; Wisco et al., 2017). Regarding shame and guilt, individuals who perceive themselves in a globally negative way and/or experience feelings of remorse after an act committed/omitted, appear to be at greater risk for suicide. In previous research, it has been suggested that individuals experiencing shame and guilt who attempt suicide, may be attempting to escape from extreme emotions resulting from socially-imposed and self-directed critiques about the self for their perceived role in the

guilt/shame-inducing situation (Hendin, 2004; Kim, Thibodeau, & Jorgensen, 2011; Lopez-Munoz et al., 2017).

Our pattern of results also substantiates previously-noted positive associations between shame, guilt and PTSD (Cunningham, Davis, Wilson, & Resick, 2018). In a cyclical fashion, individuals who experience high levels of shame are more likely to withdraw from others due to a negative self-perception that promotes avoidance and prevents open engagement with others, thereby limiting opportunities for support and exacerbating negative cognitions and emotions (Rangganadhan & Todorov, 2010; Tran & Beck, 2018). Similarly, the experience of guilt may contribute to isolation, perhaps to avoid repetition of mistakes or ruminating on the event (Held, Owens, & Anderson, 2015; Kubany & Watson, 2003).

Finally, we confirm the well-established association between PTSD and suicide risk (Lee et al., 2018; O'Donnell, Logan, & Bossarte, 2018; Wisco et al., 2014). From a biopsychosocial perspective, numerous explanatory pathways for this linkage exist. Physiologically, previous research indicates that the hyperarousal symptoms of PTSD are significant predictors of suicide attempts in veterans exposed to combat (Stanley, Rogers, Hanson, Gutierrez, & Joiner, 2019). PTSD may also exacerbate psychiatric comorbidities, exerting detrimental impact on depression, anger, and substance use (Lineberry & Brady, 2014; McKinney, Hirsch, & Britton, 2017; Wisco et al., 2014), which are all suicide risk factors. Finally, veterans with PTSD may be more impulsive and prone to engagement in risk-taking behaviors (James, Strom, & Leskela, 2014), which are personality characteristics associated with increased suicidal behavior.

On the other hand, regarding protective effects, we provide support for the beneficial association between self-compassion and psychopathology (Litz et al., 2009; Pompili et al., 2013; Wisco et al., 2017), including suicide risk. In general, the linkage between self-compassion

and psychopathology has been infrequently examined, with some noted exceptions in in veteran (Bryan, Graham, & Roberge, 2015), collegiate (Rabon, Sirois, & Hirsch, 2018), and adolescent samples (Zeller, Yuvai, Nitzan-Assayag, & Bernstein, 2015). Broadly, individuals who are kind to the self and have a positive self-perception, may also be less likely to have other comorbid psychiatric concerns that can contribute to increased suicide risk, such as depression and anxiety (Bhar, Ghahramanlou-Holloway, Brown, & Beck, 2008; Neff, Kirkpatrick, & Rude, 2007). Perhaps because of the mindfulness component of self-compassion, persons with higher levels of self-compassion may be better able to cognitively process, or buffer against, negative thoughts (e.g., shame, guilt) that would otherwise exacerbate suicide risk (Lamis & Dvorak, 2014).

This assertion was supported in our current study, as self-compassion was negatively related to shame and guilt. Similar patterns have emerged in past studies with veterans, in which self-compassion was helpful in reducing shame (Au et al., 2017) and guilt (Held & Owens, 2015). Veterans with greater self-compassion may be better able view themselves positively and kindly, rather than in the self-punitive manner characterized by shame and guilt (Shahar, 2014). Such self-kindness, paired with the mindfulness element of self-compassion, may allow veterans to consider their previous experiences in a nonjudgmental manner and may facilitate the adaptive processing of remorse (Stotter et al., 2013).

Finally, we confirm a beneficial association between self-compassion and symptoms of PTSD, including in veterans (Dahm et al., 2015; Hiraoka et al., 2015). Self-compassion may help buffer against PTSD through mindfulness, which may prevent emotional numbing, and through self-kindness, which can reduce engagement in negative self-talk and self-criticism (Hoffart, Oktedalen, & Tomas, 2015; Valdez & Lilly, 2016). Those who develop self-compassion may be

better able to engage with and process negative emotions in a balanced, non-judgmental way, rather than over-identifying with the emotions (Ehring, Frank, & Ehlers, 2008).

In sum, at the bivariate level, we replicated several well-known associations between cognitive-emotional factors, psychopathological variables, and suicide risk, in our vulnerable sample of U.S. veterans. In our multivariate discussion below, we will explore the serial interrelations between these variables, which suggest a set of potential mechanisms of action linking self-compassion and suicide risk.

Multivariate Analyses

Our multivariate hypotheses, which were supported, posit a serial association between self-compassion and suicide risk, with self-compassion exerting an ameliorative effect on negative cognitions and emotions, and psychopathological symptoms, thereby reducing suicide risk (Castilho, Carvalho, Marques, & Pinto-Gouveia, 2017; Dahm et al., 2015; Held & Owens, 2015). Specifically, we found that self-compassion was associated with suicide risk through the following mechanisms: (i) through the total effect of all variables; (ii) indirectly via lower levels of shame/guilt (1^{st}-order mediators) and, sequentially, via decreased PTSD symptoms (2^{nd}-order mediator), in both models; and (iii) indirectly via decreased PTSD symptoms, in both models.

Although our study is the first to examine these factors in a single analytic model, our pattern of results supports previous research examining similar pathways. For example, in a sample of community adults, self-compassion explained a large portion of the variance in negative affect (López, Sanderman, & Schroevers, 2016). In a sample of homeless veterans, self-compassion training resulted in reduced shame and guilt, with a clinically-significant trend in reduction of negative cognitions and mood associated with PTSD (Held et al., 2018). Finally, in a study of OEF/OIF/OND veterans by Forkus, Breines, and Weiss (2019), self-compassion

moderated the association between exposure to morally-injurious events and PTSD, and between morally-injurious events and deliberate self-harm.

These independent findings and established theory offer a strong base of support for our identification of potential mechanisms of action for the linkage between self-compassion and suicide risk. To begin, self-compassion may allow veterans to acknowledge and accept traumatic experiences, including its negative cognitive-emotional consequences, rather than avoiding the confrontation of, and act of working through, trauma and its consequences (Zhang & Chen, 2016). Self-compassion may also promote positive reframing of negative (i.e., traumatic) events, leading to a more adaptive view of the event and, thus, fewer negative thoughts and emotions (Ewert, Gaube, & Geisler, 2018). In the following sections, we will discuss the serial associations between self-compassion and the constructs of shame and guilt, and between self-compassion and PTSD symptoms, and their subsequent effects on suicide risk.

Mediation via Shame and Guilt, and PTSD. Regarding shame and guilt, the self-compassionate process of overcoming negative self-perceptions related to, and reducing over-responsibility for, trauma may enable a cascading effect that reduces vulnerability to posttraumatic symptoms. For example, the mindfulness component of self-compassion may be useful in the management of shame-laden memories that can become central to one's perspective of the self/identity and which are associated with increased severity of PTSD symptoms. These shame-based memories may become a filter through which the individual views the self and world, prompting continuous re-engagement with traumatic memories (Berntsen & Rubin, 2006; Robinaugh & McNally, 2010). Mindfulness may allow individuals to view themselves as an external observer that is separate from emotional experiences, creating needed psychological

distance between shame and identity and promoting a balanced view of one's emotions (Atkins & Styles, 2015), with beneficial downstream effects for PTSD.

Another potential mechanism of action may be self-compassion's incompatibility with avoidance, a key factor in the maintenance of negative trauma sequelae. Individuals experiencing trauma-related shame and guilt may attempt to avoid these distressing symptoms cognitively and through methods including substance use and self-harm, as evidenced in samples of homeless veterans and individuals exposed to childhood trauma (Held et al., 2018; Holl et al., 2017). Such avoidance, however, may paradoxically contribute to perpetuation and exacerbation of PTSD-related symptoms as it reinforces short-term, immediate relief from negative emotions (i.e., shame, guilt) and, thus, engagement in continuing avoidance, resulting in a failure to adequately address underlying causes of these negative emotions, which may continue to worsen (Marx & Sloan, 2005). Yet, engaging in self-compassion may allow individuals to approach these distressing symptoms without becoming overwhelmed, for example via mindful processing of negative emotions and reduced self-criticism (Neff et al., 2007). Management of cognitive avoidance may also be manifested in a more tangible way. For example, if self-compassion is enacted to reduce shame and guilt, veterans may embrace, rather than withdraw from, social networks, providing a needed source of support that can help to buffer against symptoms of PTSD and suicide risk (Cunningham, Davis, Wilson, & Resick, 2017; Lewis, 2008). Perceptions of social support may also be strengthened if veterans embrace a sense of common humanity, acknowledging that others have experienced similar traumas or emotions (Mott et al., 2013).

Emerging research may provide a neurobiological explanation for our findings. For example, Compassion-Focused Therapy (CFT) is neurobiologically-based, positing that compassion induction decreases shame via reduced activation of the midbrain periaqueductal

gray region, an area activated during the experience of shame (Gilbert, 2014). Additional studies have demonstrated that components of self-compassion, including self-kindness (Long et al., 2010) and mindfulness (Lutz et al., 2015; Wheeler, Arnkoff, & Glass, 2017), activated areas of the brain associated with the experience of shame, guilt (Michl et al., 2014; Takahashi et al., 2008) and PTSD symptoms (Bremner, 2006; Michopoulos, Norrholm, & Jovanovic, 2015). Other physiological pathways may also be involved. For example, the hypothalamic-pituitary-adrenal (HPA) axis is activated in individuals with PTSD symptoms, characterized by increased cortisol and heart rate levels (Michopoulos, Norrholm, & Jovanovic, 2015); yet, collegiate samples who participated in Compassion-Focused Imagery (Rockliff, Gilbert, McEwan, Lightman, & Glover, 2008) or compassion meditation (Pace et al., 2009) had decreased levels of cortisol compared to control groups. Finally, engaging in self-compassion meditation (Arch et al., 2013) or CFT (Matos et al., 2017) resulted in reduced stress responses in both collegiate women and non-clinical adults, and lower levels of shame in the sample of non-clinical adults. Such patterns of findings suggest that self-compassion may exert its beneficial effect on negative trauma sequelae, via a dual influence on both psychological and physiological functioning.

Mediation via Shame and Guilt. Contrary to our hypotheses and past research shame and guilt were not significant independent mediators of the linkage between self-compassion and suicide risk, suggesting that simply reducing levels of shame and guilt, without addressing the symptoms of PTSD, may have less clinical impact. One potential reason for this lack of effect, may be a fear of, or an inability to effectively implement, self-compassion. For example, persons with experiences of early trauma or emotional distress may have pre-existing perceptions of shame and guilt, along with entrenched negative beliefs about self-worth and self-compassion (e.g., not deserving of kindness). As such, these individuals may avoid or be uncomfortable with

self-compassionate responses and may have difficulty with implementation of self-compassion during distressing times (Gilbert, 2009; Gilbert, McEwan, Matos, & Rivis, 2010). This explanation has particular relevance to veterans, as up to 67% of veterans report exposure to traumatic events occurring prior to enlistment in the military (Clancy et al., 2006; Dedert et al., 2009), suggesting a potential group of veterans for whom self-compassion may be less accessible.

Characteristics of military culture, such as hypermasculinity, may also reduce the accessibility and acceptability of self-compassion. In military culture, an ideal service member demonstrates self-constraint and stoicism, and shame may occur if these standards cannot be met (Shields, Kuhl, & Westwood, 2017), directly opposing the benefits of self-compassion. Indeed, the act of being self-compassionate, itself, may be viewed as antithetical to military ideals that require one to be demanding and critical of the self. Further, at a basic level, greater adherence to masculine norms are associated with less self-compassion (Reilly, Rochlen, & Awad, 2014).

Such research, including findings from our current study, suggest that some veterans, perhaps due to past reactivity to trauma or military stoicism, may have difficulty accessing or engaging in self-compassion. As well, although self-compassion is related to less shame and guilt at the bivariate level, it may simply be the case that this is a necessary but not sufficient linkage to prevent suicide; that is, in the context of trauma, PTSD and suicide risk, reduction of shame and guilt may not be the most salient or responsive target for intervention. Finally, as we note below, it may be that suicide risk for veterans is predicated on the traumatic event itself, and on primary symptoms of PTSD, rather than on a limited range of cognitive-emotional consequences (i.e., only shame and guilt), highlighting the complexity of suicide risk but also offering potential points of intervention that are within the scope of PTSD treatment.

Mediation via PTSD Symptoms. Supporting our hypotheses, PTSD symptoms were a significant, independent mediator of the relation between self-compassion and suicide risk. In previous research, self-compassion is beneficially associated with PTSD symptoms across samples, including veterans (Hiraoka et al., 2015; Kearney et al., 2013). Broadly, persons with PTSD symptoms may have difficulty, or an inability, in disengaging from thoughts of their traumatic past. This inability may contribute to over-identification with the past and difficulty evaluating one's self in a positive manner, leading to depressed mood and increased suicide risk (Janssen, Heame, & Takarangi, 2015). Self-compassion, however, may weaken or prevent this process, allowing veterans to view themselves in a nonjudgmental manner and, thereby, reducing negative self-focused cognitions and promoting an identity not solely based on negative or traumatic past events (Dahm et al., 2015). Similarly, self-compassion, as a self-soothing mechanism, may reduce rumination about a trauma, or one's role in a traumatic event, with potential beneficial impact on intrusive thoughts, memories and nightmares, and negative mood (i.e., anxiety), as well as suicide risk (Bryan, Morrow, Etienne, & Ray-Sannerud, 2013; Cunningham, Davis, Wilson, & Resick, 2017).

The sub-components of self-compassion may also contribute unique protective effects toward amelioration of symptoms of PTSD. Mindful awareness, for instance, may allow transcendence of a traumatic past and promotion of a focus on the present and future, whereas engagement in self-kindness may reduce self-judgement of inner experiences (e.g., feelings of anxiety, intrusive memories), and such processing is associated with decreased severity of PTSD symptoms (Martin, Bartlett, Reddy, Gonzalez, & Vujanovic, 2018). For example, in a clinical sample, greater self-compassion was related to less trauma-based disturbance of self-organization, including less affect dysregulation and negative self-conceptualization (Karatzias et

al., 2018). In another study, of individuals in treatment for PTSD, less self-judgment and self-criticism were associated with lower levels of PTSD symptoms, as we found in our current study, suggesting that the effect of self-compassion, while useful for reducing such self-punitive beliefs, might also have important downstream effects on a broader array of PTSD symptoms (Hoffart, Øktedalen, & Langkaas, 2015). For example, use of mindful non-judgment was linked to decreased PTSD symptoms, including arousal, avoidance, and intrusive symptoms, in a study comparing combat veterans with and without PTSD and civilians without PTSD (Wahbeh, Lu, & Oken, 2011).

Finally, veterans who engage in self-compassion, particularly the acknowledgment of common humanity, may also have an increased willingness to solicit social support from, and feel social connectedness with, others, thereby combating the social isolation and withdrawal that are characteristic of PTSD (Bistricky et al., 2017; Pietrzak & Cook, 2013). Although previous research has not focused specifically on the linkage between common humanity and PTSD, similar constructs, including social connectedness, are well-established contributors to this disorder. For example, veterans with greater social connectedness, including a secure attachment style and greater perceptions of social support, are more likely to be resilient than distressed (Pietrzak & Cook, 2013). Conversely, in a sample of veterans undergoing residential treatment for PTSD, decreased social connectedness was related to emotional numbing (Sippel, Watkins, Pietrzak, Hoff, & Harpaz-Rotem, 2018).

Mediation in the Context of Depressive Symptoms. Of note, our overall results remained significant after covarying depressive symptoms, illustrating the robustness of our hypotheses. In previous research, depressive symptoms are a strong contributor to suicide risk, with this linkage demonstrated in a variety of populations, including veterans exposed to trauma (Lee et al., 2018;

Sher, 2009). Previous researchers have also highlighted the complicated association between comorbid depressive and PTSD symptoms (i.e., similar diagnostic criteria), which can result in an exacerbation of either or both disorders, as well as increased suicide risk (Conner et al., 2014; Kimbrel et al., 2016). The inclusion of depressive symptoms in analyses often obscures the effect of PTSD, suggesting that the negative cognitions and mood-related symptoms of PTSD that overlap with depressive symptomatology might be a strong contributor to suicide risk (Gradus, 2017). Despite this, our findings suggest that non-depressive elements of PTSD must also be considered in the treatment of suicide risk in veterans and, further, that self-compassion may holistically address a broader range of symptoms in person with trauma, than just depressive characteristics (Germer & Neff, 2015).

Limitations

Despite the novelty of our findings, they must be viewed in the context of several limitations. First, our cross-sectional design precludes exploration of causal associations and, as such, bidirectionality is a possibility. For instance, PTSD symptoms, such as intrusive memories and nightmares, may exacerbate and reinforce the presence of shame and guilt, via the replaying of a traumatic event and the promotion of rumination (Crocker, Haller, Norman, & Angkaw, 2016). As well, the heightened emotional distress following a trauma may initially inhibit use, or decrease levels, of self-compassion, allowing PTSD symptoms to increase in severity and making it more difficult for self-compassion to activate. Indeed, individuals with PTSD symptoms have a greater likelihood of being self-critical and may be unable to prevent ruminative and intrusive thought patterns (Cox, MacPherson, Enns, & McWilliams, 2004; Speckens, Ehlers, Hackmann, Ruths, & Clark, 2007). Despite the need for prospective,

longitudinal research to substantiate our serial mediation models, our analyses were based on theoretical ordering of these variables.

Our use of self-report measures may also be a limitation, as subjective assessments may limit the accuracy of measurement of our constructs. For example, comorbid conditions including depression, anxiety, and acute brain injury have significant symptom overlap with PTSD and may inflate scores on the PCL (McDonald & Calhoun, 2010). Further, use of self-report measures and self-selection recruitment may contribute to respondent bias, including under- or over-reporting of psychological distress (Fisher & Katz, 2000). Factors such as social desirability may also contribute to respondent bias; for instance, veterans with higher levels of social desirability are less likely to endorse PTSD symptoms (Baldwin, 2018; Fisher & Katz, 2000). Other factors, such as self-stigma, may also influence response patterns. Veterans often have higher levels of self-stigma regarding mental illness and treatment seeking and, thus, our sample may be comprised of respondents with less stigma regarding mental illness (Rosen et al., 2011). In future studies, researchers should assess for potentially-biasing variables and should employ alternative modes of assessment, including objective measures such as structured interviews or a review of medical records, to reduce potential respondent biases. Finally, in future research, the PCL-5 should be utilized, given changes to diagnostic criteria for PTSD in the DSM-5 (Pai, Suris, & North, 2017).

