Role of Masculinity in Relationships Between Mindfulness, Self-Compassion, and Well-Being in Military Veterans

Abigail E. Ramon, Linda Guthrie, and Natalie K. Rochester Tennessee State University

Research has begun to demonstrate the benefits of mindfulness and self-compassion for military veterans. However, investigation has lacked on how a prominent feature of military culture, adherence to masculine norms, may impact veterans' experiences of these practices. This research examined the interrelationships among masculinity, mindfulness, and self-compassion as well as how these variables predict well-being (coping and quality of life) in 164 military veterans. Veterans completed all study measures via an online survey. Results demonstrated that mindfulness and self-compassion both predict better coping and quality of life and are related to lower adherence to masculine norms. Masculinity was found related to less active coping, more avoidant/negative emotionality coping, and worse mental health-related quality of life. The Masculinity subscale of Success Dedication, however, was associated with greater mindfulness and active coping and better quality of life. Exploratory results demonstrated a significant moderation effect in which mindfulness predicted greater active coping for veterans with low masculinity but not for veterans with high masculinity. This study provides preliminary data on the role of masculine norms in the context of mindfulness and self-compassion. Although findings link total masculinity scores to negative outcomes, the masculinity component of Success Dedication appears to be a point of commonality between masculinity and mindfulness. Therefore, an effective strategy for clinicians may be to begin the teaching of mindfulness by emphasizing elements that appeal to veterans norms of success.

Public Significance Statement

Traditional masculinity among military veterans was associated with lower levels of mindfulness, self-compassion, and mental health-related quality of life as well as with greater levels of avoidant styles of coping. However, the specific masculinity norm related to work success showed relationships with better health and, specifically, a positive relationship with mindfulness. Therefore, although traditional masculinity overall is associated with greater health risks, work success may represent an adaptive element of traditional masculinity.

Keywords: traditional masculinity, mindfulness, self-compassion, veterans

Mindfulness and self-compassion-based interventions are being increasingly used in the treatment of military veterans with psychiatric difficulties. Although mindfulness and self-compassion are related practices both rooted in Eastern spirituality and notions

This article was published Online First August 29, 2019.

Abigail E. Ramon, Linda Guthrie, and Natalie K. Rochester, Department of Psychology, Tennessee State University.

This research is based on the doctoral dissertation of Abigail E. Ramon. This research, including all research questions and corresponding results, was presented at the 2018 American Psychological Association Annual Meeting in San Francisco, California. This research was supported in part by the Veterans Affairs Center for Integrated Healthcare and the Veterans Affairs Mental Illness Research, Education and Clinical Centers of Excellence program.

Correspondence concerning this article should be addressed to Abigail E. Ramon, who is now at the Veterans Affairs Center for Integrated Healthcare, Syracuse Veterans Affairs Medical Center, 800 Irving Avenue (116c), Syracuse, NY 13210. E-mail: Abigail.Ramon@va.gov or abby .ramon08@gmail.com

of health, they are also considered to be distinct constructs (Dahm et al., 2015). Mindfulness can generally be defined as nonjudgmental awareness of moment-to-moment experience (Kabat-Zinn, 2013). The practice of self-compassion involves mindfulness but is additionally characterized by kindness toward oneself and a view of suffering as part of the human condition (Dahm et al., 2015; Neff, 2003). The use of such complementary and integrative health approaches with veterans has been steadily growing in the Veterans Health Administration (VHA) since the early 2000s. For instance, survey data show that the number of VHAs offering complementary and integrative health modalities has increased from 84% in 2002 to 93% in 2015, with mindfulness being among the top modalities offered (U.S. Department of Veterans Affairs, VHA, 2015). In addition, the noteworthy rise in publications on mindfulness and veterans in the past decade also likely reflects an increase in their implementation.

This increase in use has been accompanied by research findings demonstrating the health benefits of mindfulness and self-compassion for military veterans. Although much of the research on mindfulness with veterans appears to have focused on posttrau-

matic stress disorder (PTSD), some studies have also examined its impact on other outcomes such as depression and anxiety. Findings from these studies support the effectiveness of mindfulness interventions for lowering these symptoms (Khoury et al., 2013; Khusid & Vythilingam, 2016; Polusny et al., 2015; Serpa, Taylor, & Tillisch, 2014). In addition, mindfulness treatments and thirdwave therapies that include mindfulness as a component (e.g., adjunctive mindfulness-based stress reduction for PTSD, mindfulness-based cognitive therapy for depression, dialectical behavior therapy for borderline personality disorder, and acceptance and commitment therapy for chronic pain) have or are gaining acceptance as evidence-based treatments.

Self-compassion is conceptualized as being critical for the basic capacity of self-soothing, which aims to regulate overactive threat protection systems (Gilbert, 2014). This focus makes self-compassion highly relevant for veteran populations in which stress-related disorders are prevalent (National Center for PTSD, 2019). Although in its early stages, there is now also research evidence that self-compassion is related to lower PTSD and depression among veterans (Kearney et al., 2013). Research with nonveteran populations has also found self-compassion related to greater life satisfaction, and greater sense of social connection (Au et al., 2017; Neff, 2003; Neff & Germer, 2013). In addition, self-compassion may be particularly helpful for individuals struggling with shame and guilt, another common difficulty among veterans (Gilbert & Procter, 2006; Held, Owens, Thomas, White, & Anderson, 2018).

The scholarly literature on mindfulness and self-compassion suggests they may be particularly relevant for coping and quality of life. A fundamental principle of these practices is the acceptance of experience as it is without trying to change it, as attempts to change or control are viewed as increasing suffering (Kabat-Zinn, 2013). The goal is, therefore, not directly symptom reduction but an increased ability to "be with" painful experiences in a more adaptive manner (Kabat-Zinn, 2013). This focus on acceptance versus symptom reduction is consistent with goals of coping and quality of life. Further, empirical evidence for these effects is growing, as mindfulness has been found to improve coping and quality of life (Pigeon, Allen, Possemato, Bergen-Cico, & Treatman, 2015; Polusny et al., 2015; Serpa et al., 2014). Similarly, self-compassion has been found associated with more adaptive coping (Sirois, Molnar, & Hirsch, 2015) and greater quality of life (Pinto-Gouveia, Duarte, Matos, & Fráguas, 2014) in individuals with chronic illness.

Notwithstanding extant findings on the benefits of mindfulness and self-compassion for military veterans, there has not yet been empirical investigation of these practices in the context of a prominent characteristic of military culture, adherence to traditional masculine norms (Braswell & Kushner, 2012; Keats, 2010; Lorber & Garcia, 2010). Although it is now recognized that there are various types of masculinity ideologies and norms, *traditional* masculinity refers to the masculinity norms that were dominant in the U.S. and other Western cultures before the second wave of feminism but that still have significant influence in present day (Levant, Hall, & Rankin, 2013; Thompson & Bennett, 2015). The specific norms that have been operationalized as being traditional in nature are those of restrictive emotionality, excessive self-reliance, control, physical toughness, power/success, and antifeminity (Levant et al., 2013; Owen, 2011).

Psychological research with veterans and nonveterans has found traditional masculinity related to various negative health outcomes. Specifically, masculine gender role stress has been associated with greater alexithymia and less use of positive health behaviors (Jakupcak, Osborne, Michael, Cook, & McFall, 2006; Morrison, 2012); self-reliance and emotional control have been associated with lower help-seeking (Berger, Addis, Green, Machowiak, & Goldberg, 2013); and toughness has been found related to increased chance of depression and PTSD diagnosis (Jakupcak, Blais, Grossbard, Garcia, & Okiishi, 2014). Although most of the research literature appears to point to the maladaptive effects of masculinity, some studies have also demonstrated positive effects. For example, the dimension of success has been found to predict less use of avoidance behaviors in veterans with PTSD (Garcia, Finley, Lorber, & Jakupcak, 2011). These findings demonstrate that adherence to traditional masculine norms influences health behaviors in important ways.

Traditional masculine norms appear especially important to examine in the study of mindfulness and self-compassion. These norms appear to be in strong contrast to the principles of mindfulness and self-compassion, which emphasize nonjudgmental and compassionate awareness of present experience without direct attempts to control it. In improving psychological functioning, this awareness is often applied to present internal experiences such as difficult emotions. Masculinity norms such as restrictive emotionality, toughness, and control involve behaviors opposite to those of attending mindfully to present emotional experience and, therefore, it is likely these norms play an important role in veterans' experiences of mindfulness and self-compassion. This observation along with empirical evidence for the effects of masculinity on health behavior provide a strong rationale for investigating these relationships. The increasing use of mindfulness and selfcompassion with veterans further warrants investigation of these variables. Increased knowledge about how these variables interact to predict health outcomes can lead to greater understanding about how to most effectively deliver interventions based on mindfulness and self-compassion to veterans with high adherence to traditional masculine norms.

The present research aimed to examine the interrelationships between mindfulness, self-compassion, and adherence to traditional masculine norms with veterans and to explore the role of masculinity in previously found correlates of mindfulness and self-compassion. For the latter part of the research goals, we were interested in the potential moderating role of masculinity in relationships between mindfulness (and self-compassion) and coping and quality of life. As described above, these constructs are consistent with the principles of mindfulness and self-compassion, and studies have also found them to be positively related to both practices (Pinto-Gouveia et al., 2014; Polusny et al., 2015; Serpa et al., 2014; Sirois et al., 2015). Selection of these variables was, therefore, based on both theoretical and empirical reasons. For parsimony's sake, we use the term *masculinity* at times throughout the article, but we are specifically referring to traditional masculinity. We also use this term (masculinity) in discussion of the present study results, which are specifically on adherence to traditional masculine norms.

In addition to male veterans, female veterans were included in the sample for two primary reasons. First, gender variables, such as masculinity ideologies and norms, are separate from biological sex (Addis & Cohane, 2005; Addis & Mahalik, 2003) and, thus, it is possible for women to also adhere to masculine norms. This may be especially applicable to women who have been in the military. For this reason, we decided not to exclude women from participation. Second, psychologists have noted that thorough understanding of masculinity (various types, not just traditional) involves its study in both men and women (Levant et al., 2013; Whorley & Addis, 2006). Others have also taken the approach of including women in research on masculinity (see Price, Gregg, Smith, & Fiske, 2018; Yousaf, Popat, & Hunter, 2015). Based on current literature, we made the following a priori hypotheses: (a) Mindfulness and self-compassion will predict more adaptive levels of coping and quality of life, and (b) masculinity will be negatively related to mindfulness and self-compassion. We did not specify any hypotheses regarding the role of masculinity in the relationships with coping and quality of life.

Method

Participants

Participants were 164 veterans (112 men, 51 women, and one other) from various service eras and branches. Ages ranged from 18 to 71 years old and the average age was 36.11. The majority (81.1%) of veterans were non-Latino White. Other ethnicities represented were Hispanic/Latino (6.7%), African American (4.3%), Asian American (3%), multiethnic (2.4%), and those remaining were of other ethnicity (2.4%). The majority (65.9%) of participants had a postsecondary education degree (i.e., associate, master, doctorate). One hundred seven (65.2%) had deployed and, out of these, 82 (77%) had deployed to a combat zone. Participants were recruited through online social media sites (e.g., Facebook and Reddit veteran groups) as well as through veteran groups in the community (e.g., Operation Stand Down) via a study announcement and flyer. Participants were also offered compensation in the form of entry to win one of six \$25 Visa electronic gift-cards.

Procedure

The study was approved by the institutional review board, and all data were collected online via Qualtrics survey software. Participants accessed the link for the study on the study announcement and flyer. Upon accessing the link, participants were first presented with an informed consent form on which they indicated their consent by clicking the option to proceed to the next page. Participants were informed generally that the aim of the study was to examine several factors that impact veteran health. Once participants indicated consent, they were directed to complete a demographic questionnaire, followed by the study measures. At the end of the survey participants were provided with information on how to submit their e-mail addresses through a separate Qualtrics survey, if they wished to enter the gift-card drawing. This information was stored in a secure database separate from participant responses.

Measures

Mindfulness. To measure mindfulness skills, the 39-item Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins,

Krietemeyer, & Toney, 2006) was used. The FFMQ measures five facets of mindfulness: (a) observing, which refers to the attending to experience; (b) describing, which refers to putting observations into words; (c) acting with awareness, defined as being conscious of one's actions or experiences as they occur, instead of being on "auto-pilot"; (d) nonjudging of inner experience, which refers to taking an accepting and nonevaluative attitude toward experience; and (e) nonreactivity to inner experience, defined as observing experience without reacting to it. Items are rated on a 5-point Likert-type scale ranging from never or very rarely true to very often or always true. Higher scores indicate greater mindfulness. Scores are calculated for each component and for the scale as a whole by summing the component subscale scores. Scores for the subscales of Observing, Describing, Awareness, and Nonjudging range from 8 to 40. Scores for the Nonreactivity subscale range from 7 to 35. Scores for the FFMQ as a whole range from 39 to

The FFMQ has been found to have strong internal consistency, with coefficients ranging from .75 to .91 for the five subscales (Baer et al., 2006). With the current sample, Cronbach's α levels ranged from .81 to .93 for the five subscales, and it was .92 for the scale as a whole. In addition, construct and convergent validity for the FFMQ has been found through positive correlations with well-being and other measures of mindfulness (Baer et al., 2006, 2008).

Self-compassion. To measure self-compassion, participants completed the 12-item Self-Compassion Scale-Short Form (SCS-SF; Raes, Pommier, Neff, & Van Gucht, 2011). Although the items for the short form still represent specific factors of self-compassion (e.g., self-kindness, common humanity), the authors note that the scores for the subscales are less reliable and, therefore, recommend that the short form be used to provide a total score of selfcompassion only (Raes et al., 2011). Items are rated on a 5-point Liker-type scale ranging from almost never to almost always, and higher scores indicate greater self-compassion. The Cronbach's α for the SCS-SF has been found to be .86 (Raes et al., 2011). In addition, the short form is highly correlated with the original SCS (r = .97; Raes et al., 2011). In the current research, the SCS-SF had a Cronbach's α of .89. Research using the original SCS has demonstrated good convergent and discriminant validity through correlations with conceptually similar constructs. For example, Neff (2003) found a moderate positive correlation between the SCS and self-esteem.