Our sample is also predominantly male and White, which may limit the generalizability of our findings to more ethnically and racially diverse groups, as well as to women. Further, our sample was comprised solely of veterans, potentially limiting the generalizability of our findings to other groups, including civilians and even active duty military personnel. However, historically, most veterans are male and White, supporting the applicability of our findings to our

population of interest (U.S. Census Bureau, 2012). Yet, future research is needed to examine our models as they occur across additional military samples, including those with greater diversity. For example, female veterans are more likely to report exposure to military sexual trauma (MST) compared to male counterparts, which contributes to greater risk for PTSD and other disorders, including eating disorders (Breland et al., 2018; Klingensmith, Tsai, Mota, Southwick, & Pietrzak, 2014; Scott et al., 2014). Sexual minorities are at higher risk for suicide compared to cisgender, heterosexual individuals (Yildiz, 2018), including those in the military (Blosnich, Bossarte, & Silenzio, 2012; Blosnich, Mays, & Cochran, 2014; Ray-Sannerud, Bryan, Perry, & Bryan, 2015). As well, veterans belonging to ethnic and racial minority groups may be at an increased risk for suicide due to comorbid risk factors. For example, Native American veterans have higher levels of suicide risk due to comorbidities, specifically substance use (O'Keefe & Reger, 2017). Finally, veterans with a history of mild to severe traumatic brain injury (TBI) are at higher risk for suicide than veterans without TBIs (Brenner, Homaifar, Adler, Wolfman, & Kemp, 2009; Bryan & Clemans, 2013).

Implications

Despite such limitations, our findings may have important implications for mental health promotion and suicide prevention efforts in U.S. veterans. Treatments targeting our variables of interest may reduce suicide risk for veterans in both individual and group settings, and across various mental health settings, including Veterans Affairs Medical Centers and corresponding Community Based Outpatient Clinic sites.

Individual Therapy. Bolstering already-present trait self-compassion, and developing state self-compassion, may assuage negative sequelae of trauma and reduce suicide risk in veterans; thus, interventions that foster self-compassion and target different sequelae of trauma

(i.e., shame, guilt, PTSD symptoms, and suicide risk) may prove helpful. For example, Mindful Self-Compassion (MSC), developed by Neff and Gilbert (2013) to bolster resilience and combat emotional suffering, focuses on helping individuals develop self-compassion in both a formal (i.e., sitting meditation) and informal (i.e., using cognitive restructuring and acceptance skills in daily living) manner, via training and practice in mindfulness skills. In a veteran sample (Kearney et al., 2013), and in a randomized control trial utilizing community participants (Neff & Gilbert, 2013), engagement in MSC significantly increased levels of self-compassion, and decreased depression and PTSD in veterans.

In addition to MSC, other therapies have been developed that foster self-compassion, including in individuals exposed to trauma. Compassion-Focused Therapy (CFT), for example, is focused on alleviating threat-based processing that contributes to shame and self-criticism, via promotion of self-kindness and cognitive restructuring (Gilbert, 2014; Irons & Lad, 2017; McLean, Steindl, & Bambling, 2018). In a qualitative study of persons diagnosed with PTSD, completion of CFT resulted in increased self-compassion and decreased levels of PTSD (Lawrence & Lee, 2014). Compassion-Focused Imagery, which focuses on mindful breathing and compassionate imagery involving receiving compassion from both the self and others, also reduces levels of self-criticism via promotion of self-kindness and by bolstering feelings of acceptance and warmth, as evidenced in college students (Rockliff et al., 2008). In additional research, therapies and protocols that emphasize mindfulness and self-compassion, broadly, have yielded some benefit for the treatment of trauma symptoms and comorbid negative cognitive-emotional functioning (Rapgay et al., 2014). Overall, studies examining self-compassion and mindfulness as protective factors, indicate that they are linked to less PTSD and guilt in

homeless veterans and adults with PTSD (Au et al., 2017; Held & Owens, 2015), and to reduced PTSD symptoms and increased self-compassion in veterans (Collinge, Kahn, & Soltysik, 2012).

In addition to bolstering self-compassion, interventions targeting shame, guilt, and symptoms of PTSD could also be beneficial in reducing vulnerability to suicide risk in veterans. Although most evidence-based therapies can be utilized to treat PTSD symptoms, several were specifically developed to jointly address these symptoms and potential negative sequelae (i.e., suicide risk), including Cognitive Processing Therapy (CPT) and Prolonged Exposure (PE) (Sharpless & Barber, 2011). For example, in studies of veterans with PTSD and active duty military personnel, -CPT is effective in decreasing suicide-specific cognitions (Holliday, Holder, Monteith, Lindsey, & Suris, 2018), suicide ideation (Bryan et al., 2018), and iatrogenic suicide risk (i.e., decreased severity, less new-onset suicidal ideation, and fewer suicide attempts) (Bryan et al., 2016). Similarly, in a sample of veterans who experienced military sexual trauma, completion of CPT resulted in reduced levels of self-blame (i.e., guilt) and, in turn, fewer PTSD symptoms (Holliday, Holder, & Suris, 2018). Finally, in a study of veterans with PTSD, prolonged exposure (PE) resulted in the successful decrease of PTSD symptoms and suicidal ideation (Cox et al., 2016).

Of note, both CPT and PE address emotions and cognitions that are laden with shame and guilt via restructuring and exposure techniques (Paul et al., 2014; Resick, Monson, & Chard, 2014). For example, in a study of female rape victims, both CPT and PE were successful in reducing levels of guilt (Resick, Nishith, Weaver, Astin, & Feuer, 2002) and, in another study of persons exposed to trauma, both CPT and PE were effective in reducing suicidal ideation (Gradus, Suvak, Wisco, Marx, & Resick, 2013). Both CPT and PE are also efficacious in

reducing PTSD symptoms in veterans, compared to treatment as usual conditions (Monson et al., 2006; Nacasch et al., 2007).

Finally, although not designed specifically for the treatment of PTSD, Dialectical Behavior Therapy (DBT) provides intervention strategies that can be used to target the primary factors of our model. In Stage 1 of DBT, patient's learn skills to increase control over behaviors that threaten their safety, including suicidal behavior and, in Stage 2, patient's focus on resolution of precipitants of life-threatening behavior, such as PTSD symptoms (Koerner, 2012). These skills include self-compassion (i.e., mindfulness skills, radical acceptance) and emotion regulation, and the practice of such DBT-based skills is associated with decreased PTSD symptoms in females who experienced childhood sexual abuse, in both an inpatient (Krüger et al., 2014) and outpatient setting (Steil et al., 2018), and in women diagnosed with borderline personality disorder (BPD) and PTSD (Harned, Wilks, Schmidt, & Coyle, 2018). Similar results were found in a study of veterans with BPD and PTSD symptoms, who were treated with a combination of prolonged exposure and DBT (Meyers et al., 2017).

Group Therapy. Many of these therapeutic approaches have also been developed for administration in a group format, which may help to bolster sense of common humanity and, through empathy from others, may contribute to amelioration of the negative sequelae of trauma exposure. For example, Cuppage, Baird, Gibson, Booth, and Hevey (2018) compared the efficacy of CFT to treatment-as-usual (TAU) (i.e., therapy with their assigned therapists, psychoeducation groups) in a sample of clients from an independent, not-for-profit mental health service, finding that participants who completed 14, three-hour sessions of CFT (i.e., psychoeducation, skills development related to developing a compassionate self, engaging with emotions) reported increased self-compassion and reduced levels of shame. In another study, of

individuals with eating disorders, participants who completed group-based CFT in conjunction with an evidence-based treatment (EBT) for eating disorders, compared to those who only completed the EBT, manifested greater self-compassion and reduced shame (Kelly, Wisniewski, Martin-Wager, & Hoffman, 2017).

Additional group therapy models may also be suitable for addressing the variables encompassed in our study. For example, Mindfulness-Based Cognitive Therapy (MBCT), delivered in a group format, increased mindfulness and self-compassion in individuals with somatic disorders struggling with depression (Schroevers, Tovote, Snippe, & Fleer, 2016). Similarly, female college students who completed three sessions of a group-based self-compassion intervention involving psychoeducation, meditations, and homework assignments, reported greater self-compassion and mindfulness, and decreased rumination (Smeets, Neff, Alberts, & Peters, 2014), as compared to a control group.

In another study, utilizing MBCT modified to address combat-related PTSD, veterans who completed the MBCT protocol, compared to TAU, reported fewer PTSD cognitions related to self-blame (e.g., guilt) and reduced severity of PTSD symptoms (King et al., 2013). Finally, trauma-exposed adults who engaged in an eight-session mindfulness-based stress reduction group reported decreased levels of PTSD symptoms and shame (Goldsmith et al., 2014) and, similarly, veterans engaged in a pilot study combining mindfulness with exposure therapy, reported reduced levels of PTSD symptoms (King et al., 2016).

Future Directions

In addition to therapeutic implications, our findings can inform future research and the development of targeted interventions. Given the initial success of therapies aimed at developing self-compassion, future intervention-based studies are needed, including randomized controlled

trials, to more-rigorously examine the beneficial impact of self-compassion on negative trauma sequelae and suicide risk in veterans. To begin, comparison trials may be valuable, examining differences in effects between currently available treatments designed to promote self-compassion (i.e., MSC, CFT), or reduce PTSD (i.e., CPT, PE), and alternative treatments that might be effective, such as DBT. As well, the development of new treatments specifically focused on our variables of interest may be of benefit to suicidal veterans. For example, although the constructs of shame and guilt may be addressed secondarily to PTSD symptoms in some evidence-based interventions (e.g., CPT, Trauma-Focused CBT), very few interventions (e.g., compassion-focused therapy, trauma informed guilt reduction therapy) make shame and guilt the primary focus. Thus, the development of therapeutic strategies targeting these cognitive-emotional factors is warranted (Au et al., 2017; Norman, Wilkins, Myers, & Allard, 2014). Mindfulness techniques, for instance, paired with exposure and cognitive restructuring, may help to simultaneously promote self-compassion while ameliorating levels of shame, guilt, PTSD, and suicide risk (King et al., 2016; Rapgay et al., 2014).

In future research, alternative manifestations of our variables of interest should be examined such as, for instance, shame and guilt arising from non-traumatic circumstances, or the sequelae of non-military trauma. For veterans and military personnel, however, a nascent construct encompassing the constructs of shame and guilt, referred to as moral injury, has begun to be recognized as a potential factor contributing to distress and psychopathological reactions to trauma, and may be useful to our model (Battles et al., 2018; Kelley, Braitman, White, & Ehlke, 2018; Wisco et al., 2017). Moral injury is conceptualized as the mental health consequences that occur after "perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations" and involves shame and guilt, as these

emotions often occur after a morally-injurious event (e.g., killing in combat) (Litz et al., 2009). Of note, veterans may experience shame and guilt in the context of morally-injurious events (e.g., killing civilians caught in crossfire), and these constructs may manifest distinctly from their PTSD symptoms. Indeed, in a study of National Guard personnel, moral injury and PTSD emerged as separate constructs, with shame and guilt loading onto the moral injury factor (Bryan, Bryan, Roberge, Leifker, & Rozek, 2018). Further, in a study by Bryan and colleagues (2018), the interaction of moral injury and PTSD significantly increased the likelihood of suicide ideation and attempts. Given our findings suggesting a beneficial impact of self-compassion on shame, guilt and suicide risk, it may be that self-compassion has a similar effect on moral injury, warranting investigation in future studies.

Similarly, future research is needed to substantiate our models in veterans who have experienced different types and intensities of trauma. For example, military sexual trauma increases severity of PTSD in women who have also experienced combat (Scott et al., 2014) and, comparatively, rates of PTSD for both male and female veterans are greater in those who experience MST versus combat, suggesting that interventions targeting these types of trauma may differ in efficacy (Sexton, Raggio, McSweeney, Authier, & Rauch, 2017). Regarding intensity of symptoms, male veterans experiencing military sexual trauma may manifest exacerbated levels of shame, due to the perceived violation of traditional male gender identity (Jakupcak, Primack, & Solimeo, 2017; Juan, Nunnink, Butler, & Allard, 2017), perhaps making MST-based shame more difficult to resolve. Such patterns suggest trauma-related symptoms may emerge differentially, and with different intensities, based on the type of trauma that occurs, which may also result in unique associations with self-compassion.

Finally, it is important to note that modern technologies, such as virtual reality, are increasingly being developed and used for the treatment of psychopathology, including PTSD. Despite differences in methodological application, cost and availability of equipment, and a dearth of longitudinal and randomized control trials (Gonçalves, Pedrozo, Coutinho, Figueira, & Ventura, 2012; Maples-Keller, Price, Rauch, Gerardi, & Rothbaum, 2017; Price et al., 2015), the use of VR in veterans often results in a decrease and/or elimination of a PTSD diagnosis after completion of treatment, as evidenced in studies of service members exposed to military sexual trauma (Loucks et al., 2018) and combat (Cukor et al., 2015; McLay et al., 2017; Nelson, 2013).

Importantly, VR-based technology may also be applicable to other clinical pursuits, such as the promotion of self-compassion. For example, in a study utilizing VR, female undergraduates with high levels of self-criticism recorded and observed themselves delivering compassionate responses to individuals in distress. This observation of the self, resulted in reductions in self-criticism and increased self-compassion, suggesting that acknowledging the self as compassionate - even from a virtual perspective – may bolster caring attitudes toward the self (Falconer et al., 2014). With cell phones nearly ubiquitous, and immersive technologies such as VR becoming increasingly accessible, particularly given the increased funding for research and dissemination of this technology being provided by the Department of Veterans Affairs and U.S. Department of Defense, future research and clinical efforts might find success in harnessing digital treatments for the promotion of protective characteristics and the reduction of psychopathology and suicide risk (Cukor et al., 2015).

Conclusion

In our sample of U.S. veterans, we found that the sequential associations of shame, guilt, and PTSD, explained, in part, the relation between self-compassion and suicide risk. The

presence of higher levels of self-compassion may prevent the development of negative sequelae of trauma via promotion of self-kindness and reduction of self-criticism, and by encouraging engagement in proactive behaviors (i.e., mindfulness, seeking social support) which, in turn, may reduce vulnerability to suicide risk. Although future longitudinal research is needed to substantiate our findings, our study confirms the benefits of self-compassion for suicide risk and highlights potential mechanisms of action for the compassion-suicide linkage which may be targeted in future interventions with trauma-exposed veterans. As such, healthcare providers working with veterans may want to consider therapeutically bolstering self-compassion, while at the same time ameliorating trauma-based symptoms, as a routine, synergistic approach to suicide prevention.

REFERENCES

Adams, C. E., & Leary, M. R. (2007). Promoting self-compassionate attitudes toward eating among restrictive and guilty eaters. *Journal of Social and Clinical Psychology*, *26*(10), 1120-1144. doi:10.1521/jscp.2007.26.10.1120

Akande, D. W. (2002). A data-based analysis of the psychometric performance of the Differential Emotions Scale. *Educational Studies, 28*(2), 123-131. doi:10.1080/03055690220124560

Ali, T., Dunmore, E., Clark, D., & Ehlers, A. (2002). The role of negative beliefs in posttraumatic stress disorder: A comparison of assault victims and non victims. *Behavioural and Cognitive Psychotherapy, 30*(3), 249-257. doi:10.1017/S1352465802003016

Allen, A. B., & Leary, M. R. (2010). Self-compassion, stress, and coping. *Social and Personality Psychology Compass, 4*(2), 107-118. doi:10.1111/j.1751-9004.2009.00246.x

American Association of Suicidology [AAS] (2014). *U.S.A. suicide: 2014 official final data* [Fact sheet]. Retrieved from: http://www.suicidology.org/Portals/14/docs/Resources/FactSheets/2014/2014datapgsv1b.pdf.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. Washington, D.C: American Psychiatric Association.

Ammerman, B. A., Kleiman, E. M., Uyeji, L. L., Knorr, A. C., & McCloskey, M. S. (2015). Suicidal and violent behavior: The role of anger, emotion dysregulation, and impulsivity. *Personality and Individual Differences, 79,* 57-62. doi:10.1016/j.paid.2015.01.044

Anastasiades, M. H., Kapoor, S., Wootten, J., & Lamis, D. A. (2017). Perceived stress, depressive symptoms, and suicidal ideation in undergraduate women with varying levels of mindfulness. *Archives of Women's Mental Health, 20*(1), 129-138. doi:10.1007/s00737-016-0686-5

Andrews, B., Brewin, C. R., Rose, S., & Kirk, M. (2000). Predicting PTSD symptoms in victims of violent crime: The role of shame, anger, and childhood abuse. *Journal of Abnormal Psychology, 109*(1), 69-73. doi:10.1037/0021-843X.109.1.69

Arch, J. J., Brown, K. W., Dean, D. J., Landy, L. N., Brown, K. D., & Laudenslager, M. L. (2014). Self-compassion training modulates alpha-amylase, heart rate variability, and subjective responses to social evaluative threat in women. *Psychoneuroendocrinology, 42,* 49-58. doi:10.1016/j.psyneuen.2013.12.018

Arditte, K. A., Morabito, D. M., Shaw, A. M., & Timpano, K. R. (2016). Interpersonal risk for suicide in social anxiety: The roles of shame and depression. *Psychiatry Research, 239,* 139-144. doi:10.1016/j.psychres.2016.03.017

Armour, C., Elklit, A., & Shevlin, M. (2011). Attachment typologies and posttraumatic stress disorder (PTSD), depression and anxiety: A latent profile analysis approach. *European Journal of Psychotraumatology, 2*(1), 1-9. doi: 10.3402/ejpt.v2i0.6018

Ashrafioun, L., Pigeon, W. R., Conner, K. R., Leong, S. H., & Oslin, D. W. (2016). Prevalence and correlates of suicidal ideation and suicide attempts among veterans in primary care referred for a mental health evaluation. *Journal of Affective Disorders, 189,* 344-350. doi:10.1016/j.jad.2015.09.014

Asnaani, A., Reddy, M. K., & Shea, M. T. (2014). The impact of PSTD symptoms on physical and mental health functioning in returning veterans. *Journal of Anxiety Disorders, 28*(3), 310-317. doi:10.1016/j.janxdis.2014.01.005

Atkins, P. W. B., & Styles, R. (2015). Mindfulness, identity and work: Mindfulness training creates a more flexible sense of self. In J. Reb & P. W. B. Atkins (Eds.), *Mindfulness in organizations: Foundations, research, and applications.* (pp. 133–162). New York, NY: Cambridge University Press. Retrieved from https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2015-27656-006&site=ehost-live

Au, T. M., Sauer-Zavala, S., King, M. W., Petrocchi, N., Barlow, D. H., & Litz, B. T. (2017). Compassion-based therapy for trauma-related shame and posttraumatic stress: Initial evaluation using a multiple baseline design. *Behavior Therapy, 48*(2), 207-221. doi:10.1016/j.beth.2016.11.012

Baechler, J. (1979). *Suicides*. New York: Basic Books.

Baldwin, S. L. (2018). *Differences between younger and older male combat Veterans with posttraumatic stress disorder in stressors, stigma, and barriers to care*. *Dissertation Abstracts International: Section B: The Sciences and Engineering*. ProQuest Information & Learning. Retrieved from https://search-ebscohost-com.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2018-30617-291&site=ehost-live

Barlow, M. R., Goldsmith Turow, R. E., & Gerhart, J. (2017). Trauma appraisals, emotion regulation difficulties, and self-compassion predict posttraumatic stress symptoms

following childhood abuse. *Child Abuse & Neglect, 65*37-47. doi:10.1016/j.chiabu.2017.01.006

Battles, A. R., Bravo, A. J., Kelley, M. L., White, T. D., Braitman, A. L., & Hamrick, H. C. (2018). Moral injury and PTSD as mediators of the associations between morally injurious experiences and mental health and substance use. *Traumatology*, *24*(4), 246–254. https://doi.org/10.1037/trm0000153

Beck, J. G., McNiff, J., Clapp, J. D., Olsen, S. A., Avery, M. L., & Hagewood, J. H. (2011). Exploring negative emotion in women experiencing intimate partner violence: Shame, guilt, and PTSD. *Behavior Therapy*, *42*(4), 740-750. doi:10.1016/j.beth.2011.04.001

Bennett, D. S., Hersh, J., Herres, J., & Foster, J. (2016). HIV-related stigma, shame, and avoidant coping: Risk factors for internalizing symptoms among youth living with HIV? *Child Psychiatry and Human Development*, *47*(4), 657-664. doi:10.1007/s10578-015-0599-y

Berntsen, D., & Rubin, D. C. (2006). The centrality of event scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behaviour Research and Therapy*, *44*(2), 219–231. https://doi.org/10.1016/j.brat.2005.01.009

Bhar, S., Ghahramanlou-Holloway, M., Brown, G., & Beck, A. T. (2008). Self-Esteem and Suicide Ideation in Psychiatric Outpatients. *Suicide and Life-Threatening Behavior*, *38*(5), 511-516. doi: 10.1521/suli.2008.38.5.511

Birrer, E., & Michael, T. (2011). Rumination in PTSD as well as in traumatized and non-traumatized depressed patients: A cross-sectional clinical study. *Behavioural and Cognitive Psychotherapy*, *39*(4), 381-397. doi:10.1017/S1352465811000087

Bistricky, S. L., Gallagher, M. W., Roberts, C. M., Ferris, L., Gonzalez, A. J., & Wetterneck, C. T. (2017). Frequency of interpersonal trauma types, avoidant attachment, self-compassion, and interpersonal competence: A model of persisting posttraumatic symptoms. *Journal of Aggression, Maltreatment & Trauma*, *26*(6), 608–625. https://doi.org/10.1080/10926771.2017.1322657

Blosnich, J. R., Bossarte, R. M., & Silenzio, V. M. B. (2012). Suicidal ideation among sexual minority veterans: Results from the 2005-2012 Massachusetts Behavioral Risk Factor Surveillance Survey. *American Journal of Public Health, 102*, S44–S47. doi:10.2105/AJPH.2011.300565

Blosnich, J. R., Mays, V. M., & Cochran, S. D. (2014). Suicidality among veterans: Implications of sexual minority status. *American Journal of Public Health*, *104*(Suppl 4), S535-S537. doi:10.2105/AJPH.2014.302100

Blumberg, S. H., & Izard, C. E. (1985). Affective and cognitive characteristics of depression in 10- and 11-year-old children. *Journal Of Personality And Social Psychology*, *49*(1), 194-202. doi:10.1037/0022-3514.49.1.194

Bostwick, J. M., Pabbati, C., Geske, J. R., & McKean, A. J. (2016). Suicide attempt as a risk factor for completed suicide: Even more lethal than we knew. *The American Journal of Psychiatry*, *173*(11), 1094-1100. doi:10.1176/appi.ajp.2016.15070854

Bradley, R., Schwartz, A. C., & Kaslow, N. J. (2005). Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *Journal of Traumatic Stress, 6*, 685–696. doi:10.1002/jts.20077

Breland, J. Y., Donalson, R., Li, Y., Hebenstreit, C. L., Goldstein, L. A., & Maguen, S. (2018). Military sexual trauma is associated with eating disorders, while combat exposure is not. *Psychological Trauma: Theory, Research, Practice, and Policy*, *10*(3), 276–281. https://doi-org.iris.etsu.edu:3443/10.1037/tra0000276

Brewin, C. R., Andrews, B., & Rose, S. (2000). Fear, helplessness, and horror in posttraumatic stress disorder: Investigating DSM-IV criterion A2 in victims of violent crime. *Journal of Traumatic Stress*, *13*(3), 499-509. doi:10.1023/A:1007741526169

Bremner, J. D. (2006). Traumatic stress: effects on the brain. *Dialogues in Clinical Neuroscience*, *8*(4), 445–461.

Brenner, L. A., Homaifar, B. Y., Adler, L. E., Wolfman, J. H., & Kemp, J. (2009). Suicidality and veterans with a history of traumatic brain injury: Precipitating events, protective factors, and prevention strategies. *Rehabilitation Psychology*, *54*(4), 390-397. doi:10.1037/a0017802

Brown, M. Z., Linehan, M. M., Comtois, K. A., Murray, A., & Chapman, A. L. (2009). Shame as a prospective predictor of self-inflicted injury in borderline personality disorder: A multi-modal analysis. *Behaviour Research and Therapy*, *47*(10), 815-822. doi:10.1016/j.brat.2009.06.008

Browne, T., Evangeli, M., & Greenberg, N. (2012). Trauma-related guilt and posttraumatic stress among journalists. *Journal of Traumatic Stress*, *25*(2), 207-210. doi:10.1002/jts.21678

Bryan, A. O., Theriault, J. L., & Bryan, C. J. (2015). Self-forgiveness, posttraumatic stress, and suicide attempts among military personnel and veterans. *Traumatology*, *21*(1), 40-46. doi:10.1037/trm0000017

Bryan, C. J., Andreski, S. R., McNaughton-Cassill, M., & Osman, A. (2014). Agency is associated with decreased emotional distress and suicidal ideation in military personnel. *Archives of Suicide Research, 18*(3), 241-250. doi:10.1080/13811118.2013.824836

Bryan, C. J., Bryan, A. O., Roberge, E., Leifker, F. R., & Rozek, D. C. (2018). Moral injury, posttraumatic stress disorder, and suicidal behavior among National Guard personnel. *Psychological Trauma: Theory, Research, Practice, and Policy, 10*(1), 36-45. doi:10.1037/tra0000290

Bryan, C. J. & Clemans, T. A. (2013). Repetitive traumatic brain injury, psychological symptoms, and suicide risk in a clinical sample of deployed military personnel. *Journal of the American Medical Association Psychiatry, 70*(7), 686–691. doi:10.1001/jamapsychiatry.2013.1093

Bryan, C. J., Clemans, T. A., Hernandez, A. M., Mintz, J., Peterson, A. L., Yarvis, J. S., & Resick, P. A. (2016). Evaluating potential iatrogenic suicide risk in trauma-focused group cognitive behavioral therapy for the treatment of PTSD in active duty military personnel. *Depression and Anxiety, 33*(6), 549–557. https://doi-org.iris.etsu.edu:3443/10.1002/da.22456

Bryan, C. J., Graham, E., & Roberge, E. (2015). Living a life worth living: Spirituality and suicide risk in military personnel. *Spirituality in Clinical Practice, 2*, 74-78. doi: 10.1037/scp0000056

Bryan, C. J., Leifker, F. R., Rozek, D. C., Bryan, A. O., Reynolds, M. L., Oakey, D. N., & Roberge, E. (2018). Examining the effectiveness of an intensive, 2-week treatment program for military personnel and veterans with ptsd: Results of a pilot, open-label,

prospective cohort trial. *Journal of Clinical Psychology*. https://doi-org.iris.etsu.edu:3443/10.1002/jclp.22651

Bryan, C. J., Morrow, C. E., Etienne, N., & Ray-Sannerud, B. (2013). Guilt, shame, and suicidal ideation in a military outpatient clinical sample. *Depression and Anxiety*, *30*(1), 55-60. doi:10.1002/da.22002

Bryan, C. J., Roberge, E., Bryan, A. O., Ray-Sannerud, B., Morrow, C. E., & Etienne, N. (2015). Guilt as a mediator of the relationship between depression and posttraumatic stress with suicide ideation in two samples of military personnel and veterans. *International Journal of Cognitive Therapy*, *8*(2), 143-155. doi:10.1521/ijct.2015.8.2.143

Buchanan, N. T., Settles, I. H., Hall, A. T., & O'Connor, R. C. (2014). A review of organizational strategies for reducing sexual harassment: Insights from the U. S. military. *Journal of Social Issues*, *70*(4), 687-702. doi:10.1111/josi.12086

Burrell, L. M., Adams, G. A., Durand, D. B., & Castro, C. A. (2006). The impact of military lifestyle demands on well-being, army, and family outcomes. *Armed Forces & Society*, *33*(1), 43-58. doi:10.1177/0002764206288804

Bursztein Lipsicas, C., Levav, I., & Levine, S. Z. (2017). Holocaust exposure and subsequent suicide risk: A population-based study. *Social Psychiatry and Psychiatric Epidemiology*, *52*(3), 311-317. doi:10.1007/s00127-016-1323-3

Carmassi, C., Bertelloni, C. A., Gesi, C., Conversano, C., Stratta, P., Massimetti, G., & ... Dell'Osso, L. (2017). New DSM-5 PTSD guilt and shame symptoms among Italian earthquake survivors: Impact on maladaptive behaviors. *Psychiatry Research, 251*, 142-147. doi:10.1016/j.psychres.2016.11.026

Carroll, T. D., Currier, J. M., McCormick, W. H., & Drescher, K. D. (2017). Adverse childhood experiences and risk for suicidal behavior in male Iraq and Afghanistan veterans seeking PTSD treatment. *Psychological Trauma: Theory, Research, Practice, and Policy, 9*(5), 583-586. doi:10.1037/tra0000250

Castilho, P., Carvalho, S. A., Marques, S., & Pinto-Gouveia, J. (2017). Self-compassion and emotional intelligence in adolescence: A multigroup mediational study of the impact of shame memories on depressive symptoms. *Journal of Child and Family Studies, 26*(3), 759-768. doi:10.1007/s10826-016-0613-4

Center for Disease Control [CDC] (2015). *Suicide Facts at a Glance 2015.* [Fact Sheet]. Retrieved from: http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.PDF

Clancy, C. P., Graybeal, A., Tompson, W. P., Badgett, K. S., Feldman, M. E., Calhoun, P. S., … Beckham, J. C. (2006). Lifetime trauma exposure in veterans with military-related posttraumatic stress disorder: Association with current symptomatology. *The Journal of Clinical Psychiatry*, *67*(9), 1346–1353. https://doi.org/10.4088/JCP.v67n0904

Cole, A. B., Wingate, L. R., Tucker, R. P., Rhoades-Kerswill, S., O'Keefe, V. M., & Hollingsworth, D. W. (2015). The differential impact of brooding and reflection on the relationship between perceived stress and suicide ideation. *Personality and Individual Differences, 83,* 170-173. doi:10.1016/j.paid.2015.04.013

Collinge, W., Kahn, J., & Soltysik, R. (2012). Promoting reintegration of National Guard veterans and their partners using a self-directed program of integrative therapies: A pilot study. *Military Medicine, 177*(12), 1477-1485. doi:10.7205/MILMED-D-12-00121

Collins, K. L., Best, I., Stritzke, W. K., & Page, A. C. (2016). Mindfulness and zest for life buffer the negative effects of experimentally-induced perceived burdensomeness and

thwarted belongingness: Implications for theories of suicide. *Journal of Abnormal Psychology, 125*(5), 704-714. doi:10.1037/abn0000167

Collins, K. L., Stebbing, C., Stritzke, W. K., & Page, A. C. (2017). A brief mindfulness intervention attenuates desire to escape following experimental induction of the interpersonal adversity implicated in suicide risk. *Mindfulness, 8*(4), 1096-1105. doi:10.1007/s12671-017-0686-1

Conner, K. R., Bohnert, A. S., McCarthy, J. F., Valenstein, M., Bossarte, R., Ignacio, R., & ... Ilgen, M. A. (2013). Mental disorder comorbidity and suicide among 2.96 million men receiving care in the veterans health administration health system. *Journal of Abnormal Psychology, 122*(1), 256-263. doi:10.1037/a0030163

Conner, K. R., Bossarte, R. M., He, H., Arora, J., Lu, N., Tu, X. M., & Katz, I. R. (2014). Posttraumatic stress disorder and suicide in 5.9 million individuals receiving care in the Veterans Health Administration Health System. *Journal of Affective Disorders, 166,* 1-5. doi:10.1016/j.jad.2014.04.067

Cover, R. (2012). Mediating suicide: Print journalism and the categorization of queer youth suicide discourses. *Archives of Sexual Behavior, 41*(5), 1173-1183. doi:10.1007/s10508-012-9901-2

Cox, B. J., MacPherson, P. S. R., Enns, M. W., & McWilliams, L. A. (2004). Neuroticism and self-criticism associated with posttraumatic stress disorder in a nationally representative sample. *Behaviour Research and Therapy*, *42*(1), 105–114. https://doi.org/10.1016/S0005-7967(03)00105-0

Cox, K. S., Mouilso, E. R., Venners, M. R., Defever, M. E., Duvivier, L., Rauch, S. A. M., … Tuerk, P. W. (2016). Reducing suicidal ideation through evidence-based treatment for

posttraumatic stress disorder. *Journal of Psychiatric Research, 80*, 59–63. https://doi-org.iris.etsu.edu:3443/10.1016/j.jpsychires.2016.05.011

Crocker, L. D., Haller, M., Norman, S. B., & Angkaw, A. C. (2016). Shame versus trauma-related guilt as mediators of the relationship between PTSD symptoms and aggression among returning veterans. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(4), 520-527. doi:10.1037/tra0000151

Crosby, A. E., Han, B., Ortega, L. A. G., Parks, S. E., & Gfroer, J. (2011). Suicidal thoughts and behaviors among adults aged ≥18 years – United States, 2008-2009. *Morbidity and Mortality Weekly Report, 60*(13), 1-22. Retrieved from: https://www.cdc.gov/mmwr/preview/mmwrhtml/ss6013a1.htm?=nocontent

Cukor, J., Gerardi, M., Alley, S., Reist, C., Roy, M., Rothbaum, B. O., … Rizzo, A. (2015). Virtual reality exposure therapy for combat-related PTSD. In E. C. Ritchie (Ed.), *Posttraumatic stress disorder and related diseases in combat veterans.* (pp. 69–83). Cham: Springer International Publishing. https://doi-org.iris.etsu.edu:3443/10.1007/978-3-319-22985-0pass:[_]7

Cunningham, K. C., Davis, J. L., Wilson, S. M., & Resick, P. A. (2017). A relative weights comparison of trauma-related shame and guilt as predictors of dsm-5 posttraumatic stress disorder symptom severity among us veterans and military members. *British Journal of Clinical Psychology*, doi:10.1111/bjc.12163

Cuppage, J., Baird, K., Gibson, J., Booth, R., & Hevey, D. (2018). Compassion focused therapy: Exploring the effectiveness with a transdiagnostic group and potential processes of change. *British Journal of Clinical Psychology,* doi:10.1111/bjc.12162

Currier, J. M., Drescher, K. D., Holland, J. M., Lisman, R., & Foy, D. W. (2016). Spirituality, forgiveness, and quality of life: Testing a mediational model with military veterans with PTSD. *International Journal for the Psychology of Religion*, *26*(2), 167-179. doi:10.1080/10508619.2015.1019793

Currier, J. M., Holland, J. M., & Drescher, K. D. (2015). Spirituality factors in the prediction of outcomes of PTSD treatment for U.S. military veterans. *Journal of Traumatic Stress*, *28*(1), 57-64. doi:10.1002/jts.21978

Curtin, S. C., Warner, M., & Hedegaard, H. (2016). Suicide rates for females and males by race and ethnicity: United States, 1999 and 2014. *NCHS Health E-Stat. National Center for Health Statistics*.