Masculinity. To assess masculinity, participants completed the 20-item Masculine Behavior Scale (MBS; Snell, 1989). The MBS measures behavioral tendencies associated with the traditional male gender role. These tendencies are measured via four subscales: (a) Restrictive Emotionality, (b) Inhibited Affection, (c) Success Dedication, and (d) Exaggerated Self-Reliance. The MBS was selected for this study because our interest was specifically in the behavioral tendencies associated with traditional masculinity, rather than beliefs about what masculinity is, which is the concept captured by many masculinity measures. Items are rated on a 5-point Likert-type scale ranging from agree to disagree, and higher scores indicate greater engagement in masculine behaviors. Scores can be calculated for each subscale as well as for the total measure by summing the subscale scores. The MBS has been found to have good internal consistency. Estimates calculated using scores of both men and women range from .69 to .89 (Snell, 1989). With the current sample, coefficients ranged from .69 to .93 for the subscales, and it was .89 for the scale as a whole. Snell (1989) reported evidence of construct validity through significant correlations with the Personal Attributes Questionnaire.

Coping. To measure coping, participants completed the 28item Brief COPE (Carver, 1997). The Brief COPE contains 14 subscales, with two items each, that measure different ways of both adaptive and maladaptive coping (e.g., active coping, humor, self-distraction). Items are rated on a 4-point Likert-type scale ranging from I haven't been doing this at all to I have been doing this a lot, and higher scores indicate greater use of the particular coping response. The subscales of the Brief COPE have been found to have good internal consistency. Cronbach's as have been found to be greater than or equal to .64 for all but three subscales, for which αs ranged from .50 to .57 (Carver, 1997). Although the validity of the Brief COPE does not appear to have been directly examined, evidence for its convergent validity may be considered through its associations with theoretically similar constructs. For instance, Boden, Bonn-Miller, Vujanovic, and Drescher (2012) found their avoidant factor to be positively related to the avoidant symptom cluster of the PTSD Checklist-Military Version. In research with the original COPE inventory, Litman (2006) found positive relationships between approach coping and a measure of behavioral activation.

Because we were interested in obtaining a measure of higher order factors that reflected an active or approach coping style and an avoidant coping style that we could use in our main analyses, we submitted the Brief COPE to an exploratory factor analysis (EFA) to extract these two factors. We used the criteria discussed by Litman (2006) to determine the number of factors to extract: (a) size of eigenvalues, (b) scree plots, (c) amount of variance explained by the factors, and (d) meaningfulness/interpretability of the factors. We used principal components analysis and oblique rotation, as factors were expected to correlate. The final solution included three factors that accounted for 51% of the variance in Brief COPE scores. Items were selected if they had a factor loading of .5 or greater and if they did not also have high (above .30) cross-loadings on other factors. Eigenvalues for all three factors were above 2.

The first factor consisted of 12 items reflecting active styles of coping and included items from the original subscales of Instrumental Support, Active, Planning, Positive Reframing, Emotional Support, and Acceptance. This factor was titled Active Coping. Factor two comprised six items from the original subscales of Behavioral Disengagement, Self-Blame, and Substance Use and was titled Avoidant/Negative Emotionality Coping. Four items from the Religion and Humor subscales made up factor three, which was not further analyzed. Thus, the first two factors were used to create the measures of active and avoidant coping needed for this research. Cronbach's αs for both subscales were excellent (.91 for Active Coping and .83 for Avoidant/Negative Emotionality Coping).

Quality of life. The Veterans Research and Development (RAND) 12-Item Health Survey (VR-12; Kazis et al., 1998, 1999) was used to measure quality of life. The VR-12 was developed from the Veterans Short Form-36 and Medical Outcomes Study Short Form-36 and measures several domains of health-related quality of life and functioning. The domains measured are those of physical health, mental health, limitations in role (related to work

or daily living) functioning, social functioning, bodily pain, energy/vitality, and general health perceptions. The scale yields a score for each domain (subscale). Items are scored variously for different subscales. For example, items for the Limitations in Role Functioning subscale are scored on a 5-point Likert-type scale ranging from *no, none of the time* to *yes, all of the time*, whereas items for the Physical Functioning subscale are scored on a 3-point Likert-type scale ranging from *yes, limited a lot* to *no, not limited at all*. Items inquire about issues as experienced in the last month.

Item scores are then used to calculate two summary scores: one for mental health-related quality of life (Mental Component Summary; MCS) and one for physical health-related quality of life (Physical Component Summary; PCS). Summary scores are standard scores with a mean of 50 and standard deviation of 10, based on general U.S. population norms. This research used the method described by Selim et al. (2009) for calculating summary scores. For each summary score, this method involves transforming item raw scores into standard scores, then multiplying each standard score by an empirically derived regression coefficient, and finally summing these products and adding a constant. Higher summary scores indicate greater quality of life. Scores produced by the VR-12 correspond highly with those produced by its parent instrument, the Veterans SF-36, which has been well-validated (Jones et al., 2001; Wallace et al., 2010). Cronbach's α levels for the Veterans SF-36 subscales range from .85 to .94 (Jones et al., 2001). Cronbach's α with the current sample was .92 for both PCS and MCS.

Design

This study used a descriptive, cross-sectional design. Data were collected simultaneously with a larger study examining numerous variables on the health of military veterans. The current study differed from the larger study in that the larger study examined various psychological correlates of trauma exposure (e.g., depression, PTSD, coping) as well as the role of gender in those relationships. Because participants completed several other measures in addition to those for this specific study, validated briefer measures were selected for this study when possible (e.g., SCS-SF and MBS) to minimize participant burden.

Results

Preliminary analyses were conducted in addition to main hypotheses analyses. Descriptive statistics and Cronbach's αs for all variables are shown in Table 1. To provide some information on how the inclusion of female participants might impact our results, we conducted a multivariate analysis of variance to compare scores of men and women on all study variables. The multivariate analysis of variance was significant, F(7, 155) = 3.03, p = .005; Wilk's $\Lambda = .880$. However, significant differences were only observed for Active Coping, with female veterans reporting higher scores (M = 2.49; SD = .68) than male veterans (M = 2.16; SD = .68) .75). Notably, women's masculinity scores (M = 3.16; SD = .76) did not significantly differ from men's scores (M = 3.34; SD =.83). Bivariate correlations and multiple regressions were used for hypotheses analyses. For the exploratory research question regarding the potential moderating role of masculinity, multiple hierarchical regressions were used.

This document is copyrighted by the American Psychological Association or one of its allied publishers. This article is intended solely for the personal use of the individual user and is not to be disseminated broadly.