Dahm, K. A., Meyer, E. C., Neff, K. D., Kimbrel, N. A., Gulliver, S. B., & Morissette, S. B. (2015). Mindfulness, self-compassion, posttraumatic stress disorder symptoms, and functional disability in U.S. Iraq and Afghanistan war veterans. *Journal of Traumatic Stress*, *28*(5), 460-464. doi:10.1002/jts.22045

Dalgleish, T. (2004). Cognitive approaches to posttraumatic stress disorder: The evolution of multirepresentational theorizing. *Psychological Bulletin*, *130*(2), 228-260. doi:10.1037/0033-2909.130.2.228

Daniel, S. S., Goldston, D. B., Erkanli, A., Franklin, J. C., & Mayfield, A. M. (2009). Trait anger, anger expression, and suicide attempts among adolescents and young adults: A prospective study. *Journal of Clinical Child and Adolescent Psychology*, *38*(5), 661-671. doi:10.1080/15374410903103494

Davis, M. T., Witte, T. K., & Weathers, F. W. (2014). Posttraumatic stress disorder and suicidal ideation: The role of specific symptoms within the framework of the interpersonal-

psychological theory of suicide. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(6), 610-618. doi:10.1037/a0033941

Dedert, E. A., Green, K. T., Calhoun, P. S., Yoash-Gantz, R., Taber, K. H., Mumford, M. M., … Beckham, J. C. (2009). Association of trauma exposure with psychiatric morbidity in military veterans who have served since September 11, 2001. *Journal of Psychiatric Research*, *43*(9), 830–836. https://doi.org/10.1016/j.jpsychires.2009.01.004

Dekel, S., Mamon, D., Solomon, Z., Lanman, O., & Dishy, G. (2016). Can guilt lead to psychological growth following trauma exposure? *Psychiatry Research*, *236,* 196-198. doi:10.1016/j.psychres.2016.01.011

de Mattos Souza, L. D., Lopez Molina, M., da Silva, R. A., & Jansen, K. (2016). History of childhood trauma as risk factors to suicide risk in major depression. *Psychiatry Research*, *246,* 612-616. doi:10.1016/j.psychres.2016.11.002

Dewey, D., Schuldberg, D., & Madathil, R. (2014). Do peritraumatic emotions differentially predict PTSD symptom clusters? Initial evidence for emotion specificity. *Psychological Reports*, *115*(1), 1-12. doi:10.2466/16.02.PR0.115c11z7

Diedrich, A., Hofmann, S. G., Cuijpers, P., & Berking, M. (2016). Self-compassion enhances the efficacy of explicit cognitive reappraisal as an emotion regulation strategy in individuals with major depressive disorder. *Behaviour Research and Therapy*, *82,* 1-10. doi:10.1016/j.brat.2016.04.003

Dixon-Gordon, K. L., Tull, M. T., & Gratz, K. L. (2014). Self-injurious behaviors in posttraumatic stress disorder: An examination of potential moderators. *Journal of Affective Disorders*, *166,* 359-367. doi:10.1016/j.jad.2014.05.033

Doehring, C. (2017). In over our heads with financial anxiety from student debt. *Pastoral Psychology,* 1-10. doi:10.1007/s11089-017-0772-2

Drapeau, C. W., & McIntosh, J. L. (2015). U.S.A. suicide 2014: Official final data. Washington, DC: American Association of Suicidology. Retrieved from http://www.suicidology.org.

Dyer, K. W., Dorahy, M. J., Corry, M., Black, R., Matheson, L., Coles, H., & ... Middleton, W. (2017). Comparing shame in clinical and nonclinical populations: Preliminary findings. *Psychological Trauma: Theory, Research, Practice, and Policy*, *9*(2), 173-180. doi:10.1037/tra0000158

Eaton, K. M., Messer, S. C., Wilson, A. G., & Hoge, C. W. (2006). Strengthening the validity of population-based suicide rate comparisons: An illustration using U.S. military and civilian data. *Suicide and Life-Threatening Behavior*, *36*(2), 182-191. doi:10.1521/suli.2006.36.2.182

Ehret, A. M., Joormann, J., & Berking, M. (2015). Examining risk and resilience factors for depression: The role of self-criticism and self-compassion. *Cognition and Emotion*, *29*(8), 1496-1504. doi:10.1080/02699931.2014.992394

Ehring, T., Frank, S., & Ehlers, A. (2008). The role of rumination and reduced concreteness in the maintenance of posttraumatic stress disorder and depression following trauma. *Cognitive Therapy and Research*, *32*(4), 488-506. doi:10.1007/s10608-006-9089-7

Elnitsky, C. A., Fisher, M. P., & Blevins, C. L. (2017). Military service member and veteran reintegration: A conceptual analysis, unified definition, and key domains. *Frontiers in Psychology*, *8,* 1-14. doi: 10.3389/fpsyg.2017.00369

Ewert, C., Gaube, B., & Geisler, F. C. M. (2018). Dispositional self-compassion impacts immediate and delayed reactions to social evaluation. *Personality and Individual Differences, 125*, 91–96. https://doi.org/10.1016/j.paid.2017.12.037

Exline, J. J., Yali, A. M., & Sanderson, W. C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology*, *56*(12), 1481-1496. doi:10.1002/1097-4679(200012)56:12<1481::AID-1>3.0.CO;2-A

Falconer, C. J., Slater, M., Rovira, A., King, J. A., Gilbert, P., Antley, A., & Brewin, C. R. (2014). Embodying compassion: A virtual reality paradigm for overcoming excessive self-criticism. *Plos ONE*, *9*(11).

Fanning, J. R., & Pietrzak, R. H. (2013). Suicidality among older male veterans in the United States: Results from the National Health and Resilience in Veterans study. *Journal of Psychiatric Research*, *47*(11), 1766-1775. doi:10.1016/j.jpsychires.2013.07.015

Feiring, C., & Taska, L. S. (2005). The persistence of shame following sexual abuse: A longitudinal look at risk and recovery. *Child Maltreatment*, *10*(4), 337-349. doi:10.1177/1077559505276686

Ferreira, C., Matos, M., Duarte, C., & Pinto-Gouveia, J. (2014). Shame memories and eating psychopathology: The buffering effect of self-compassion. *European Eating Disorders Review*, *22*(6), 487-494. doi:10.1002/erv.2322

Finley, E. P., Bollinger, M., Noël, P. H., Amuan, M. E., Copeland, L. A., Pugh, J. A., & ... Pugh, M. V. (2015). A national cohort study of the association between the Polytrauma Clinical Triad and suicide-related behavior among US veterans who served in Iraq and Afghanistan. *American Journal of Public Health*, *105*(2), 380-387. doi:10.2105/AJPH.2014.301957

Fisher, R. J., & Katz, J. E. (2000). Social-desirability bias and the validity of self-reported values. *Psychology & Marketing*, *17*(2), 105–120. https://doi-org.iris.etsu.edu:3443/10.1002/(SICI)1520-6793(200002)17:2<105::AID-MAR3>3.0.CO;2-9

Forbes, D., Creamer, M., Hawthorne, G., Allen, N., & McHugh, T. (2003). Comorbidity as a predictor of symptom change after treatment in combat-related posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, *191*(2), 93-99. doi:10.1097/00005053-200302000-00005

Fordwood, S. R., Asarnow, J. R., Huizar, D. P., & Reise, S. P. (2007). Suicide attempts among depressed adolescents in primary care. *Journal of Clinical Child & Adolescent Psychology*, *36*, 392–404. doi: 10.1080/15374410701444355

Forkus, S. R., Breines, J. G., & Weiss, N. H. (2019). Morally injurious experiences and mental health: The moderating role of self-compassion. *Psychological Trauma: Theory, Research, Practice, and Policy*. https://doi.org/10.1037/tra0000446

Frankfurt, S., & Frazier, P. (2016). A review of research on moral injury in combat veterans. *Military Psychology*, *28*(5), 318-330. doi:10.1037/mil0000132

Freeman, T. W., Roca, V., & Moore, W. M. (2000). A comparison of chronic combat related posttraumatic stress disorder (PTSD) patients with and without a history of suicide attempts. *The Journal of Nervous and Mental Disease*, *188*, 460–463. doi: 10.1097/00005053-200007000-00011

Friese, M., & Hofmann, W. (2016). State mindfulness, self-regulation, and emotional experience in everyday life. *Motivation Science, 2*(1), 1-14. doi:10.1037/mot0000027

Gallegos, A. M., Cross, W., & Pigeon, W. R. (2015). Mindfulness-based stress reduction for veterans exposed to military sexual trauma: Rationale and implementation considerations. *Military Medicine, 180*(6), 684-689. doi:10.7205/MILMED-D-14-00448

Gasparre, A., Bosco, S., & Bellelli, G. (2010). Cognitive and social consequences of participation in social rites: Collective coping, social support, and post-traumatic growth in the victims of Guatemala genocide. *Revista De Psicología Social*, *25*(1), 35-46. doi:10.1174/021347410790193513

Gates, M. A., Holowka, D. W., Vasterling, J. J., Keane, T. M., Marx, B. P., & Rosen, R. C. (2012). Posttraumatic stress disorder in veterans and military personnel: Epidemiology, screening, and case recognition. *Psychological Services*, *9*(4), 361-382. doi:10.1037/a0027649

Gaudet, C. M., Sowers, K. M., Nugent, W. R., & Boriskin, J. A. (2016) A review of PTSD and shame in military veterans. *Journal of Human Behavior in the Social Environment, 26*(1), 56-68. doi: 10.1080/10911359.2015.1059168

Gerber, M. M., Boals, A., & Schuettler, D. (2011). The unique contributions of positive and negative religious coping to posttraumatic growth and PTSD. *Psychology of Religion and Spirituality*, *3*(4), 298-307. doi:10.1037/a0023016

Germer, C. K., & Neff, K. D. (2015). Cultivating self-compassion in trauma survivors. In V. M. Follette, J. Briere, D. Rozelle, J. W. Hopper, D. I. Rome, V. M. Follette, ... D. I. Rome (Eds.), *Mindfulness-oriented interventions for trauma: Integrating contemplative practices* (pp. 43-58). New York, NY, US: Guilford Press.

Gil, S., & Weinberg, M. (2015). Coping strategies and internal resources of dispositional optimism and mastery as predictors of traumatic exposure and of PTSD symptoms: A

prospective study. *Psychological Trauma: Theory, Research, Practice, and Policy*, *7*(4), 405-411. doi:10.1037/tra0000032

Gilbert, P. (2000). Social mentalities: Internal 'social' conflict and the role of inner warmth and compassion in cognitive therapy. In P. Gilbert, K. G. Bailey, P. Gilbert, K. G. Bailey (Eds.), *Genes on the couch: Explorations in evolutionary psychotherapy* (pp. 118-150). New York, NY, US: Brunner-Routledge.

Gilbert, P. (2009). Introducing compassion-focused therapy. *Advances in Psychiatric Treatment, 15*, 199–208. doi:10.1192/apt.bp.107.005264.

Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology, 53*(1), 6–41. doi:10.1111/bjc.12043

Gilbert, P., McEwan, K., Matos, M., & Rivis, A. (2010). Fears of compassion: Development of three self-report measures. *Psychology and Psychotherapy: Theory, Research and Practice, 84*, 239–255. doi:10. 1348/147608310X526511.

Gill, J., Lee, H., Barr, T., Baxter, T., Heinzelmann, M., Rak, H., & Mysliwiec, V. (2014). Lower health related quality of life in U.S. military personnel is associated with service-related disorders and inflammation. *Psychiatry Research, 216*(1), 116-122. doi: 10.1016/j.psychres.2014.01.046

Goldsmith, R. E., Gerhart, J. I., Chesney, S. A., Burns, J. W., Kleinman, B., & Hood, M. M. (2014). Mindfulness-based stress reduction for posttraumatic stress symptoms: Building acceptance and decreasing shame. *Journal of Evidence-Based Complementary & Alternative Medicine, 19*(4), 227-234. doi:10.1177/2156587214533703

Gonçalves, R., Pedrozo, A. L., Coutinho, E. S. F., Figueira, I., & Ventura, P. (2012). Efficacy of virtual reality exposure therapy in the treatment of PTSD: A systematic review. *PLoS ONE*, *7*(12). https://doi-org.iris.etsu.edu:3443/10.1371/journal.pone.0048469

Gooding, P., Tarrier, N., Dunn, G., Shaw, J., Awenat, Y., Ulph, F., & Pratt, D. (2015). The moderating effects of coping and self-esteem on the relationship between defeat, entrapment and suicidality in a sample of prisoners at high risk of suicide. *European Psychiatry*, *30*(8), 988-994. doi:10.1016/j.eurpsy.2015.09.002

Gradus J. L. (2017). Prevalence and prognosis of stress disorders: a review of the epidemiologic literature. *Clinical epidemiology, 9,* 251-260. doi:10.2147/CLEP.S106250

Gradus, J. L., Suvak, M. K., Wisco, B. E., Marx, B. P., & Resick, P. A. (2013). Treatment of posttraumatic stress disorder reduces suicidal ideation. *Depression and Anxiety*, *30*(10), 1046–1053. Retrieved from https://search-ebscohost-com.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2013-36082-021&site=ehost-live

Graton, A., Ric, F., & Gonzalez, E. (2016). Reparation or reactance? The influence of guilt on reaction to persuasive communication. *Journal of Experimental Social Psychology, 62,* 40-49. doi:10.1016/j.jesp.2015.09.016

Guerra, V. S., & Calhoun, P. S. (2011). Examining the relation between posttraumatic stress disorder and suicidal ideation in an OEF/OIF veteran sample. *Journal of Anxiety Disorders*, *25*(1), 12-18. doi:10.1016/j.janxdis.2010.06.025

Gunn, J. I., Lester, D., & Yang, B. (2014). *Theories of suicide: Past, present and future*. Springfield, IL, US: Charles C Thomas Publisher.

Hall, J. H., & Fincham, F. D. (2008). The temporal course of self-forgiveness. *Journal of Social and Clinical Psychology*, *27*(2), 174-202. doi:10.1521/jscp.2008.27.2.174

Harman, R., & Lee, D. (2010). The role of shame and self-critical thinking in the development and maintenance of current threat in post-traumatic stress disorder. *Clinical Psychology & Psychotherapy*, *17*(1), 13-24. doi: 10.1002/cpp.636

Harned, M. S., Wilks, C. R., Schmidt, S. C., & Coyle, T. N. (2018). Improving functional outcomes in women with borderline personality disorder and PTSD by changing PTSD severity and post-traumatic cognitions. *Behaviour Research and Therapy*, *103*, 53–61. https://doi-org.iris.etsu.edu:3443/10.1016/j.brat.2018.02.002

Hasanović, M., & Pajević, I. (2010). Religious moral beliefs as mental health protective factor of war veterans suffering from PTSD, depressiveness, anxiety, tobacco and alcohol abuse in comorbidity. *Psychiatria Danubina*, *22*(2), 203-210.

Hassija, C. M., Luterek, J. A., Naragon-Gainey, K., Moore, S. A., & Simpson, T. (2012). Impact of emotional approach coping and hope on PTSD and depression symptoms in a trauma exposed sample of veterans receiving outpatient VA mental health care services. *Anxiety, Stress & Coping: An International Journal*, *25*(5), 559-573. doi:10.1080/10615806.2011.621948

Hathaway, L. M., Boals, A., & Banks, J. B. (2010). PTSD symptoms and dominant emotional response to a traumatic event: An examination of DSM-IV criterion A2. *Anxiety, Stress & Coping: An International Journal*, *23*(1), 119-126. doi:10.1080/10615800902818771

Hawton, K., Comabella, C. I., Haw, C., & Saunders, K. (2013). Risk factors for suicide in individuals with depression: A systematic review. *Journal of Affective Disorders*, *147*(1-3), 17-28. doi:10.1016/j.jad.2013.01.004

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* New York, NY: The Guilford Press.

Heath, N. L., Carsley, D., De Riggi, M. E., Mills, D., & Mettler, J. (2016). The relationship between mindfulness, depressive symptoms, and non-suicidal self-injury amongst adolescents. *Archives of Suicide Research*, *20*(4), 635-649. doi:10.1080/13811118.2016.1162243

Held, P., & Owens, G. P. (2015). Effects of self-compassion workbook training on trauma-related guilt in a sample of homeless veterans: A pilot study. *Journal of Clinical Psychology*, *71*(6), 513-526. doi:10.1002/jclp.22170

Held, P., Owens, G. P., & Anderson, S. E. (2015). The interrelationships among trauma-related guilt and shame, disengagement coping, and PTSD in a sample of treatment-seeking substance users. *Traumatology*, *21*(4), 285-292. doi:10.1037/trm0000050

Hendin, H. (2014). An innovative approach to treating combat veterans with PTSD at risk for suicide. *Suicide and Life-Threatening Behavior*, *44*(5), 582-590. doi:10.1111/sltb.12135

Hendin, H., & Haas, A. P. (1991). Suicide and guilt as manifestations of PTSD in Vietnam combat veterans. *The American Journal of Psychiatry*, *148*(5), 586-591. doi:10.1176/ajp.148.5.586

Hendin, H., Maltsberger, J. T., & Szanto, K. (2007). The role of intense affective states in signaling a suicide crisis. *Journal of Nervous and Mental Disease*, *195*(5), 363-368.

Henning, K. R., & Frueh, B. C. (1997). Combat guilt and its relationship to PTSD symptoms. *Journal of Clinical Psychology*, *53*(8), 801-808. doi:10.1002/(SICI)1097-4679(199712)53:8<801::AID-JCLP3>3.0.CO;2-I

Hiraoka, R., Meyer, E. C., Kimbrel, N. A., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (2015). Self-compassion as a prospective predictor of PTSD symptom severity among trauma-exposed U.S. Iraq and Afghanistan war veterans. *Journal of Traumatic Stress*, *28*(2), 127-133. doi:10.1002/jts.21995

Hirsch, J. K. (2006). A review of the literature on rural suicide: Risk and protective factors, incidence, and prevention. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *27*(4), 189-199. doi:10.1027/0227-5910.27.4.189

Hirsch, J. K., Duberstein, P. R., Conner, K. R., Heisel, M. J., Beckman, A., Franus, N., & Conwell, Y. (2006). Future orientation and suicide ideation and attempts in depressed adults ages 50 and over. *The American Journal of Geriatric Psychiatry, 14*(9), 752-757. doi:10.1097/01.JGP.0000209219.06017.62

Hoffart, A., Øktedalen, T., & Langkaas, T. F. (2015). Self-compassion influences PTSD symptoms in the process of change in trauma-focused cognitive-behavioral therapies: A study of within-person processes. *Frontiers in Psychology*, *6*, 1-11. doi:10.3389/fpsyg.2015.01273

Hoffmire, C. A., Kemp, J. E., & Bossarte, R. M. (2015). Changes in suicide mortality for veterans and nonveterans by gender and history of VHA service use, 2000-2010. *Psychiatric Services*, *66*(9), 959-965. doi:10.1176/appi.ps.201400031

Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R. L. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine*, *2004*(351), 13-22. doi: 10.1056/NEJMoa040603

Hoge, C. W., & Warner, C. H. (2014). Estimating PTSD prevalence in US veterans: Considering combat exposure, PTSD checklist cutpoints, and DSM-5. *The Journal of Clinical Psychiatry*, *75*(12), e1439-e1441. doi:10.4088/JCP.14com09616

Holl, J., Wolff, S., Schumacher, M., Höcker, A., Arens, E. A., Spindler, G., ... & Schäfer, I. (2017). Substance use to regulate intense posttraumatic shame in individuals with childhood abuse and neglect. *Development and psychopathology*, *29*(3), 737-749.