6.55 7.39 7.72 8.32 5.62 23.85 0.90 0.90 1.25 1.25 0.89 0.81 0.74 0.77 11.26 SD26.60 25.95 27.40 21.37 125.70 2.89 3.59 3.45 3.25 3.25 3.25 3.28 3.28 3.25 3.25 3.27 3.28 N 16 15 -.66** 03 -.0512 10 6 Intercorrelations, Descriptive Statistics, and Reliability Coefficients for All Variables 9 5 4 Brief COPE Avoid/Neg. Em. 10. MBS Inhibit. Affection FFMQ Nonjudging FFMQ Nonreactivity 9. MBS Rest. Emotion 11. MBS Self-Reliance Brief COPE Active FFMO Awareness Describing Variable SCS-SF Total 8. MBS Success FFMQ Total VR-12 MCS 12. MBS Total13. Brief COPE 15. VR-12 PCS

N = 164. FFMQ = Five Facet Mindfulness Questionnaire (Baer et al., 2006); SCS-SF = Self-Compassion Scale-Short form (Raes et al., 2011); MBS = Masculine Behavior Scale (Snell, 1989); = Inhibited; Avoid/Neg. Em. = Avoidant/Negative Emotionality; VR-12 = Veterans Research and Development (RAND) 12-Item Health Survey (Kazis et al., 1998, 1999); VR-12 PCS = Veterans Research and Development (RAND) 12-Item Health Survey Physical Component Summary; VR-12 MCS = Veterans Research and Development (RAND) 12-Item Health Survey Mental Component Summary. Emotion = Restrictive Emotionality; Inhibit. $^*p < .01.$ p < .05.

Hypotheses Analyses

Relationships with Brief COPE. The first set of hypotheses involved predictions regarding the relationship between mindfulness (FFMQ) and the coping variables (Brief COPE Active Coping and Avoidant/Negative Emotionality Coping) as well as about the relationship between self-compassion (SCS-SF) and the coping variables. As expected, the FFMQ as a whole was positively correlated with Active Coping (r = .21) and negatively correlated with Avoidant/Negative Emotionality Coping (r = -.62). Correlations by FFMQ subscale can be seen in Table 1. Also as expected, the SCS-SF demonstrated the same pattern of relationships with Active Coping (r = .22) and Avoidant/Negative Emotionality Coping (r = -.66).

Multiple regression analyses were used to examine the prediction of the Brief COPE variables. The five FFMQ subscale scores, SCS-SF scores, and the four MBS subscale scores were simultaneously entered as predictors for a total of 10 predictors (results for MBS subscales are reported in a section in the following text on exploratory analyses). Results were again supportive of hypotheses for both Active Coping and Avoidant/Negative Emotionality Coping. For Active Coping, the model overall was significant, $R^2 =$.32, F(10, 153) = 7.31, p = .000. The adjusted R^2 was .28 (95%) confidence interval [CI: .171, .389]) and, thus, predictor variables together accounted for ~28% of the variance in Active Coping scores. Table 2 demonstrates unstandardized coefficients, standard errors, standardized coefficients, t values, and significance levels for all predictors. The FFMQ subscale of Observing ($\beta = .18$) and SCS-SF ($\beta = .33$) significantly predicted greater Active Coping scores. Contrary to expectations, however, the FFMQ subscale of Nonjudging predicted lower Active Coping scores ($\beta = -.29$).

For Avoidant/Negative Emotionality Coping, the model was overall significant, $R^2=.54$, F(10,153)=18.10, p=.000. The adjusted R^2 was .51 (95% CI [.410, .610]), indicating that the predictor variables together accounted for \sim 51% of the variance in Avoidant/Negative Emotionality coping scores. Predictors with significant regression coefficients were the FFMQ subscales of Awareness ($\beta=-.15$), Nonjudging ($\beta=-.20$), Nonreactivity ($\beta=-.16$), and SCS-SF ($\beta=-.28$). Unstandardized coefficients, standard errors, standardized coefficients, t values, and significance levels for all predictors are shown in Table 2.

Relationships with VR-12. The first set of hypotheses also outlined predictions regarding the relationship between FFMQ and quality of life variables (VR-12 PCS and MCS) and between SCS-SF and quality of life variables. These results were also supportive of hypotheses. Specifically, total FFMQ was positively correlated with both PCS (r = .30) and MCS (r = .64). Correlation results by FFMQ subscale can be viewed in Table 1. Similar to the FFMQ results, SCS-SF was positively correlated with both PCS (r = .19) and MCS (r = .60). Multiple regression analyses were again used to examine the prediction of the VR-12 variables. The five FFMQ subscale scores, SCS-SF scores, and the four MBS subscale scores were simultaneously entered as predictors for a total of 10 predictors (results for MBS subscales are reported in a section in the following text on exploratory analyses). Results were mostly supportive of hypotheses for both PCS and MCS.

For PCS, the model overall was significant, $R^2 = .17$, F(10, 153) = 3.19, p = .001. The adjusted R^2 was .12 (95% CI [.033, .207]), indicating that the predictor variables accounted for 12% of

Table 2
Predictors of Active Coping and Avoidant/Negative Emotionality Coping

	Active Coping				Avoidant/Neg. Emotion. Coping			
Predictor	В	SE	β	t	В	SE	β	t
FFMQ Observing	.02	.01	.18*	2.18	.01	.01	.09	1.30
FFMQ Describing	01	.01	07	-0.71	01	.01	06	-0.78
FFMQ Awareness	00	.01	03	-0.34	02	.01	15*	-2.04
FFMQ Nonjudging	03	.01	29^{**}	-2.78	02	.01	20^{*}	-2.35
FFMQ Nonreactivity	.00	.01	.02	0.16	02	.01	16*	-2.08
SCS-SF Total	.27	.09	.33**	3.07	24	.08	28**	-3.19
MBS Success	.15	.05	.25**	3.06	02	.04	03	-0.50
MBS Rest. Emotion	26	.16	46	-1.67	.01	.14	.01	0.06
MBS Inhibit. Affection	.09	.17	.15	0.55	.07	.15	.12	0.50
MBS Self-Reliance	.09	.07	.11	1.23	.10	.06	.12	1.62

Note. N=164. FFMQ = Five Facet Mindfulness Questionnaire (Baer et al., 2006); SCS-SF = Self-Compassion Scale–Short form (Raes et al., 2011); MBS = Masculine Behavior Scale (Snell, 1989); Rest. Emotion = Restrictive Emotionality; Inhibit. = Inhibited. * p < .05. ** p < .01.

the variance in PCS scores. Unstandardized coefficients, standard errors, standardized coefficients, t values, and significance levels for all predictors are shown in Table 3. Examination of regression coefficients demonstrated significant results for FFMQ Awareness ($\beta=.20$), but not for SCS-SF ($\beta=-.09$, ns). For MCS, the model was again overall significant, $R^2=.55$, F(10,153)=18.53, p=.000. The adjusted R^2 was .52 (95% CI [.421, .619]), indicating that predictors together accounted for 52% of the variance in MCS scores. Results also demonstrated that predictors significantly contributing to higher MCS scores were those of FFMQ Describing ($\beta=.18$), Awareness ($\beta=.22$), and Nonjudging ($\beta=.17$), and SCS-SF ($\beta=.24$). Unstandardized coefficients, standard errors, standardized coefficients, t values, and significance levels for all predictors shown in Table 3.

Relationships between FFMQ, SCS-SF, and MBS. The second set of hypotheses specified predictions about the relationship between FFMQ and MBS and between SCS-SF and MBS. As anticipated, results demonstrated a negative correlation (r=-.24) between total FFMQ scores and total MBS scores. Although most

relationships by subscale point to negative relationships between the FFMQ and MBS, one noteworthy exception involved the MBS subscale of Success Dedication, which had a positive correlation (r=.28) with FFMQ total. Similar to the findings for total FFMQ, results on the relationship between SCS-SF and total MBS indicated a negative relationship (r=-.35). These correlation results and those by subscale can be viewed in Table 1.

Exploratory Analyses on Role of Masculinity

Relationships with Brief COPE and VR-12. Exploratory analyses were carried out to explore the role of masculinity in relation to the other variables in the study. Results for bivariate correlations for total MBS and for subscales are presented in Table 1. As noted earlier in the section on the regression results, the four MBS subscales were entered as predictors in regression analyses along with the FFMQ and SCS-SF variables. In addition to the significant FFMQ and SCS-SF predictors already reported, results demonstrated significant regression coefficients for some of the

Table 3
Predictors of Physical Health-Related Quality of Life (PCS) and Mental Health-Related Quality of Life (MCS)

	PCS				MCS			
Predictor	В	SE	β	t	В	SE	β	t
FFMQ Observing	-0.26	0.18	15	-1.68	-0.00	0.13	00	-0.02
FFMQ Describing	0.16	0.17	.11	0.96	0.30	0.14	.18*	2.25
FFMQ Awareness	0.29	0.14	.20*	2.00	0.35	0.12	.22**	3.04
FFMQ Nonjudging	0.09	0.15	.06	0.56	0.25	0.13	.17*	1.98
FFMQ Nonreactivity	0.19	0.21	.09	0.86	0.05	0.17	.02	0.31
SCS-SF Total	-1.15	1.47	09	-0.78	3.35	1.20	.24**	2.80
MBS Success	1.56	0.81	.17*	1.93	1.83	0.66	.18**	2.77
MBS Rest. Emotionality	-0.58	2.68	07	-0.22	3.94	2.18	.40	1.81
MBS Inhibit. Affection	-0.43	2.85	05	-0.15	-3.32	2.31	33	-1.43
MBS Self-Reliance	-0.54	1.23	04	-0.44	-2.95	1.00	21**	-2.95

Note. N=164. FFMQ = Five Facet Mindfulness Questionnaire (Baer et al., 2006); SCS-SF = Self-Compassion Scale–Short form (Raes et al., 2011); MBS = Masculine Behavior Scale (Snell, 1989); Rest. = Restrictive; Inhibit. = Inhibited. MBS Success was marginally significant (p=.056) in prediction of PCS. * p<.05. ** p<.01.

MBS subscales in some of the regressions. Specifically, MBS Success Dedication predicted greater Active Coping scores (β = .25). None of the MBS subscales were significant in the regression for Avoidant/Negative Emotionality Coping. For PCS, MBS Success Dedication predicted higher scores (β = .17). For MCS, MBS Success Dedication predicted higher scores (β = .18) and Exaggerated Self-Reliance predicted lower scores (β = -.21).

Moderation analyses. The MBS total scale was analyzed as a moderator in the relationships between FFMQ (and, separately, SCS-SF) and the criterion variables (Active Coping, Avoidant/Negative Emotionality Coping, PCS, and MCS). For each criterion variable, a multiple hierarchical regression was conducted in which FFMQ total and MBS total were entered into the first block (Model 1) and the interaction term (FFMQ Total × MBS Total) was entered into the second block (Model 2). These same analyses were also conducted with SCS-SF and MBS total; thus, a total of eight moderation analyses were conducted. Variables were centered for creation of interaction terms. To limit scope of study to a manageable level, moderation analyses were done at the total scale level versus subscale level.

Brief COPE. In examining the prediction of Active Coping by FFMQ and MBS, results showed that MBS total moderated the relationship between FFMQ total and Active Coping. Specifically, Model 1 was significant, $R^2 = .06$, F(2, 161) = 5.03, p = .008, as well as Model 2, $R^2\Delta = .03$; p = .034. The interaction was such that for veterans with low MBS total scores (i.e., 1 *SD* below the mean) FFMQ total was positively related to Active Coping. However, for veterans with high MBS total scores (i.e., 1 *SD* above the mean), there was a negative correlation (albeit very small) between FFMQ total and Active Coping. This interaction

is graphed in Figure 1. In examining the prediction of Active Coping by SCS-SF and MBS, results did not show a significant moderation effect. Model 1 was significant, $R^2 = .06$, F(2, 161) = 4.68, p = .011; however, Model 2 was nonsignificant, $R^2\Delta = .07$; p = .197, ns.

In testing the prediction of Avoidant/Negative Emotionality Coping by FFMQ and MBS, results did not show a significant moderation effect. Model 1 was significant, $R^2 = .43$, F(2, 161) = 60.20, p = .000; however, Model 2 was nonsignificant, $R^2\Delta = .01$; p = .156, ns. Also for Avoidant/Negative Emotionality Coping, results did not yield a significant interaction between SCS-SF total and MBS total. Model 1 was significant, $R^2 = .45$, F(2, 161) = 65.91, p = .000, but Model 2 was nonsignificant, $R^2\Delta = .00$; p = .928, ns.

Veterans RAND 12-Item Health Survey. In examining the prediction of PCS by FFMQ and MBS, results did not show significant moderation. Model 1 was significant, $R^2 = .09$, F(2, 161) = 7.74, p = .001; however, Model 2 was nonsignificant, $R^2\Delta = .00$; p = .759, ns. When examining the prediction of PCS by SCS-SF and MBS, moderation results were also nonsignificant. Model 1 approached significance, $R^2 = .04$, F(2, 161) = 2.90, p = .058, and Model 2 was nonsignificant, $R^2\Delta = .00$; p = .871, ns.

In testing the prediction of MCS by FFMQ and MBS, moderation results were nonsignificant. Model 1 was significant, $R^2 = .41$, F(2, 161) = 56.62, p = .000; however, Model 2 was nonsignificant, $R^2\Delta = .00$; p = .398, ns. In testing the prediction of MCS by SCS-SF and MBS, moderation results were also nonsignificant. Model 1 was significant, $R^2 = .36$, F(2, 161) = 45.44, p = .000, but Model 2 was nonsignificant, $R^2\Delta = .01$; p = .169, ns.

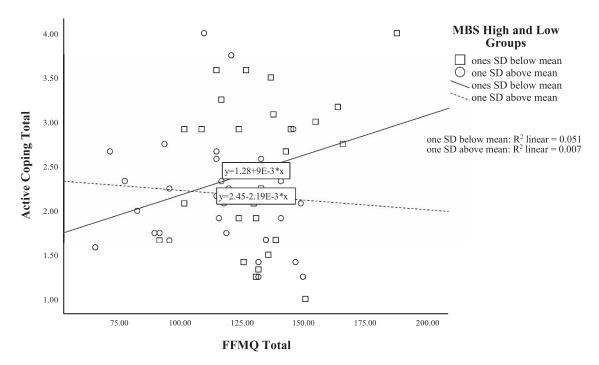


Figure 1. MBS moderates the relationship between FFMQ and Active Coping such that FFMQ predicts greater Active Coping for the low, but not high, MBS group. N = 164. FFMQ = Five Facet Mindfulness Questionnaire (Baer et al., 2006); MBS = Masculine Behavior Scale (Snell, 1989).

Discussion

Previous research suggests that adherence to traditional masculine norms among military veterans influences health behaviors in important ways. The aim of this study was to provide insight regarding the possible role of adherence to traditional masculine norms in male and female veterans' experiences of mindfulness and self-compassion. This study appears to be the first to examine these variable interrelationships and how they predict well-being, specifically coping and quality of life. These findings are significant in light of the increasing use of mindfulness and self-compassion-based interventions with veterans as well as the fact that various treatments that incorporate mindfulness are now evidence based. Findings from this study may help enhance the effectiveness of mindfulness and self-compassion interventions to ultimately lead to better outcomes for military veterans.