Holland, K. M., Vivolo-Kantor, A. M., Logan, J. E., & Leemis, R. W. (2017). Antecedents of suicide among youth aged 11–15: A multistate mixed methods analysis. *Journal of Youth and Adolescence*, *46*(7), 1598-1610. doi:10.1007/s10964-016-0610-3

Holliday, R., Holder, N., Monteith, L. L., & Surís, A. (2018). Decreases in suicide cognitions after cognitive processing therapy among veterans with posttraumatic stress disorder due to military sexual trauma: A preliminary examination. *Journal of Nervous and Mental Disease*, *206*(7), 575–578. Retrieved from https://search-ebscohost-com.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2018-34803-013&site=ehost-live

Holliday, R., Holder, N., & Surís, A. (2018). Reductions in self-blame cognitions predict PTSD improvements with cognitive processing therapy for military sexual trauma-related PTSD. *Psychiatry Research*, *263*, 181–184. https://doi-org.iris.etsu.edu:3443/10.1016/j.psychres.2018.03.007

Holtzheimer, P. E., Rousso, J., Zatzick, D., Bundy, C., & Roy-Byrne, P. P. (2005). The impact of comorbid posttraumatic stress disorder on short-term clinical outcome in hospitalized patients with depression. *American Journal of Psychiatry*, *162*, 970–976. doi: 10.1176/appi.ajp.162.5.970

Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine, 41*(3), 209-218.

Huang, H., & Kashubeck-West, S. (2015). Exposure, agency, perceived threat, and guilt as predictors of posttraumatic stress disorder in veterans. *Journal of Counseling & Development, 93*(1), 3-13. doi:10.1002/j.1556-6676.2015.00176.x

Irons, C. & Lad, S. (2017). Using compassion focused therapy to work with shame and self-criticism in complex trauma. *Australian Clinical Psychologist, 3*(1), 47-54.

Israel-Cohen, Y., Kashy-Rosenbaum, G., & Kaplan, O. (2016). Acute stress reaction and positive future orientation as predictors of PTSD among Israeli adolescents exposed to missile attacks. *Translational Issues in Psychological Science, 2*(4), 361-370. doi:10.1037/tps0000096

Izard, C. E. (1979). *Differential Emotions Scale*. ETS m 1979.

Izard, C. E., Libero, D. Z., Putnam, P., & Haynes, O. M. (1993). Stability of emotion experiences and their relations to traits of personality. *Journal of Personality and Social Psychology, 64*(5), 847-860. doi:10.1037/0022-3514.64.5.847

Jackson, S., Agius, R., Bridger, R., & Richards, P. (2011). Occupational stress and the outcome of basic military training. *Occupational Medicine, 61*(4), 253-258. doi:10.1093/occmed/kqr036

Jakupcak, M., Hoerster, K. D., Varra, A., Vannoy, S., Felker, B., & Hunt, S. (2011). Hopelessness and suicidal ideation in Iraq and Afghanistan war veterans reporting subthreshold and threshold PTSD. *Journal of Nervous and Mental Disease, 199*, 272-275. doi: 10.1097/NMD.0b013e3182124604

Jakupcak, M., Primack, J. M., & Solimeo, S. L. (2017). Introduction to the special issue examining the implications of masculinity within military and veteran populations. *Psychology of Men & Masculinity, 18*(3), 191–192. https://doi-org.iris.etsu.edu:3443/10.1037/men0000126

James, L. M., Strom, T. Q., & Leskela, J. (2014). Risk-taking behaviors and impulsivity among veterans with and without PTSD and mild TBI. *Military Medicine, 179*(4), 357–363. https://doi.org/10.7205/MILMED-D-13-00241

Jang, J., Park, J., Oh, K., Lee, K., Kim, M. S., Yoon, M., & ... Chung, Y. (2014). Predictors of suicidal ideation in a community sample: Roles of anger, self-esteem, and depression. *Psychiatry Research, 216*(1), 74-81. doi:10.1016/j.psychres.2013.12.054

Janssen, S. J., Hearne, T. L., & Takarangi, M. T. (2015). The relation between self-reported PTSD and depression symptoms and the psychological distance of positive and negative events. *Journal of Behavior Therapy and Experimental Psychiatry, 48*177-184. doi:10.1016/j.jbtep.2015.04.002

Johnson, E. A., & O'Brien, K. A. (2013). Self-compassion soothes the savage ego-threat system: Effects on negative affect, shame, rumination, and depressive symptoms. *Journal of Social and Clinical Psychology, 32*(9), 939-963. doi:10.1521/jscp.2013.32.9.939

Johnson, H., Thompson, A., & Downs, M. (2009). Non-Western interpreters' experiences of trauma: The protective role of culture following exposure to oppression. *Ethnicity & Health, 14*(4), 407-418. doi:10.1080/13557850802621449

Joiner, T. J., Gencoz, F., Gencoz, T., Metalsky, G. I., & Rudd, M. D. (2001). The relation of self-hatred and suicidality in people with schizophrenia-spectrum symptoms. *Journal of*

Psychopathology and Behavioral Assessment, *23*(2), 107-115. doi:10.1023/A:1010915709011

Joiner, T. E., Sachs-Ericsson, N. J., Wingate, L. R., Brown, J. S., Anestis, M. D., & Selby, E. A. (2007). Childhood physical and sexual abuse and lifetime number of suicide attempts: A persistent and theoretically important relationship. *Behaviour Research and Therapy, 45*, 539–547. doi: 10.1016/j.brat.2006.04.007

Joseph, S., & Linley, P. A. (2008). Reflections on theory and practice in trauma, recovery, and growth: A paradigm shift for the field of traumatic stress. In S. Joseph, P. A. Linley, S. Joseph, P. A. Linley (Eds.), *Trauma, recovery, and growth: Positive psychological perspectives on posttraumatic stress* (pp. 339-356). Hoboken, NJ, US: John Wiley & Sons Inc.

Joseph, J. S., Moring, J. C., & Bira, L. M. (2015). Cognitive flexibility as a key factor in the conceptualization and treatment of PTSD. *Current Psychiatry Reviews*, *11*(3), 180-192. doi:10.2174/1573400511666150629104921

Jovanović, N., Podlesek, A., Medved, V., Grubišin, J., Mihaljevic-Peleš, A., Goran, T., & Lovretić, V. (2013). Association between psychopathology and suicidal behavior in schizophrenia: A cross-sectional study of 509 participants. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *34*(6), 374-381. doi:10.1027/0227-5910/a000211

Juan, M. J. D., Nunnink, S. E., Butler, E. O., & Allard, C. B. (2017). Gender role stress mediates depression among veteran men with military sexual trauma. *Psychology of Men & Masculinity*, *18*(3), 243–250. https://doi-org.iris.etsu.edu:3443/10.1037/men0000120

Kang, H. K., & Bullman, T. A. (2008). Risk of suicide among US veterans after returning from the Iraq or Afghanistan war zones. *Journal of the American Medical Association, 300*(6), 652-653. doi:10.1001/jama.300.6.652

Kaplan, M. S., Huguet, N., McFarland, B. H., & Newsom, J. T. (2007). Suicide among male veterans: A prospective population-based study. *Journal of Epidemiology & Community Health, 61*(7), 619-624. doi: 10.1136/jech.2006.054346

Karatzias, T., Hyland, P., Bradley, A., Fyvie, C., Logan, K., Easton, P., … Shevlin, M. (2018). Is self-compassion a worthwhile therapeutic target for icd-11 complex ptsd (cptsd)? *Behavioural and Cognitive Psychotherapy*. https://doi-org.iris.etsu.edu:3443/10.1017/S1352465818000577

Karris, M., & Caldwell, B. E. (2015). Integrating emotionally focused therapy, self-compassion, and compassion-focused therapy to assist shame-prone couples who have experienced trauma. *The Family Journal, 23*(4), 346-357. doi:10.1177/1066480715601676

Katz, M. H. (2006). *Multivariable analysis: A practical guide for clinicians.* Cambridge University Press, New York, New York.

Kealy, D., Spidel, A., & Ogrodniczuk, J. S. (2017). Self-conscious emotions and suicidal ideation among women with and without history of childhood sexual abuse. *Counselling & Psychotherapy Research*. doi:10.1002/capr.12140

Keane, T. M., Caddell, J. M., & Taylor, K. L. (1988). Mississippi scale of combat-related posttraumatic stress disorder: Three studies in reliability and validity. *Journal of Consulting and Clinical Psychology, 56,* 85–90.

Kearney, D. J., Malte, C. A., McManus, C., Martinez, M. E., Felleman, B., & Simpson, T. L. (2013). Loving-kindness meditation for posttraumatic stress disorder: A pilot study. *Journal of Traumatic Stress*, *26*(4), 426-434. doi:10.1002/jts.21832

Keith, J., Velezmoro, R., & O'Brien, C. (2015). Correlates of cognitive flexibility in veterans seeking treatment for posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, *203*(4), 287-293. doi:10.1097/NMD.0000000000000280

Kelley, M. L., Braitman, A. L., White, T. D., & Ehlke, S. J. (2018). Sex differences in mental health symptoms and substance use and their association with moral injury in veterans. *Psychological Trauma: Theory, Research, Practice, and Policy*. https://doi.org/10.1037/tra0000407

Kelly, A. C., Carter, J. C., & Borairi, S. (2014). Are improvements in shame and self-compassion early in eating disorders treatment associated with better patient outcomes? *International Journal of Eating Disorders*, *47*(1), 54-64. doi:10.1002/eat.22196

Kelly, A. C., & Tasca, G. A. (2016). Within-persons predictors of change during eating disorders treatment: An examination of self-compassion, self-criticism, shame, and eating disorder symptoms. *International Journal of Eating Disorders*, *49*(7), 716-722. doi:10.1002/eat.22527

Kelly, A. C., Wisniewski, L., Martin-Wagar, C., & Hoffman, E. (2017). Group-based compassion-focused therapy as an adjunct to outpatient treatment for eating disorders: A pilot randomized controlled trial. *Clinical Psychology & Psychotherapy*, *24*(2), 475-487. doi:10.1002/cpp.2018

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using

DSM-IV and DSM-5 criteria. *Journal of Traumatic Stress*, *26*(5), 537-547. doi:10.1002/jts.21848

Kim, S., Thibodeau, R., & Jorgensen, R. S. (2011). Shame, guilt, and depressive symptoms: A meta-analytic review. *Psychological Bulletin*, *137*(1), 68-96. doi:10.1037/a0021466

Kimbrel, N. A., Meyer, E. C., DeBeer, B. B., Gulliver, S. B., & Morissette, S. B. (2016). A 12-Month prospective study of the effects of PTSD-depression comorbidity on suicidal behavior in Iraq/Afghanistan-era veterans. *Psychiatry Research, 243,* 97-99. doi:10.1016/j.psychres.2016.06.011

King, A. P., Erickson, T. M., Giardino, N. D., Favorite, T., Rauch, S. A. M., Robinson, E., … Liberzon, I. (2013). A pilot study of group mindfulness-based cognitive therapy (MBCT) for combat veterans with posttraumatic stress disorder (PTSD). *Depression and Anxiety*, *30*(7), 638–645. https://doi-org.iris.etsu.edu:3443/10.1002/da.22104

King, A. P., Block, S. R., Sripada, R. K., Rauch, S. A. M., Porter, K. E., Favorite, T. K., … Liberzon, I. (2016). A pilot study of mindfulness-based exposure therapy in OEF/OIF combat veterans with PTSD: Altered medial frontal cortex and amygdala responses in social–emotional processing. *Frontiers in Psychiatry*, *7*. Retrieved from https://search-ebscohostcom.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2016-59775-001&site=ehost-live

Klasen, F., Reissmann, S., Voss, C., & Okello, J. (2015). The guiltless guilty: Trauma-related guilt and psychopathology in former Ugandan child soldiers. *Child Psychiatry and Human Development*, *46*(2), 180-193. doi:10.1007/s10578-014-0470-6

Kleim, B., Graham, B., Bryant, R. A., & Ehlers, A. (2013). Capturing intrusive re-experiencing in trauma survivors' daily lives using ecological momentary assessment. *Journal of Abnormal Psychology*, *122*(4), 998-1009. doi:10.1037/a0034957

Kleiman, E. M., & Liu, R. T. (2013). Social support as a protective factor in suicide: Findings from two nationally representative samples. *Journal of Affective Disorders*, *150*(2), 540-545. doi:10.1016/j.jad.2013.01.033

Kleiman, E. M., & Riskind, J. H. (2013). Utilized social support and self-esteem mediate the relationship between perceived social support and suicide ideation: A test of a multiple mediator model. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, *34*(1), 42-49. doi:10.1027/0227-5910/a000159

Klingensmith, K., Tsai, J., Mota, N., Southwick, S. M., & Pietrzak, R. H. (2014). Military sexual trauma in US veterans: Results from the National Health and Resilience in Veterans Study. *The Journal of Clinical Psychiatry*, *75*(10), e1133–e1139. https://doi-org.iris.etsu.edu:3443/10.4088/JCP.14m09244

Koerner, K. (2012). Doing dialectical behavior therapy: A practical guide. New York: The Guilford Press.

Körner, A., Coroiu, A., Copeland, L., Gomez-Garibello, C., Albani, C., Zenger, M., & Bräler, E. (2015). The role of self-compassion in buffering symptoms of depression in the general population. *Plos One*, *10*(10). doi:10.1371/journal.pone.0136598

Kposowa, A., Hamilton, D., & Wang, K. (2016). Impact of firearm availability and gun regulation on state suicide rates. *Suicide and Life-Threatening Behavior*, *46*(6), 678-696. doi:10.1111/sltb.12243

Krüger, A., Ehring, T., Priebe, K., Dyer, A. S., Steil, R., & Bohus, M. (2014). Sudden losses and sudden gains during a DBT-PTSD treatment for posttraumatic stress disorder following childhood sexual abuse. *European Journal of Psychotraumatology, 5*. Retrieved from https://search-ebscohost-com.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2014-44897-001&site=ehost-live

Kubany, E. S., & Watson, S. B. (2003). Guilt: Elaboration of a multidimensional model. *The Psychological Record, 53*(1), 51-90.

La Bash, H., & Papa, A. (2014). Shame and PTSD symptoms. *Psychological Trauma: Theory, Research, Practice, and Policy, 6*(2), 159-166. doi:10.1037/a0032637

Lamis, D. A., & Dvorak, R. D. (2014). Mindfulness, nonattachment, and suicide rumination in college students: The mediating role of depressive symptoms. *Mindfulness*, *5*(5), 487-496. doi:10.1007/s12671-013-0203-0

Langman, L., & Chung, M. C. (2013). The relationship between forgiveness, spirituality, traumatic guilt and posttraumatic stress disorder (PTSD) among people with addiction. *Psychiatric Quarterly*, *84*(1), 11-26. doi:10.1007/s11126-012-9223-5

Lawrence, V. A., & Lee, D. (2014). An exploration of people's experiences of compassion-focused therapy for trauma, using interpretative phenomenological analysis. *Clinical Psychology & Psychotherapy*, *21*(6), 495–507. Retrieved from https://search-ebscohost-com.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2014-54478-002&site=ehost-live

LeardMann, C. A., Powell, T. M., Smith, T. C., Bell, M. R., Smith, B., Boyko, E. J.,…Hoge, C.W. (2013). Risk factors associated with suicide in current and former US military

personnel. *The Journal of the American Medical Association, 310* (5), 496-506. doi: 10.1001/jama.2013.65164

Leary, M. R., Tate, E. B., Adams, C. E., Allen, A. B., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology, 92*(5), 887-904. doi:10.1037/0022-3514.92.5.887

LeBouthillier, D. M., McMillan, K. A., Thibodeau, M. A., & Asmundson, G. G. (2015). Types and number of traumas associated with suicidal ideation and suicide attempts in PTSD: Findings from a U.S. nationally representative sample. *Journal of Traumatic Stress, 28*(3), 183-190. doi:10.1002/jts.22010

Lee, D. J., Kearns, J. C., Wisco, B. E., Green, J. D., Gradus, J. L., Sloan, D. M., & ... Marx, B. P. (2018). A longitudinal study of risk factors for suicide attempts among Operation Enduring Freedom and Operation Iraqi Freedom veterans. *Depression and Anxiety*, doi:10.1002/da.22736

Lee, D. A., Scragg, P., & Turner, S. (2001). The role of shame and guilt in traumatic events: A clinical model of shame-based and guilt-based PTSD. *British Journal of Medical Psychology, 74*(4), 451-466. doi:10.1348/000711201161109

Lehavot, K., Simpson, T. L., & Shipherd, J. C. (2016). Factors associated with suicidality among a national sample of transgender veterans. *Suicide and Life-Threatening Behavior*, *46*(5), 507-524. doi:10.1111/sltb.12233

Lemaire, C. M., & Graham, D. P. (2011). Factors associated with suicidal ideation in OEF/OIF veterans. *Journal of Affective Disorders*, *130*(1-2), 231-238. doi:10.1016/j.jad.2010.10.021

Leskela, J., Dieperink, M., & Thuras, P. (2002). Shame and posttraumatic stress disorder. *Journal of Traumatic Stress*, *15*(3), 223-226. doi:10.1023/A:1015255311837

Lewis, H. B. (1971). *Shame and guilt in neurosis*. New York: International Universities Press

Lewis, M. (2008). Self-conscious emotions: Embarrassment, pride, shame, and guilt. In M. Lewis, J. M. Haviland-Jones &L. F. Barrett (Eds.), Handbook of emotions (pp. 742–756). New York: Guilford.

Li, Y., Aggen, S., Shi, S., Gao, J., Li, Y., Tao, M., & ... Kendler, K. S. (2014). Subtypes of major depression: Latent class analysis in depressed Han Chinese women. *Psychological Medicine*, *44*(15), 2-5. doi:10.1017/S0033291714000749

Lineberry, T. W., & Brady, K. T. (2014). Suicide and substance use disorders. In S. H. Koslow, P. Ruiz, C. B. Nemeroff, S. H. Koslow, P. Ruiz, C. B. Nemeroff (Eds.), *A concise guide to understanding suicide: Epidemiology, pathophysiology, and prevention* (pp. 117-122). New York, NY, US: Cambridge University Press. doi:10.1017/CBO9781139519502.016

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, *29*(8), 695-706. doi: 10.1016/j.cpr.2009.07.003

López, A., Sanderman, R., & Schroevers, M. J. (2016). Mindfulness and self-compassion as unique and common predictors of affect in the general population. *Mindfulness*, *7*(6), 1289–1296. https://doi.org/10.1007/s12671-016-0568-y

Lopez-Castroman, J., Jaussent, I., Beziat, S., Guillaume, S., Baca-Garcia, E., Olié, E., & Courtet, P. (2015). Posttraumatic Stress Disorder following childhood abuse increases the severity of suicide attempts. *Journal of Affective Disorders*, *170*, 7-14. doi:10.1016/j.jad.2014.08.010

López-Muñoz, F., Cuerda-Galindo, E., & Krischel, M. (2017). Study of deaths by suicide in the Soviet Special Camp Number 7 (Sachsenhausen), 1945–1950. *Psychiatric Quarterly, 88*(1), 93-101. doi:10.1007/s11126-016-9435-1

Loucks, L., Yasinski, C., Norrholm, S. D., Maples-Keller, J., Post, L., Zwiebach, L., … Rothbaum, B. O. (2018). You can do that?!: Feasibility of virtual reality exposure therapy in the treatment of ptsd due to military sexual trauma. *Journal of Anxiety Disorders*. https://doi-org.iris.etsu.edu:3443/10.1016/j.janxdis.2018.06.004

Lu, M. W., Woodside, K. I., Chisholm, T. L., & Ward, M. F. (2014). Making connections: Suicide prevention and the use of technology with rural veterans. *Journal of Rural Mental Health*, *38*(2), 98-108. doi:10.1037/rmh0000021

Lupis, S. B., Sabik, N. J., & Wolf, J. M. (2016). Role of shame and body esteem in cortisol stress responses. *Journal of Behavioral Medicine*, *39*(2), 262-275. doi:10.1007/s10865-015-9695-5

Lutz, J., Brühl, A. B., Doerig, N., Scheerer, H., Achermann, R., Weibel, A., & ... Herwig, U. (2016). Altered processing of self-related emotional stimuli in mindfulness meditators. *Neuroimage, 124*(Part A), 958-967. doi:10.1016/j.neuroimage.2015.09.057

Maguen, S., Lucenko, B. A., Reger, M. A., Gahm, G. A., Litz, B. T., Seal, K. H.,... & Marmar, C. R. (2010). The impact of reported direct and indirect killing on mental health symptoms in Iraq war veterans. *Journal of Traumatic Stress, 23*, 86 –90. doi: 10.1002/jts.20434

Maguen, S., Metzler, T. J., Bosch, J., Marmar, C. R., Knight, S. J., & Neylan, T. C. (2012). Killing in combat may be independently associated with suicidal ideation. *Depression & Anxiety, 29*, 918–923. doi:10.1002/da.21954

Maguen, S., Metzler, T. J., Litz, B. T., Seal, K. H., Knight, S. J., & Marmar, C. R. (2009). The impact of killing in war on mental health symptoms and related functioning. *Journal of Traumatic Stress, 22*, 435-443. doi: 10.1002/jts.20451.

Maheux, A., & Price, M. (2015). Investigation of the relation between PTSD symptoms and self-compassion: Comparison across DSM IV and DSM 5 PTSD symptom clusters. *Self and Identity, 14*(6), 627-637. doi:10.1080/15298868.2015.1037791

Maheux, A., & Price, M. (2016). The indirect effect of social support on post-trauma psychopathology via self-compassion. *Personality and Individual Differences, 88,* 102-107. doi:10.1016/j.paid.2015.08.051

Maloney, E., Degenhardt, L., Darke, S., Mattick, R. P., & Nelson, E. (2007). Suicidal behaviour and associated risk factors among opioid-dependent individuals: A case control study. *Addiction, 102*, 1933–1941

Mandelli, L., Carli, V., Roy, A., Serretti, A., & Sarchiapone, M. (2011). The influence of childhood trauma on the onset and repetition of suicidal behavior: An investigation in a high risk sample of male prisoners. *Journal of Psychiatric Research*, *45*(6), 742-747. doi:10.1016/j.jpsychires.2010.11.005

Manoranjitham, S. D., Rajkumar, A. P., Thangadurai, P., Prasad, J., Jayakaran, R., & Jacob, K. S. (2010). Risk factors for suicide in rural South India. *The British Journal of Psychiatry*, *196*(1), 26-30. doi:10.1192/bjp.bp.108.063347

Maples-Keller, J. L., Price, M., Rauch, S., Gerardi, M., & Rothbaum, B. O. (2017). Investigating relationships between PTSD symptom clusters within virtual reality exposure therapy for OEF/OIF veterans. *Behavior Therapy*, *48*(2), 147-155. doi:10.1016/j.beth.2016.02.011

Martin, C. E., Bartlett, B. A., Reddy, M. K., Gonzalez, A., & Vujanovic, A. A. (2018). Associations between mindfulness facets and ptsd symptom severity in psychiatric inpatients. *Mindfulness*. https://doi.org/10.1007/s12671-018-0904-5

Martin, G., Richardson, A. S., Bergen, H. A., Roeger, L., & Allison, S. (2005). Perceived academic performance, self-esteem and locus of control as indicators of need for assessment of adolescent suicide risk: Implications for teachers. *Journal of Adolescence*, *28*(1), 75-87. doi:10.1016/j.adolescence.2004.04.005

Marx, B. P., & Sloan, D. M. (2005). Peritraumatic dissociation and experiential avoidance as predictors of posttraumatic stress symptomatology. *Behavior Research and Therapy, 43*, 569-583. doi:10.1016/j.brat.2004.04.004

Marzuk, P. M., Hartwell, N., Leon, A. C., & Portera, L. (2005). Executive functioning in depressed patients with suicidal ideation. *Acta Psychiatrica Scandinavica*, *112*(4), 294-301. doi:10.1111/j.1600-0447.2005.00585.x

Mason, J. W., Wang, S., Yehuda, R., Riney, S., Charney, D. S., & Southwick, S. M. (2001). Psychogenic lowering of urinary cortisol levels linked to increased emotional numbing and a shame-depressive syndrome in combat-related posttraumatic stress disorder. *Psychosomatic Medicine*, *63*(3), 387-401. doi:10.1097/00006842-200105000-00008

Matos, M., Carvalho, S. A., Cunha, M., Galhardo, A., & Sepodes, C. (2017). Psychological flexibility and self-compassion in gay and heterosexual men: How they relate to childhood memories, shame, and depressive symptoms. *Journal of LGBT Issues in Counseling*, *11*(2), 88-105. doi:10.1080/15538605.2017.1310007

Matos, M., Duarte, C., Duarte, J., Pinto-Gouveia, J., Petrocchi, N., Basran, J., & Gilbert, P. (2017). Psychological and physiological effects of compassionate mind training: A pilot randomised controlled study. *Mindfulness*, *8*(6), 1699-1712. doi:10.1007/s12671-017-0745-7

Matos, M., Gouveia, J. P., & Duarte, C. (2015). Constructing a self protected against shame: The importance of warmth and safeness memories and feelings on the association between shame memories and depression. *International Journal of Psychology & Psychological Therapy*, *15*(3), 317-335.

May, C. N., Overholser, J. C., Ridley, J., & Raymond, D. (2015). Passive suicidal ideation: A clinically relevant risk factor for suicide in treatment-seeking veterans. *Illness, Crisis, & Loss*, *23*(3), 261-277. doi:10.1177/1054137315585422

McCarten, J. M., Hoffmire, C. A., & Bossarte, R. M. (2015). Changes in overall and firearm veteran suicide rates by gender, 2001–2010. *American Journal of Preventive Medicine*, *48*(3), 360-364. doi:10.1016/j.amepre.2014.10.013

McCauley, J. L., Killeen, T., Gros, D. F., Brady, K. T., & Back, S. E. (2012). Posttraumatic stress disorder and co-occurring substance use disorders: Advances in assessment and treatment. *Clinical Psychology: Science and Practice*, *19*(3), 283-304. doi:10.1111/cpsp.12006

McCormack, L., & Joseph, S. (2014). Psychological growth in aging Vietnam veterans: Redefining shame and betrayal. *Journal of Humanistic Psychology*, *54*(3), 336-355. doi:10.1177/0022167813501393

McDonald, S. D., & Calhoun, P. S. (2010). The diagnostic accuracy of the PTSD Checklist: A critical review. *Clinical Psychology Review*, *30*(8), 976–987. https://doi.org/10.1016/j.cpr.2010.06.012

McKinney, J. M., Hirsch, J. K., & Britton, P. C. (2017). PTSD symptoms and suicide risk in veterans: Serial indirect effects via depression and anger. *Journal of Affective Disorders, 214,* 100-107. doi:10.1016/j.jad.2017.03.008

McLay, R. N., Baird, A., Webb-Murphy, J., Deal, W., Tran, L., Anson, H., … Johnston, S. (2017). A randomized, head-to-head study of virtual reality exposure therapy for posttraumatic stress disorder. *Cyberpsychology, Behavior, and Social Networking*, *20*(4), 218–224. https://doi-org.iris.etsu.edu:3443/10.1089/cyber.2016.0554

McLean, C. P., & Foa, E. B. (2017). Emotions and emotion regulation in posttraumatic stress disorder. *Current Opinion in Psychology*, *14,* 72-77. doi:10.1016/j.copsyc.2016.10.006

McLean, C. P., Zang, Y., Zandberg, L., Bryan, C. J., Gay, N., Yarvis, J. S., ... & STRONG STAR Consortium. (2017). Predictors of suicidal ideation among active duty military personnel with posttraumatic stress disorder. *Journal of Affective Disorders, 208,* 392-398. doi:10.1016/j.jad.2016.08.061

McLean, L., Steindl, S. R., & Bambling, M. (2018) Compassion-Focused therapy as an intervention for adult survivors of sexual abuse. *Journal of Child Sexual Abuse, 27*(2), 161-175. doi: 10.1080/10538712.2017.1390718

Melyani, M., Allahyari, A. A., Falah, P. A., Ashtiani, A. F., & Tavoli, A. (2015). Mindfulness based cognitive therapy versus cognitive behavioral therapy in cognitive reactivity and self-compassion in females with recurrent depression with residual symptoms. *Journal of Psychology*, *18*(4), 393-407.

Meyers, L., Voller, E. K., McCallum, E. B., Thuras, P., Shallcross, S., Velasquez, T., & Meis, L. (2017). Treating veterans with PTSD and borderline personality symptoms in a 12-week intensive outpatient setting: Findings from a pilot program. *Journal of Traumatic Stress*, *30*(2), 178–181. https://doi-org.iris.etsu.edu:3443/10.1002/jts.22174

Michl, P., Meindl, T., Meister, F., Born, C., Engel, R. R., Reiser, M., & Hennig-Fast, K. (2014). Neurobiological underpinnings of shame and guilt: A pilot fMRI study. *Social Cognitive and Affective Neuroscience, 9*(2), 150-157. doi:10.1093/scan/nss114

Michopoulos, V., Norrholm, S. D., & Jovanovic, T. (2015). Diagnostic biomarkers for posttraumatic stress disorder: Promising horizons from translational neuroscience research. *Biological Psychiatry, 78*(5), 344-353. doi:10.1016/j.biopsych.2015.01.005

Milligan, R., & Andrews, B. (2005). Suicidal and other self-harming behaviour in offender women: The role of shame, anger and childhood abuse. *Legal and Criminological Psychology, 10*(1), 13-25. doi:10.1348/135532504X15439

Mittal, D., Drummond, K. L., Blevins, D., Curran, G., Corrigan, P., & Sullivan, G. (2013). Stigma associated with PTSD: Perceptions of treatment seeking combat veterans. *Psychiatric Rehabilitation Journal*, *36*(2), 86-92. doi:10.1037/h0094976

Mokros, H. B. (1995). Suicide and shame. *American Behavioral Scientist*, *38*(8), 1091-1103. doi:10.1177/0002764295038008005

Monson, C. M., Schnurr, P. P., Resick, P. A., Friedman, M. J., Young-Xu, Y., & Stevens, S. P. (2006). Cognitive Processing Therapy for veterans with military related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology, 74*, 898–907.

Mott, J. M., Sutherland, R. J., Williams, W., Lanier, S. H., Ready, D. J., & Teng, E. J. (2013). Patient perspectives on the effectiveness and tolerability of group-based exposure therapy

for posttraumatic stress disorder: Preliminary self-report findings from 20 veterans. *Psychological Trauma: Theory, Research, Practice, and Policy, 5*(5), 453-461. doi:10.1037/a0029386

Nagra, G. S., Lin, A., & Upthegrove, R. (2016). What bridges the gap between self-harm and suicidality? The role of forgiveness, resilience and attachment. *Psychiatry Research, 241*, 78-82. doi:10.1016/j.psychres.2016.04.103

Najavits, L. M. (2015). Trauma and substance abuse: a clinician's guide to treatment. In *Evidence Based Treatments for Trauma-Related Psychological Disorders* (pp. 317-330). Springer International Publishing.

Nacasch, N., Foa, E. B., Huppert, J. D., Tzur, D., Fostick, L., Dinstein, Y., … Zohar, J. (2011). Prolonged exposure therapy for combat- and terror-related posttraumatic stress disorder: A randomized control comparison with treatment as usual. *The Journal of Clinical Psychiatry*, *72*(9), 1174–1180. https://doi-org.iris.etsu.edu:3443/10.4088/JCP.09m05682blu

Neff, K. D. (2003a). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity, 2*(2), 85-101. doi:10.1080/15298860309032

Neff, K. D. (2003b). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*(3), 223-250. doi:10.1080/15298860309027

Neff, K. D. (2016). The self-compassion scale is a valid and theoretically coherent measure of self-compassion. *Mindfulness,* 7(1), 264-274. doi: 10.1007/s12671-015-0479-3

Neff, K., & Germer, C. (2013). A pilot study and randomized controlled trial of the Mindful Self-Compassion program. *Journal of Clinical Psychology, 69*(1), 28-44.

Neff, K. D., Hseih, Y., & Dejitthirat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity, 4*, 263-287. doi: 10.1080/13576500444000317

Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality, 41*(1), 139-154.

Neff, K. D., Pisitsungkagarn, K., & Hsieh, Y. (2008). Self-compassion and self-construal in the United States, Thailand, and Taiwan. *Journal of Cross-Cultural Psychology, 39*(3), 267-285. doi:10.1177/0022022108314544

Nelson, R. J. (2013). Is virtual reality exposure therapy effective for service members and veterans experiencing combat-related PTSD? *Traumatology*, *19*(3), 171–178. https://doi-org.iris.etsu.edu:3443/10.1177/1534765612459891

Nock, M. K., Borges, G., Bromet, E. J., Cha, C. B., Kessler, R. C., & Lee, S. (2008). Suicide and suicidal behavior. *Epidemiologic Reviews, 30*(1), 133-154. doi: 10.1093/epirev/mxn002

Norman, S. B., Wilkins, K. C., Myers, U. S., & Allard, C. B. (2014). Trauma informed guilt reduction therapy with combat veterans. *Cognitive and Behavioral Practice*, *21*(1), 78–88. https://doi-org.iris.etsu.edu:3443/10.1016/j.cbpra.2013.08.001

Novaco, R. W., Swanson, R. D., Gonzalez, O. I., Gahm, G. A., & Reger, M. D. (2012). Anger and postcombat mental health: Validation of a brief anger measure with U.S. Soldiers postdeployed from Iraq and Afghanistan. *Psychological Assessment, 24*(3), 661-675. doi:10.1037/a0026636

O'Donnell, J., Logan, J., & Bossarte, R. (2018). Ten-year trend and correlates of reported posttraumatic stress disorder among young male veteran suicide decedents—results from the national violent death reporting system, 16 US States, 2005–2014. *Suicide and Life-Threatening Behavior*. https://doi.org/10.1111/sltb.12536

O'Keefe, V. M., & Reger, G. M. (2017). Suicide among American Indian/Alaska Native military service members and veterans. *Psychological Services, 14*(3), 289-294. doi:10.1037/ser0000117

Øktedalen, T., Hoffart, A., & Langkaas, T. F. (2015). Trauma-related shame and guilt as time-varying predictors of posttraumatic stress disorder symptoms during imagery exposure and imagery rescripting - A randomized controlled trial. *Psychotherapy Research, 25*(5), 518-532. doi:10.1080/10503307.2014.917217

Osman, A., Bagge, C., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The Suicidal Behavior Questionnaire-Revised (SBQ-R): Validation with clinical and nonclinical samples. *Assessment, 8,* 443-454. doi: 10.1177/107319110100800409

Østergaard, M. D., Nordentoft, M., & Hjorthøj, C. (2017). Associations between substance use disorders and suicide or suicide attempts in people with mental illness: A Danish nation-wide, prospective, register-based study of patients diagnosed with schizophrenia, bipolar disorder, unipolar depression or personality disorder. *Addiction, 112*(7), 1250-1259.

Pace, T. W., Negi, L. T., Adame, D. D., Cole, S. P., Sivilli, T. I., Brown, T. D., & ... Raison, C. L. (2009). Effect of compassion meditation on neuroendocrine, innate immune and behavioral responses to psychosocial stress. *Psychoneuroendocrinology, 34*(1), 87-98. doi:10.1016/j.psyneuen.2008.08.011

Pai, A., Suris, A. M., & North, C. S. (2017). Posttraumatic stress disorder in the DSM-5: Controversy, change, and conceptual considerations. *Behavioral Sciences (Basel, Switzerland), 7*(1), 7. doi:10.3390/bs7010007

Panagioti, M., Gooding, P., & Tarrier, N. (2009). Post-traumatic stress disorder and suicidal behavior: A narrative review. *Clinical Psychology Review, 29*(6), 471-482. doi: 10.1016/j.cpr.2009.05.001

Panagioti, M., Gooding, P., Taylor, P., & Tarrier, N. (2012). Negative self-appraisals and suicidal behavior among trauma victims experiencing PTSD symptoms: The mediating role of defeat and entrapment. *Depression and Anxiety, 29*(3), 187-194. doi: 10.1002/da.21917

Park, M., Chang, E. R., & You, S. (2015). Protective role of coping flexibility in PTSD and depressive symptoms following trauma. *Personality and Individual Differences, 82,* 102-106. doi:10.1016/j.paid.2015.03.007

Parker, S., & Thomas, R. (2009). Psychological differences in shame vs. guilt: Implications for mental health counselors. *Journal of Mental Health Counseling, 31*(3), 213-224. doi:10.17744/mehc.31.3.f405217281988832

Paul, L. A., Gros, D. F., Strachan, M., Worsham, G., Foa, E. B., & Acierno, R. (2014). Prolonged exposure for guilt and shame in a veteran of Operation Iraqi Freedom. *American Journal of Psychotherapy*, *68*(3), 277-286.