Current findings further the evidence for the benefits of mindfulness and self-compassion for military veterans and demonstrate that mindfulness and self-compassion each account for unique variance in coping and quality of life. Previous research has found that active coping is related to better health outcomes, such as lower PTSD and depressive symptoms, suggesting that active coping is an adaptive behavior (Boden et al., 2012; Mason, Boden, & Cucciare, 2014). In contrast, avoidant styles of coping have been related to greater mental health difficulties, suggesting that avoidant coping is generally a maladaptive behavior (Boden et al., 2012; Pietrzak, Harpaz-Rotem, & Southwick, 2011). The present study found mindfulness and self-compassion to predict greater active coping and less avoidant coping, indicating that these practices support healthier ways of coping overall. Present findings, however, also included an unanticipated exception to the positive relationship between mindfulness and active coping. Specifically, the mindfulness subscale of Nonjudging predicted lower active coping. The reason for this relationship is unclear; however, anecdotal observations from our clinical experience provide a possible explanation. In learning mindfulness skills, individuals sometimes question how decisions are to be made if one should not judge situations as good or bad and, thus, misinterpret nonjudging as meaning they should not take any action. Therefore, it is possible that the nonjudging facet of mindfulness could at times make it difficult for individuals to make decisions on actions to take. Alternatively, the practice of mindfulness also emphasizes "nondoing" (Kabat-Zinn, 2013) and, therefore, it could be that this principle came through in the nonjudging variable and explains its (nonjudging) inverse relationship with active coping.

Our hypothesis on the prediction of quality of life was mostly supported. Mindfulness predicted greater physical health-related quality of life, but self-compassion did not. However, when not including mindfulness as a predictor (as was done in moderation analyses with self-compassion), self-compassion did predict physical health-related quality of life. Thus, it appears that self-compassion does not predict physical health-related quality of life when accounting for mindfulness. Mindfulness and self-compassion each uniquely predicted better mental health-related quality of life. Findings indicate that veterans can likely improve their coping and quality of life by improving skills of mindfulness and self-compassion.

Research on the benefits of self-compassion with veterans, specifically, is in its infancy. And to our knowledge, this is the first

study that examines coping and quality of life as variables associated with self-compassion among veterans. The relationships between self-compassion and greater active coping and less avoidant coping are particularly noteworthy, given the concern among some individuals that self-compassion may promote complacency (Neff, 2012). On the contrary, the finding that self-compassion leads to greater use of active coping is consistent with the interpretation that self-compassion could facilitate approaching, rather than avoiding behaviors, when dealing with difficult circumstances, thereby assisting in making challenging yet adaptive changes in one's behavior (Neff, 2012). This relationship appears further relevant for individuals who adhere excessively to certain masculine norms, such as "toughness," which may in actuality be counterproductive to adaptive functioning and growth.

Results regarding the role of traditional masculinity in relation to mindfulness, self-compassion, and well-being yielded several noteworthy findings that warrant additional study. Total masculinity scores were found related to poorer coping and lower quality of life (mental health related). This research, therefore, validates findings from previous studies (Berger et al., 2013; Meyers, Chapman, Gunthert, & Weissbrod, 2016), demonstrating a direct relationship between masculinity and worse health. In addition, masculinity may be related to greater avoidant coping, in particular, because the masculine norm of restrictive emotionality likely involves the avoidance of emotions. Moderation findings suggest masculinity may interfere with the positive effects of mindfulness for active coping, as mindfulness predicted greater active coping for those low, but not high, in masculinity. Given the relationship of masculinity to lower active coping, it is possible that highly masculine individuals may be particularly reluctant to use active coping behaviors and, thus, less responsive to mindfulness.

A noteworthy observation is highlighted regarding the negative relationship between masculinity and self-compassion. This relationship was also found in two previous studies with civilian samples (Heath, Brenner, Vogel, Lannin, & Strass, 2017; Reilly, Rochlen, & Awad, 2014). Notwithstanding this relationship, however, previous research has also found men to have slightly higher levels of self-compassion compared with women (see Yarnell et al., 2015, and Yarnell, Neff, Davidson, & Mullarkey, 2018, for a fuller discussion of this matter). In the current sample, there were no differences between men and women veterans' self-compassion levels.

Although total masculinity scores were related to lower wellbeing, results by Masculinity subscale demonstrated important exceptions. Total masculinity scores were related to lower mindfulness, lower self-compassion, lower active coping, worse mental health-related quality of life, and higher avoidant coping. When considering results by subscale, however, the success component was related to greater mindfulness, greater active coping, and greater physical and mental health-related quality of life. These findings, therefore, highlight that the relation of masculinity to other health variables is more nuanced and that some components of masculinity may be adaptive. Possible adaptive components of masculinity have also been found in previous studies. For instance, the success component has also been related to less avoidance in veterans with PTSD (Garcia et al., 2011). And qualitative findings highlight the ability of veterans to reframe norms of toughness to mean "fighting" against health issues by getting the proper care (Caddick, Smith, & Phoenix, 2015).

The positive relationships between the masculinity success component and mindfulness and active coping are particularly significant. These relationships may be explained my mindfulness and active coping possibly being prerequisite strategies to achieve success. For instance, in mindfulness, components of awareness, acceptance, and equanimity promote more thoughtful decisionmaking, as opposed to impulsive reacting. Similarly, active coping strategies involve the approaching of difficulties and implementation of behaviors successful for mitigating the harmful effects of stressors. The reverse pattern in which norms of success facilitate more active coping and mindfulness could also be true. The positive relationships between these variables are in contrast to moderation results that showed masculinity as a whole to interfere with the positive effect of mindfulness on active coping. These discrepant findings could indicate that although success facilitates active coping, other components of masculinity (such as restrictive emotionality) may interfere with active coping.

Findings may be used by clinicians to inform the implementation of mindfulness and self-compassion-based interventions with populations characterized by high adherence to traditional masculine norms. Given the significant relationships between the present variables, it appears important that clinicians assess veterans' adherence to masculine norms when implementing mindfulnessand self-compassion-based interventions. This assessment may identify the extent to which a veteran holds views or behaviors in contrast to the practices of mindfulness and self-compassion. Judiciousness in the way clinicians present information that may feel too at odds with patients' beliefs or worldviews is likely important for continued engagement in treatment. Clinicians may also want to keep in mind that highly masculine veterans could be very reluctant to use active coping strategies. In this situation, care could be taken to begin with mindfulness and active coping strategies that are more tolerable, which may vary across veterans. For instance, some veterans may prefer to start with mindful observation of internal experience without the need to take further action, whereas others may prefer to seek social support to cope with difficulties. Both of these strategies would still be considered approach strategies. Reluctance in the use of active coping strategies may be particularly pronounced in veterans with PTSD, who may feel triggered upon use of these strategies, or in veterans with depression, who may view emotions and help-seeking as violating masculine norms of toughness.