Pawlak, J., Dmitrzak-Węglarz, M., Skibińska, M., Szczepankiewicz, A., Leszczyńska-Rodziewicz, A., Rajewska-Rager, A., & ... Hauser, J. (2013). Suicide attempts and clinical risk factors in patients with bipolar and unipolar affective disorders. *General Hospital Psychiatry*, *35*(4), 427-432. doi:10.1016/j.genhosppsych.2013.03.014

Perez, N. M., Jennings, W. G., Piquero, A. R., & Baglivio, M. T. (2016). Adverse childhood experiences and suicide attempts: The mediating influence of personality development

and problem behaviors. *Journal of Youth and Adolescence*, *45*(8), 1527-1545. doi:10.1007/s10964-016-0519-x

Pietrzak, R. H., & Cook, J. M. (2013). Psychological resilience in older U.S. veterans: Results from the National Health and Resilience in Veterans Study. *Depression and Anxiety*, *30*(5), 432-443. doi:10.1002/da.22083

Pietrzak, R. H., Goldstein, M. B., Malley, J. C., Rivers, A. J., Johnson, D. C., & Southwick, S. M. (2010). Risk and protective factors associated with suicidal ideation in veterans of operations Enduring Freedom and Iraqi Freedom. *Journal of Affective Disorders*, *123*(1-3), 102-107. doi:10.1016/j.jad.2009.08.001

Pietrzak, R. H., Russo, A. R., Ling, Q., & Southwick, S. M. (2011). Suicidal ideation in treatment-seeking veterans of Operations Enduring Freedom and Iraqi Freedom: The role of coping strategies, resilience, and social support. *Journal of Psychiatric Research*, *45*(6), 720-726. doi:10.1016/j.jpsychires.2010.11.015

Piovani, J. I. (2008). The historical construction of correlation as a conceptual and operative instrument for empirical research. *Quality & Quantity*, *42*(6), 757-777. doi: 10.1007/s11135-006-9066-y

Pompili, M., Sher, L., Serafini, G., Forte, A., Innamorati, M., Dominici, G., & ... Girardi, P. (2013). Posttraumatic stress disorder and suicide risk among veterans: A literature review. *Journal of Nervous and Mental Disease*, *201*(9), 802-812. doi:10.1097/NMD.0b013e3182a21458

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40,* 879-891. doi: 10.3758/BRM.40.3.879

Price, M., Maples, J. L., Jovanovic, T., Norrholm, S. D., Heekin, M., & Rothbaum, B. O. (2015). An investigation of outcome expectancies as a predictor of treatment response for combat veterans with ptsd: Comparison of clinician, self-report, and biological measures. *Depression and Anxiety*, *32*(6), 392-399. doi:10.1002/da.22354

Puckett, J. A., Horne, S. G., Surace, F., Carter, A., Noffsinger-Frazier, N., Shulman, J., & ... Mosher, C. (2017). Predictors of sexual minority youth's reported suicide attempts and mental health. *Journal of Homosexuality*, *64*(6), 697-715. doi:10.1080/00918369.2016.1196999

Pugh, L. R., Taylor, P. J., & Berry, K. (2015). The role of guilt in the development of post-traumatic stress disorder: A systematic review. *Journal of Affective Disorders, 182*138-150. doi:10.1016/j.jad.2015.04.026

Qin, P., Agerbo, E., & Mortensen, P. B. (2002). Suicide risk in relation to family history of completed suicide and psychiatric disorders: A nested case-control study based on longitudinal registers. *The Lancet*, *360*(9340), 1126-1130. doi:10.1016/S0140-6736(02)11197-4

Rabon, J., Brooks, B. D., Kaniuka, A. R., Sirois, F., & Hirsch, J. K. (2017). Self-compassion and suicide risk in veterans: When the going gets tough, do the tough benefit more from self-kindness? Manuscript invited for revision for publication.

Raes, F., Pommier, E., Neff, K. D., Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology and Psychotherapy, 18*, 250-255. doi: 10.1002/cpp.702

Rajalin, M., Hirvikoski, T., & Jokinen, J. (2013). Family history of suicide and exposure to interpersonal violence in childhood predict suicide in male suicide attempters. *Journal of Affective Disorders*, *148*(1), 92-97. doi:10.1016/j.jad.2012.11.055

Ramberg, M., Stanley, B., Ystgaard, M., & Mehlum, L. (2015). Depressed suicide attempters with posttraumatic stress disorder. *Archives of Suicide Research*, *19*(1), 48-59. doi:10.1080/13811118.2014.915777

Ramsawh, H. J., Fullerton, C. S., Mash, H. H., Ng, T. H., Kessler, R. C., Stein, M. B., & Ursano, R. J. (2014). Risk for suicidal behaviors associated with PTSD, depression, and their comorbidity in the U.S. Army. *Journal of Affective Disorders*, *161*, 116-122. doi:10.1016/j.jad.2014.03.016

Rangganadhan, A. R., & Todorov, N. (2010). Personality and self-forgiveness: The roles of shame, guilt, empathy and conciliatory behavior. *Journal of Social and Clinical Psychology*, *29*(1), 1-22. doi:10.1521/jscp.2010.29.1.1

Rapgay, L., Ross, J. L., Petersen, O., Izquierdo, C., Harms, M., Hawa, S., & ... Couper, G. (2014). A proposed protocol integrating classical mindfulness with prolonged exposure therapy to treat posttraumatic stress disorder. *Mindfulness*, *5*(6), 742-755. doi:10.1007/s12671-013-0231-9

Ray-Sannerud, B. N., Bryan, C. J., Perry, N. S., & Bryan, A. O. (2015). High levels of emotional distress, trauma exposure, and self-injurious thoughts and behaviors among military personnel and veterans with a history of same sex behavior. *Psychology of Sexual Orientation and Gender Diversity*, *2*(2), 130-137. doi:10.1037/sgd0000096

Regan, P., Cachelin, F. M., & Minnick, A. M. (2017). Initial treatment seeking from professional health care providers for eating disorders: A review and synthesis of potential barriers to

and facilitators of 'first contact'. *International Journal of Eating Disorders*, *50*(3), 190-209. doi:10.1002/eat.22683

Reilly, E. D., Rochlen, A. B., & Awad, G. H. (2014). Men's self-compassion and self-esteem: The moderating roles of shame and masculine norm adherence. *Psychology of Men & Masculinity*, *15*(1), 22–28. https://doi.org/10.1037/a0031028

Renshaw, K. D., & Kiddie, N. S. (2012). Internal anger and external expressions of aggression in OEF/OIF veterans. *Military Psychology*, *24*(3), 221-235. doi:10.1080/08995605.2012.678197

Resick, P. A., Monson, C. M., & Chard, K. (2014). Cognitive processing therapy veteran/military version: Therapist's manual. Washington, DC: Department of Veterans Affairs.

Resick, P. A., Nishith, P., Weaver, T. L., Astin, M. C., & Feuer, C. A. (2002). A comparison of cognitive-processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology*, *70*(4), 867–879. https://doi-org.iris.etsu.edu:3443/10.1037/0022-006X.70.4.867

Rice, T. R., & Sher, L. (2013). Killing in combat and suicide risk. *European Psychiatry*, *28*(4), 261. doi:10.1016/j.eurpsy.2012.10.001

Riley, G., Gregory, N., Bellinger, J., Davies, N., Mabbott, G., & Sabourin, R. (2011). Carer's education groups for relatives with a first episode of psychosis: An evaluation of an eight-week education group. *Early Intervention in Psychiatry*, *5*(1), 57-63. doi:10.1111/j.1751-7893.2010.00195.x

Robinaugh, D. J., & McNally, R. J. (2010). Autobiographical memory for shame or guilt provoking events: Association with psychological symptoms. *Behaviour Research and Therapy*, *48*(7), 646–652. https://doi.org/10.1016/j.brat.2010.03.017

Robinson, S., Kissane, D. W., Brooker, J., Hempton, C., & Burney, S. (2017). The relationship between poor quality of life and desire to hasten death: A multiple mediation model examining the contributions of depression, demoralization, loss of control, and low self-worth. *Journal of Pain and Symptom Management*, *53*(2), 243-249. doi:10.1016/j.jpainsymman.2016.08.013

Rockliff, H., Gilbert, P., McEwan, K., Lightman, S., & Glover, D. (2008). A pilot exploration of heart rate variability and salivary cortisol responses to compassion-focused imagery. *Clinical Neuropsychiatry: Journal of Treatment Evaluation*, *5*(3), 132-139.

Rogers, M. L., & Joiner, T. E. (2017). Rumination, suicidal ideation, and suicide attempts: A meta-analytic review. *Review of General Psychology*, *21*(2), 132-142. doi:10.1037/gpr0000101

Rogers, M. L., Kelliher-Rabon, J., Hagan, C. R., Hirsch, J. K., & Joiner, T. E. (2017). Negative emotions in veterans relate to suicide risk through feelings of perceived burdensomeness and thwarted belongingness. *Journal of Affective Disorders*, *208*15-21. doi:10.1016/j.jad.2016.09.038

Rosen, C. S., Greenbaum, M. A., Fitt, J. E., Laffaye, C., Norris, V. A., & Kimerling, R. (2011). Stigma, help-seeking attitudes, and use of psychotherapy in veterans with diagnoses of posttraumatic stress disorder. *Journal of Nervous and Mental Disease*, *199*(11), 879-885. doi:10.1097/NMD.0b013e3182349ea5

Ross, C. A. (2013). Self-blame and suicidal ideation among combat veterans. *American Journal of Psychotherapy*, *67*(4), 309-322.

Roush, J. F., Brown, S. L., Mitchell, S. M., & Cukrowicz, K. C. (2017). Shame, guilt, and suicide ideation among bondage and discipline, dominance and submission, and sadomasochism practitioners: Examining the role of the interpersonal theory of suicide. *Suicide and Life-Threatening Behavior*, *47*(2), 129-141. doi:10.1111/sltb.12267

Rudd, M. D., Goulding, J., & Bryan, C. J. (2011). Student veterans: A national survey exploring psychological symptoms and suicide risk. *Professional Psychology: Research and Practice*, *42*(5), 354-360. doi:10.1037/a0025164

Runnals, J. J., Garovoy, N., McCutcheon, S. J., Robbins, A. T., Mann-Wrobel, M. C., Elliott, A., & Strauss, J. L. (2014). Systematic review of women veterans' mental health. *Women's Health Issues*, *24*(5), 485-502. doi:10.1016/j.whi.2014.06.012

Schanche, E., Stiles, T. C., McCullough, L., Svartberg, M., & Nielsen, G. H. (2011). The relationship between activating affects, inhibitory affects, and self-compassion in patients with Cluster C personality disorders. *Psychotherapy*, *48*(3), 293-303. doi:10.1037/a0022012

Schell, T. L., & Marshall, G. N. (2008). Survey of individuals previously deployed for OEF/OIF. In T. Tanielian & L. H. Jaycox (Eds.), *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery* (87-115). Santa Monica, CA: RAND Corporation.

Schroevers, M. J., Tovote, K. A., Snippe, E., & Fleer, J. (2016). Group and individual mindfulness-based cognitive therapy (MBCT) are both effective: A pilot randomized

controlled trial in depressed people with a somatic disease. *Mindfulness*, *7*(6), 1339-1346. doi:10.1007/s12671-016-0575-z

Scott, J. C., Pietrzak, R. H., Southwick, S. M., Jordan, J., Silliker, N., Brandt, C. A., & Haskell, S. G. (2014). Military sexual trauma interacts with combat exposure to increase risk for posttraumatic stress symptomatology in female Iraq and Afghanistan veterans. *The Journal of Clinical Psychiatry*, *75*(6), 637–643. https://doi-org.iris.etsu.edu:3443/10.4088/JCP.13m08808

Scrandis, D. A. (2005). Normalizing postpartum depressive symptoms with social support. *Journal of the American Psychiatric Nurses Association*, *11*(4), 223-230. doi:10.1177/1078390305280940

Seedat, S., Stein, M. B., & Forde, D. R. (2005). Association between physical partner violence, posttraumatic stress, childhood trauma, and suicide attempts in a community sample of women. *Violence and Victims*, *20*(1), 87-98. doi:10.1891/vivi.2005.20.1.87

Selby, E. A., Anestis, M. D., Bender, T. W., Ribiero, J. D., Nock, M. K., Rudd, M. D., Joiner, T. E. (2010). Overcoming the fear of lethal injury: Evaluating suicidal behavior in the military through the lens of the interpersonal-psychological theory of suicide. *Clinical Psychology Review, 30,* 298–307. doi: 10.1016/j.cpr.2009.12.004

Selimbegović, L., & Chatard, A. (2013). The mirror effect: Self-awareness alone increases suicide thought accessibility. *Consciousness and Cognition: An International Journal*, *22*(3), 756-764. doi:10.1016/j.concog.2013.04.014

Sexton, M. B., Raggio, G. A., McSweeney, L. B., Authier, C. C., & Rauch, S. A. M. (2017). Contrasting gender and combat versus military sexual traumas: Psychiatric symptom severity and morbidities in treatment-seeking veterans. *Journal of Women's*

Health, *26*(9), 933–940. Retrieved from https://search-ebscohost-com.iris.etsu.edu:3443/login.aspx?direct=true&AuthType=cookie,ip,url,uid,athens&db=psyh&AN=2017-41966-002&site=ehost-live

Shahar, B. (2014). Emotion-focused therapy for the treatment of social anxiety: An overview of the model and a case description. *Clinical Psychology & Psychotherapy*, *21*(6), 536-547.

Sharpless, B. A., & Barber, J. P. (2011). A clinician's guide to PTSD treatments for returning veterans. *Professional Psychology: Research and Practice*, *42*(1), 8-15. doi:10.1037/a0022351

Sher, L. (2009). Suicide in war veterans: the role of comorbidity of PTSD and depression. *Expert Review of Neurotherapeutics*, *9*(7), 921-923. doi:10.1586/ern.09.61

Shields, D. M., Kuhl, D., & Westwood, M. J. (2017). Abject masculinity and the military: Articulating a fulcrum of struggle and change. *Psychology of Men & Masculinity*, *18*(3), 215–225. https://doi.org/10.1037/men0000114

Shorey, R. C., Sherman, A. E., Kivisto, A. J., Elkins, S. R., Rhatigan, D. L., & Moore, T. M. (2011). Gender differences in depression and anxiety among victims of intimate partner violence: The moderating effect of shame proneness. *Journal of Interpersonal Violence*, *26*(9), 1834-1850. doi:10.1177/0886260510372949

Singer, M. (2004). Shame, guilt, self-hatred and remorse in the psychotherapy of Vietnam combat veterans who committed atrocities. *American Journal of Psychotherapy*, *58*(4), 377.

Sippel, L. M., Watkins, L. E., Pietrzak, R. H., Hoff, R., & Harpaz-Rotem, I. (2018). The unique roles of emotional numbing and arousal symptoms in relation to social connectedness

among military veterans in residential treatment for PTSD. *Psychiatry: Interpersonal and Biological Processes*. https://doi-org.iris.etsu.edu:3443/10.1080/00332747.2017.1395313

Sirois, F. M., Molnar, D. S., & Hirsch, J. K. (2015). Self-compassion, stress, and coping in the context of chronic illness. *Self and Identity, 14*(3), 334-347. doi:10.1080/15298868.2014.996249

Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology*, *70*(9), 794-807. doi:10.1002/jclp.22076

Speckens, A. M., Ehlers, A., Hackmann, A., Ruths, F. A., & Clark, D. M. (2007). Intrusive memories and rumination in patients with post-traumatic stress disorder: A phenomenological comparison. *Memory*, *15*(3), 249-257. doi:10.1080/09658210701256449

Stange, J. P., Kleiman, E. M., Sylvia, L. G., Magalhães, P. V. D. S., Berk, M., Nierenberg, A. A., & Deckersbach, T. (2016). Specific mood symptoms confer risk for subsequent suicidal ideation in bipolar disorder with and without suicide attempt history: Multi-wave date from STEP-BD. *Depression and Anxiety*, *33*(6), 464-472. doi: 10.1002/da.22464

Stanley, I. H., Rogers, M. L., Hanson, J. E., Gutierrez, P. M., & Joiner, T. E. (2019). PTSD symptom clusters and suicide attempts among high-risk military service members: A three-month prospective investigation. *Journal of Consulting and Clinical Psychology*, *87*(1), 67–78. https://doi.org/10.1037/ccp0000350

Steil, R., Dittmann, C., Müller-Engelmann, M., Dyer, A., Maasch, A.-M., & Priebe, K. (2018). Dialectical behaviour therapy for posttraumatic stress disorder related to childhood sexual abuse: A pilot study in an outpatient treatment setting. *European Journal of*

Psychotraumatology, *9*(1). https://doi-org.iris.etsu.edu:3443/10.1080/20008198.2018.1423832

Stein, N. R., Mills, M. A., Arditte, K., Mendoza, C., Borah, A. M., Resick, P. A., & Litz, B. T. (2012). A scheme for categorizing traumatic military events. *Behavior Modification*, *36*(6), 787-807. doi:10.1177/0145445512446945

Stern, J. (2014). PTSD: Policy issues. *Psychoanalytic Psychology*, *31*(2), 255-261. doi:10.1037/a0036008

Stevens, D., Wilcox, H. C., MacKinnon, D. F., Mondimore, F. M., Schweizer, B., Jancic, D., & ... Potash, J. B. (2013). Posttraumatic stress disorder increases risk for suicide attempt in adults with recurrent major depression. *Depression and Anxiety*, *30*(10), 940-946. doi: 10.1002/da.22160

Stötter, A., Mitsche, M., Endler, P. C., Oleksy, P., Kamenschek, D., Mosgoeller, W., & Haring, C. (2013). Mindfulness-based touch therapy and mindfulness practice in persons with moderate depression. *Body, Movement and Dance in Psychotherapy*, *8*(3), 183-198. doi:10.1080/17432979.2013.803154

Stotz, S. J., Elbert, T., Müller, V., & Schauer, M. (2015). The relationship between trauma, shame, and guilt: Findings from a community-based study of refugee minors in Germany. *European Journal of Psychotraumatology*, *6*, 1-10. doi: 10.3402/ejpt.v6.25863

Substance Abuse and Mental Health Services Administration (2013). Results from the 2013 National Survey on Drug Use and Health: Mental Health Findings, NSDUH Series H-49, HHS Publication No. (SMA) 14-4887. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Sullivan, E. M., Annest, J. L., & Luo, F. (2013). Suicide among adults aged 35-64 years – United States, 1999-2010. *Morbidity and Mortality Weekly Report, 62*(17), 321-325.