Current findings are also especially relevant for clinicians because findings identify points of commonality between masculinity and mindfulness that can be used as possible points of entry for the presentation of mindfulness and self-compassion. As discussed above, mindfulness has elements consistent with the masculinity component of success. Therefore, clinicians could begin by highlighting the mindfulness notion of effectiveness to appeal to veterans' norms of success. In addition, bivariate results demonstrated that total masculinity scores were unrelated to mindfulness facets of awareness and nonreactivity, offering additional possible points of entry, as these results may reflect less contrast between masculinity and mindfulness. Although results did not demonstrate a positive relationship between any component of masculinity and self-compassion, veterans may benefit from presentation of information on the benefits of self-compassion for approaching and, thus, being more effective in addressing problems, again appealing to the masculine norm of success. Similarly, other compassion

researchers have discussed emphasizing the role of courage in self-compassion as a potentially effective strategy for promoting self-compassion among men (Kirby & Kirby, 2017).

Limitations and Future Research

Results from this study should be interpreted in light of some limitations. For instance, the cross-sectional nature of the data prevents us from drawing conclusions of causality between the study variables. In addition, although findings indicate masculinity is associated with lower mindfulness and self-compassion, as this was not an intervention study, this finding does not provide direct insights about how masculinity would impact the effectiveness of *efforts to learn* mindfulness and self-compassion. However, findings do appear to provide a basis for the hypothesis that masculinity does likely influence this process (i.e., how veterans view and subsequently use these practices).

The online data collection method limited the extent to which we could confirm participants' identities as veterans. However, participants filled out a demographic questionnaire that collected extensive data on their military backgrounds, and initial data screening did not indicate reason to be concerned about nonveteran participants. Further, although participants were offered entry into a \$25 gift-card drawing as compensation, the receipt of this compensation was not guaranteed and did not seem to be in excess of the time and effort demands of the study. The study sample also appeared to have more education than that of some veteran subgroups (e.g., enlisted; Parker, Cilluffo, & Stepler, 2017) and, thus, results may differ among less educated veterans. Another limitation in our sample was the lack of ethnic diversity and, therefore, results could differ in studies with a greater number of ethnic minority participants. Indeed, research on some of the current study variables (e.g., masculinity, self-compassion) has shown that levels of endorsement can vary based on ethnicity (Levant & Richmond, 2007; Yarnell et al., 2015).

Other limitations related to sample size. For instance, EFAs have generally been considered to be a large sample technique, with sample size recommendations, for example, of 500 (Comrey & Lee, 1992). Researchers, however, have also highlighted that determination of appropriate sample size for EFAs is more complex and depends on several elements such as number of factors, size of factor loadings, and communality estimates (MacCallum, Widaman, Zhang, & Hong, 1999). MacCallum et al. (1999) noted that for a factor analysis with well-defined factors, strong factor loadings, and communality estimates of .5 or higher, a sample size of 100-200 may be adequate. In the current EFA of the Brief COPE, all factor loadings were .5 or higher but most were above .6 and many above .8. The two factors used for the study analyses were clearly defined and similar to those found by Boden et al., 2012, but five of the items used for the factors had communality estimates between .3 and .5.

Some directions for future research can be found in the study's limitations. For instance, findings regarding relationships with coping variables that were extracted from EFA in this study should aim to be replicated with larger samples. In addition, future research on this topic should include more ethnic minority veterans and veterans with a greater range of education level to obtain a more representative military veteran sample. For future cross-sectional study of the present relationships, in-person or more

direct methods (e.g., interview) of data collection could be used to verify with complete certainty participants' identities as veterans. Intervention studies would provide specific evidence regarding the impact of masculinity in actually learning mindfulness and self-compassion and further inform the need for any necessary adaptations for working with traditionally masculine individuals.

Other steps for further research are noted. Present exploratory findings suggest possible moderation and mediation effects in the variable interrelationships. Examination of these effects in future research could, again, provide more conclusive evidence regarding the role of traditional masculinity in the use of mindfulness and self-compassion. Future research could also provide information on the usefulness of targeting mindfulness and self-compassion for increasing adaptive coping and quality of life among military veterans with high adherence to traditional masculine norms. If more conclusive evidence is found for these areas, a long-term goal of this research will be to develop adaptations of mindfulness-and self-compassion-based interventions sensitive to veterans' masculinity norms and ones that will assist veterans in modifying or redefining unhelpful aspects of masculinity for the ultimate goal of fuller functioning and increased well-being.

Conclusion

Findings demonstrate that overall adherence to traditional masculine norms among military veterans is related to lower mindfulness and self-compassion, which are associated with better coping and quality of life. Importantly, however, current findings also suggest greater complexity in the relationship of traditional masculinity to health variables. Relationships found also offer possible points of compatibility between masculinity and mindfulness and self-compassion that warrant further study. Results from such investigations may assist the effective implementation of mindfulness- and self-compassion-based interventions with military veterans with high adherence to traditionally masculine norms.

References

- Addis, M. E., & Cohane, G. H. (2005). Social scientific paradigms of masculinity and their implications for research and practice in men's mental health. *Journal of Clinical Psychology*, 61, 633–647. http://dx .doi.org/10.1002/jclp.20099
- Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help seeking. *American Psychologist*, *58*, 5–14. http://dx.doi.org/10.1037/0003-066X.58.1.5
- 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, 207–221. http://dx.doi.org/10.1016/j.beth.2016.11.012
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006).
 Using self-report assessment methods to explore facets of mindfulness.
 Assessment, 13, 27–45. http://dx.doi.org/10.1177/1073191105283504
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., . . . Williams, J. M. G. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, 15, 329–342. http://dx.doi.org/10.1177/1073191107313003
- Berger, J. L., Addis, M. E., Green, J. D., Machowiak, C., & Goldberg, V. (2013). Men's reactions to mental health labels, forms of help-seeking, and sources of help-seeking advice. *Psychology of Men and Masculinity*, 14, 433–443. http://dx.doi.org/10.1037/a0030175