Suominen, K., Isometsä, E., Ostamo, A., & Lönnqvist, J. (2004). Level of suicidal intent predicts overall mortality and suicide after attempted suicide: A 12-year follow-up study. *BioMed Central Psychiatry*, *4.* doi:10.1186/1471-244X-4-11

Taft, C. T., Kaloupek, D. G., Schumm, J. A., Marshall, A. D., Panuzio, J., King, D. W., & Keane, T. M. (2007). Posttraumatic stress disorder symptoms, physiological reactivity, alcohol problems, and aggression among military veterans. *Journal of Abnormal Psychology*, *116*(3), 498-507. doi:10.1037/0021-843X.116.3.498

Takahashi, H., Matsuura, M., Koeda, M., Yahata, N., Suhara, T., Kato, M., & Okubo, Y. (2008). Brain activations during judgments of positive self-conscious emotion and positive basic emotion: Pride and joy. *Cerebral Cortex*, *18*(4), 898-903. doi:10.1093/cercor/bhm120

Tanaka, M., Wekerle, C., Schmuck, M. L., & Paglia-Boak, A. (2011). The linkages among childhood maltreatment, adolescent mental health, and self-compassion in child welfare adolescents. *Child Abuse & Neglect*, *35*(10), 887-898. doi:10.1016/j.chiabu.2011.07.003

Tanelian, T., & Jaycox, L. H. (Eds.). (2004). *Invisible wounds of war: Psychological and cognitive injuries, their consequences, and services to assist recovery*. Santa Monica, CA: Rand Corporation.

Tangney, J. P., & Dearing, L. (2002). *Shame and guilt*. Guilford Press, New York, NY.

Tarber, D. N., Cohn, T. J., Casazza, S., Hastings, S. L., & Steele, J. (2016). The role of self-compassion in psychological well-being for male survivors of childhood maltreatment. *Mindfulness*, *7*(5), 1193-1202. doi:10.1007/s12671-016-0562-4

Tesh, M., Learman, J., & Pulliam, R. M. (2015). Mindful self-compassion strategies for survivors of intimate partner abuse. *Mindfulnes*s, *6*(2), 192-201. doi: 10.1007/s12671-013-0244-4

Thomas, J. L., Britt, T. W., Odle-Dusseau, H., & Bliese, P. D. (2011). Dispositional optimism buffers combat veterans from the negative effects of warzone stress on mental health symptoms and work impairment. *Journal of Clinical Psychology*, *67*(9), 866-880. doi:10.1002/jclp.20809

Thompson, M. M., & Jetly, R. (2014). Battlefield ethics training: Integrating ethical scenarios in high-intensity military field exercises. *European Journal of Psychotraumatology, 5*, 1-11. doi: 10.3402/ejpt.v5.23668

Thompson, M. P., Kaslow, N. J., Lane, D. B., & Kingree, J. B. (2000). Childhood maltreatment, PTSD, and suicidal behavior among African American females. *Journal of Interpersonal Violence, 15*, 3–15. doi: 10.1177/088626000015001001

Thompson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal of Traumatic Stress*, *21*(6), 556-558. doi:10.1002/jts.20374

Tilghman-Osborne, C., Cole, D. A., & Felton, J. W. (2012). Inappropriate and excessive guilt: Instrument validation and developmental differences in relation to depression. *Journal of Abnormal Child Psychology*, *40*(4), 607-620. doi:10.1007/s10802-011-9591-6

Tone, E. B., & Tully, E. C. (2014). Empathy as a 'risky strength': A multilevel examination of empathy and risk for internalizing disorders. *Development and Psychopathology*, *26*(4, Pt 2), 1547-1565. doi:10.1017/S0954579414001199

Tran, H. N., & Beck, J. G. (2018). Are peritraumatic perceptions of fear/life threat and posttraumatic negative self-conscious appraisals/emotions differentially associated with

ptsd symptoms? *Cognitive Therapy and Research*. https://doi-org.iris.etsu.edu:3443/10.1007/s10608-018-9903-z

Tran, K. K., Wong, Y. J., Cokley, K. O., Brownson, C., Drum, D., Awad, G., & Wang, M. (2015). Suicidal Asian American college students' perceptions of protective factors: A qualitative study. *Death Studies*, *39*(8), 500-507. doi:10.1080/07481187.2014.970299

Tripp, J. C., & McDevitt-Murphy, M. E. (2017). Trauma-related guilt mediates the relationship between posttraumatic stress disorder and suicidal ideation in OEF/OIF/OND veterans. *Suicide and Life-Threatening Behavior*, *47*(1), 78-85. doi:10.1111/sltb.12266

Trompetter, H. R., de Kleine, E., & Bohlmeijer, E. T. (2016). Why does positive mental health buffer against psychopathology? An exploratory study on self-compassion as a resilience mechanism and adaptive emotion regulation strategy. *Cognitive Therapy and Research*, *41*(3), 459-468. doi:10.1007/s10608-016-9774-0

Tsai, A. C., Lucas, M., & Kawachi, I. (2015). Association between social integration and suicide among women in the United States. *Journal of the American Medical Association Psychiatry*, *72*(10), 987-993. doi:10.1001/jamapsychiatry.2015.1002

Urlic, I., & Simunkovic, G. T. (2009). Working through shame in groups for victims of trauma and war. *International Journal of Group Psychotherapy*, *59*(2), 165-178. doi:10.1521/ijgp.2009.59.2.165

Ursano, R. J., Kessler, R. C., Stein, M. B., Naifeh, J. A., Aliaga, P. A., Fullerton, C. S., & ... Heeringa, S. G. (2016). Risk factors, methods, and timing of suicide attempts among US Army soldiers. *The Journal of the American Medical Association Psychiatry*, *73*(7), 741-749. doi:10.1001/jamapsychiatry.2016.0600

U.S. Census Bureau (2012). A snapshot of our nation's veterans. Retrieved from: http://www.census.gov/library/infographics/veterans.html

U.S. Census Bureau. (2016). *Quick Facts: United States*. Retrieved from: https://www.census.gov/quickfacts/fact/table/US/PST045216

Valdez, C. E., & Lilly, M. M. (2016). Self-compassion and trauma processing outcomes among victims of violence. *Mindfulness, 7*(2), 329-339. doi:10.1007/s12671-015-0442-3

Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of Anxiety Disorders, 25*(1), 123–130. doi:10.1016/j.janxdis.2010.08.011

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr. (2010). The interpersonal theory of suicide. *Psychological Review*, *117,* 575– 600. doi:10.1037/ a0018697

Vargas, A. F., Hanson, T., Kraus, D., Drescher, K., & Foy, D. (2013). Moral injury themes in combat veterans' narrative responses from the National Vietnam Veterans' Readjustment Study. *Traumatology*, *19*(3), 243-250. doi:10.1177/1534765613476099

Veterans Affairs Office of Suicide Prevention [VA OSP]. (2016). *Suicide among veterans and other Americans 2001-2014.* Retrieved from: https://www.mentalhealth.va.gov/docs/2016suicidedatareport.pdf

Wahbeh, H., Lu, M., & Oken, B. (2011). Mindful awareness and non-judging in relation to posttraumatic stress disorder symptoms. *Mindfulness*, *2*(4), 219–227. https://doi.org/10.1007/s12671-011-0064-3

Walser, R. D., Garvert, D. W., Karlin, B. E., Trockel, M., Ryu, D. M., & Taylor, C. B. (2015). Effectiveness of Acceptance and Commitment Therapy in treating depression and suicidal ideation in veterans. *Behaviour Research and Therapy, 74*25-31. doi:10.1016/j.brat.2015.08.012

Warren, R. (2015). Emotion regulation in borderline personality disorder: The role of self-criticism, shame, and self-compassion. *Personality and Mental Health, 9*(1), 84-86. doi:10.1002/pmh.1290

Weathers, F., Huska, J., & Keane, T. (1991). The PTSD checklist military version (PCL-M). *Boston, MA: National Center for PTSD*.

Weathers, F., Litz, B., Herman, D., Huska, J., & Keane, T. (1993). *The PTSD Checklist (PCL): Reliability, Validity, and Diagnostic Utility.* Paper presented at the Annual Convention of the International Society for Traumatic Stress Studies, San Antonio, TX.

Weisenhorn, D. A., Frey, L. M., van de Venne, J., & Cerel, J. (2017). Suicide exposure and posttraumatic stress disorder: Is marriage a protective factor for veterans? *Journal of Child and Family Studies*, *26*(1), 161-167. doi:10.1007/s10826-016-0538-y

Werbart Törnblom, A., Werbart, A., & Rydelius, P. (2015). Shame and gender differences in paths to youth suicide: Parents' perspective. *Qualitative Health Research, 25*(8), 1099-1116. doi:10.1177/1049732315578402

Wheeler, M. S., Arnkoff, D. B., & Glass, C. R. (2017). The neuroscience of mindfulness: How mindfulness alters the brain and facilitates emotion regulation. *Mindfulness, 8*(6), 1471-1487. doi:10.1007/s12671-017-0742-x

Wiklander, M., Samuelsson, M., Jokinen, J., Nilsonne, Å., Wilczek, A., Rylander, G., & Åsberg, M. (2012). Shame-proneness in attempted suicide patients. *BioMed Central Psychiatry*, *12*, 1-9. doi: 10.1186/1471-244X-12-50

Wild, L. G., Flisher, A. J., & Lombard, C. (2004). Suicidal ideation and attempts in adolescents: Associations with depression and six domains of self-esteem. *Journal of Adolescence*, *27*(6), 611-624. doi:10.1016/j.adolescence.2004.03.001

Williamson, I., Sandage, S. J., & Lee, R. M. (2007). How social connectedness affects guilt and shame: Mediation by hope and differentiation of self. *Personality and Individual Differences*, *43*(8), 2159-2170. doi:10.1016/j.paid.2007.06.026

Wingate, L. R., Burns, A. B., Gordon, K. H., Perez, M., Walker, R. L., Williams, F. M., & Joiner, T. J. (2006). Suicide and positive cognitions: Positive psychology applied to the understanding and treatment of suicidal behavior. In T. E. Ellis, T. E. Ellis (Eds.), *Cognition and suicide: Theory, research, and therapy* (pp. 261-283). Washington, DC, US: American Psychological Association. doi:10.1037/11377-012

Wisco, B. E., Marx, B. P., May, C. L., Martini, B., Krystal, J. H., Southwick, S. M., & Pietrzak, R. H. (2017). Moral injury in U.S. Combat veterans: Results from the National Health and Resilience in Veterans Study. *Depression and Anxiety*, *34*(4), 340-347. doi:10.1002/da.22614

Wisco, B. E., Marx, B. P., Wolf, E. J., Miller, M. W., Southwick, S. M., & Pietrzak, R. H. (2014). Posttraumatic stress disorder in the US veteran population: Results from the National Health and Resilience in Veterans Study. *Journal of Clinical Psychiatry*, *75*(12), 1338-1346. doi:10.4088/JCP.14m09328

Wong, C. Y., & Mak, W. S. (2013). Differentiating the role of three self-compassion components in buffering cognitive-personality vulnerability to depression among Chinese in Hong Kong. *Journal of Counseling Psychology*, *60*(1), 162-169. doi:10.1037/a0030451

Woods, H., & Proeve, M. (2014). Relationships of mindfulness, self-compassion, and meditation experience with shame-proneness. *Journal of Cognitive Psychotherapy*, *28*(1), 20-33. doi:10.1891/0889-8391.28.1.20

World Health Organization [WHO] (2016). *Suicide* [Fact sheet]. Retrieved from: http://www.who.int/mediacentre/factsheets/fs398/en/.

Yarvis, J. S., Yoon, E., Amenuke, M., Simien-Turner, S., & Landers, G. D. (2012). Assessment of PTSD in older veterans: The posttraumatic stress disorder checklist: Military Version (PCL-M). *Advances in Social Work, 13*(1), 185-202.

Yildiz, E. (2018). Suicide in sexual minority populations: A systematic review of evidence-based studies. *Archives Of Psychiatric Nursing*, doi:10.1016/j.apnu.2018.03.003

You, S., Talbot, N. L., He, H., & Conner, K. R. (2012). Emotions and suicidal ideation among depressed women with childhood sexual abuse histories. *Suicide and Life-Threatening Behavior*, *42*(3), 244-254. doi:10.1111/j.1943-278X.2012.00086.x

Yu, S., Chen, S., & Chang, K. (2008). Rumination predicting depression and PTSD symptoms in postoperative breast cancer patients. *Chinese Journal of Psychology*, *50*(3), 289-302.

Yuan, C., Wang, Z., Inslicht, S. S., McCaslin, S. E., Metzler, T. J., Henn-Haase, C., & ... Marmar, C. R. (2011). Protective factors for posttraumatic stress disorder symptoms in a prospective study of police officers. *Psychiatry Research*, *188*(1), 45-50. doi:10.1016/j.psychres.2010.10.034

Zamora-Kapoor, A., Nelson, L. A., Barbosa-Leiker, C., Comtois, K. A., Walker, L. R., & Buchwald, D. S. (2016). Suicidal ideation in American Indian/Alaska native and White adolescents: The role of social isolation, exposure to suicide, and overweight. *American Indian and Alaska Native Mental Health Research*, *23*(4), 86-100. doi:10.5820/aian.2304.2016.86

Zang, Y., Gallagher, T., McLean, C. P., Tannahill, H. S., Yarvis, J. S., & Foa, E. B. (2017). The impact of social support, unit cohesion, and trait resilience on PTSD in treatment-seeking military personnel with PTSD: The role of posttraumatic cognitions. *Journal of Psychiatric Research*, *86,* 18-25. doi:10.1016/j.jpsychires.2016.11.005

Zeller, M., Yuval, K., Nitzan-Assayag, Y., & Bernstein, A. (2015). Self-compassion in recovery following potentially traumatic stress: Longitudinal study of at-risk youth. *Journal of Abnormal Child Psychology, 43*(4), 645-653. doi: 10.1007/s10802-014-9937-y

Zeng, W., Ma, Z., & Li, H. (2017). Mindfulness and suicidal ideation in Chinese older adults: Perceived stress as mediator. *Social Behavior and Personality, 45*(5), 733-740. doi:10.2224/sbp.5807

Zhang, J. W., & Chen, S. (2016). Self-compassion promotes personal improvement from regret experiences via acceptance. *Personality and Social Psychology Bulletin, 42*(2), 244–258. https://doi.org/10.1177/0146167215623271

Zinzow, H. M., Grubaugh, A. L., Monnier, J., Suffoletta-Maierle, S., & Frueh, B. C. (2007). Trauma among female veterans: A critical review. *Trauma, Violence, & Abuse, 8*(4), 384-400. doi:10.1177/1524838007307295

VITA

JESSICA MCKINNEY

Education:

Ph.D. Psychology, concentration in Clinical Psychology, East Tennessee State University, Johnson City, Tennessee, 2019
M.S. Psychology, concentration in Research, University of Tennessee-Chattanooga, Chattanooga, Tennessee, 2013
B.S. Psychology, University of Tennessee-Chattanooga, Chattanooga, Tennessee, 2011
High School Diploma, Northeast High School, Clarksville, Tennessee, 2007

Professional Experience:

2018 – 2019. Psychology Intern. Louis Stokes Cleveland Veterans Affairs Medical Center. Pre-doctoral Internship. Cleveland, Ohio
2017-2018. Extern Clinician. Frontier Health - Holston Counseling Center. Externship. Kingsport, Tennessee.
2016 – 2017. Extern Clinician. James H. Quillen VA Healthcare System – PCT. Externship. Johnson City, Tennessee.
2015 – 2016. Practicum Clinician. James H. Quillen VA Healthcare System Primary Care-Mental Health Integration Clinic. Practicum. Johnson City, Tennessee.
2015– 2016. Extern Clinician. Camelot Care Center. Externship. Kingsport, Tennessee.
2015 – 2016. Practicum Clinician. Mountain States Health Alliance Cardiac Rehabilitation Center. Practicum. Johnson City, Tennessee
2015 – 2017. Student Clinician. Behavioral Health and Wellness Clinic. Practicum. Johnson City, Tennessee.
2014. Adjunct Instructor. East Tennessee State University. Johnson City, Tennessee.
2013-2015. Graduate Research Assistant. East Tennessee State University. Johnson City, Tennessee.
2011-2012. Adjunct Instructor. University of Tennessee-Chattanooga. Chattanooga, Tennessee.

Publications:

Britton, P. C., McKinney, J. M., Bishop, T. M., Pigeon, W. R., & Hirsch, J. K. (2019) Insomnia and risk for suicidal behavior: A test of a mechanistic transdiagnostic model in veterans. *Journal of Affective Disorders, 245,* 412-418.
McKinney, J. M., Hirsch, J. K., & Britton, P. C. (2017). PTSD symptoms and suicidal behavior in veterans: Serial indirect effects via depression and anger. *Journal of Affective Disorders, 214,* 100-107. doi: 10.1016/j.jad.2017.03.008
Montgomery, M., Turner, A., McKinney, J., Kaniuka, A., Brooks, B., Webb, J. R., & Hirsch, J. K. (2017). Intimate partner

violence and suicidal behavior: Mediating roles of forgiveness and depression. *Innovation in Psychology: An Undergraduate Journal of Psychology*.

Maxwell, K., McKinney, J., & Metzger, R. (2012). Self-handicapping mediates between impulsiveness and self-discipline. *Modern Psychological Studies, 17*(2), 66-69.

Awards:

2014 Priester - Sloan Family Scholarship
2013 Outstanding Master's Psychology Student
2011 Ulrey K. Wilson Award for Outstanding Senior in Psychology
2011 Alpha Society