- Boden, T. T., Bonn-Miller, M. O., Vujanovic, A. A., & Drescher, K. D. (2012). A prospective investigation of changes in avoidant and active coping and posttraumatic stress disorder symptoms among military veteran. *Journal of Psychopathology and Behavioral Assessment*, 34, 433–439. http://dx.doi.org/10.1007/s10862-012-9293-6
- Braswell, H., & Kushner, H. I. (2012). Suicide, social integration, and masculinity in the U.S. military. *Social Science and Medicine*, 74, 530–536. http://dx.doi.org/10.1016/j.socscimed.2010.07.031
- Caddick, N., Smith, B., & Phoenix, C. (2015). Male combat veterans' narratives of PTSD, masculinity, and health. Sociology of Health and Illness, 37, 97–111. http://dx.doi.org/10.1111/1467-9566.12183
- Carver, C. S. (1997). You want to measure coping but your protocol's too long: Consider the brief COPE. *International Journal of Behavioral Medicine*, 4, 92–100. http://dx.doi.org/10.1207/s15327558ijbm0401_6
- Comrey, A. L., & Lee, H. B. (1992). A first course in factor analysis. Hillsdale, NJ: Erlbaum.
- 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, 460–464. http://dx.doi.org/10.1002/jts.22045
- Garcia, H. A., Finley, E. P., Lorber, W., & Jakupcak, M. (2011). A preliminary study of the association between traditional masculine behavioral norms and PTSD symptoms in Iraq and Afghanistan Veterans. *Psychology of Men and Masculinity*, 12, 55–63. http://dx.doi.org/10 .1037/a0020577
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. British Journal of Clinical Psychology, 53, 6–41. http://dx.doi.org/10 .1111/bjc.12043
- Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy*, 13, 353–379. http://dx.doi.org/10.1002/cpp.507
- Heath, P. J., Brenner, R. E., Vogel, D. L., Lannin, D. G., & Strass, H. A. (2017). Masculinity and barriers to seeking counseling: The buffering role of self-compassion. *Journal of Counseling Psychology*, 64, 94–103. http://dx.doi.org/10.1037/cou0000185
- Held, P., Owens, G. P., Thomas, E. A., White, B. A., & Anderson, S. E. (2018). A pilot study of brief self-compassion training with individuals in substance use disorder treatment. *Traumatology*, 24, 219–227. http:// dx.doi.org/10.1037/trm0000146
- Jakupcak, M., Blais, R. K., Grossbard, J., Garcia, H., & Okiishi, J. (2014). "Toughness" in Association with mental health symptoms among Iraq and Afghanistan war veterans seeking Veterans Affairs health care. Psychology of Men and Masculinity, 15, 100–104. http://dx.doi.org/10.1037/a0031508
- Jakupcak, M., Osborne, T. L., Michael, S., Cook, J. W., & McFall, M. (2006). Implications of masculine gender role stress in male veterans with posttraumatic stress disorder. *Psychology of Men and Masculinity*, 7, 203–211. http://dx.doi.org/10.1037/1524-9220.7.4.203
- Jones, D., Kazis, L., Lee, A., Rogers, W., Skinner, K., Cassar, L., . . . Hendricks, A. (2001). Health status assessments using the Veterans SF-12 and SF-36: Methods for evaluating outcomes in the Veterans Health Administration. *The Journal of Ambulatory Care Management*, 24, 68–86. http://dx.doi.org/10.1097/00004479-200107000-00011
- Kabat-Zinn, J. (2013). Full catastrophe living: How to cope with stress, pain, and illness using mindfulness meditation. London, United Kingdom: Piatkus Books Ltd.
- Kazis, L. E., Miller, D. R., Clark, J., Skinner, K., Lee, A., Rogers, W., . . . Linzer, M. (1998). Health-related quality of life in patients served by the Department of Veterans Affairs: Results from the Veterans Health Study. Archives of Internal Medicine, 158, 626–632. http://dx.doi.org/ 10.1001/archinte.158.6.626

- Kazis, L. E., Ren, X. S., Lee, A., Skinner, K., Rogers, W., Clark, J., & Miller, D. R. (1999). Health status in VA patients: Results from the Veterans Health Study. *American Journal of Medical Quality*, 14, 28–38. http://dx.doi.org/10.1177/106286069901400105
- 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, 426–434. http://dx.doi.org/10.1002/jts.21832
- Keats, P. A. (2010). Soldiers working internationally: Impacts of masculinity, military culture, and operational stress on cross-cultural adaptation. *International Journal for the Advancement of Counseling*, 32, 290–303. http://dx.doi.org/10.1007/s10447-010-9107-z
- Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., ... Hofmann, S. G. (2013). Mindfulness-based therapy: A comprehensive meta-analysis. *Clinical Psychology Review*, 33, 763–771. http://dx .doi.org/10.1016/j.cpr.2013.05.005
- Khusid, M. A., & Vythilingam, M. (2016). The emerging role of mindfulness meditation as effective self-management strategy, part 1: Clinical implications for depression, post-traumatic stress disorder, and anxiety. *Military Medicine*, 181, 961–968. http://dx.doi.org/10.7205/MILMED-D-14-00677
- Kirby, J. N., & Kirby, P. G. (2017). An evolutionary model to conceptualize masculinity and compassion in male teenagers: A unifying framework. *Clinical Psychologist*, 21, 74–89. http://dx.doi.org/10.1111/cp.12129
- Levant, R. F., Hall, R. J., & Rankin, T. J. (2013). Male Role Norms Inventory-Short Form (MRNI-SF): Development, confirmatory factor analytic investigation of structure, and measurement invariance across gender. *Journal of Counseling Psychology*, 60, 228–238. http://dx.doi.org/10.1037/a0031545
- Levant, R. F., & Richmond, K. (2007). A review of research on masculinity ideologies using the Male Role Norms Inventory. *Journal of Men's Studies*, 15, 130–146. http://dx.doi.org/10.3149/jms.1502.130
- Litman, J. A. (2006). The COPE inventory: Dimensionality and relationships with approach- and avoidance-motives and positive and negative traits. *Personality and Individual Differences*, 41, 273–284. http://dx.doi.org/10.1016/j.paid.2005.11.032
- Lorber, W., & Garcia, H. A. (2010). Not supposed to feel this: Traditional masculinity in psychotherapy with male veterans returning from Afghanistan and Iraq. Psychotherapy: Theory, Research, and Practice, 47, 296–305. http://dx.doi.org/10.1037/a0021161
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods*, 4, 84–99. http://dx.doi .org/10.1037/1082-989X.4.1.84
- Mason, A. E., Boden, M. T., & Cucciare, M. A. (2014). Prospective associations among approach coping, alcohol misuse and psychiatric symptoms among veterans receiving a brief alcohol intervention. *Jour*nal of Substance Abuse Treatment, 46, 553–560. http://dx.doi.org/10 .1016/j.jsat.2014.01.006
- Meyers, N. M., Chapman, J. C., Gunthert, K. C., & Weissbrod, C. S. (2016). The effect of masculinity on community reintegration following TBI in military veterans. *Military Psychology*, 28, 14–24. http://dx.doi.org/10.1037/mil0000097
- Morrison, J. A. (2012). Masculinity moderates the relationship between symptoms of PTSD and cardiac-related health behaviors in male veterans. *Psychology of Men and Masculinity*, 13, 158–165. http://dx.doi.org/ 10.1037/a0024186
- National Center for PTSD. (2019). *Epidemiology of PTSD*. Retrieved from https://www.ptsd.va.gov/professional/treat/essentials/epidemiology.asp
- Neff, K. D. (2003). The development and validation of a scale to measure self-compassion. Self and Identity, 2, 223–250. http://dx.doi.org/10 .1080/15298860309027

- Neff, K. D. (2012). The science of self-compassion. In C. Germer & R. Siegel (Eds.), Compassion and wisdom in psychotherapy (pp. 79–92).
 New York, NY: Guilford Press.
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69, 28–44. http://dx.doi.org/10.1002/jclp.21923
- Owen, J. (2011). Assessing the factor structures of the 55- and 22-item versions of the conformity to masculine norms inventory. *American Journal of Men's Health*, 5, 118–128. http://dx.doi.org/10.1177/1557988310363817
- Parker, K., Cilluffo, A., & Stepler, R. (2017). 6 facts about U.S. military and its changing demographics. *Pew Research Center*. Retrieved from http://www.pewresearch.org/fact-tank/2017/04/13/6-facts-about-the-u-s-military-and-its-changing-demographics/
- Pietrzak, R. H., Harpaz-Rotem, I., & Southwick, S. M. (2011). Cognitive-behavioral coping strategies associated with combat-related PTSD in treatment-seeking OEF-OIF veterans. *Psychiatry Research*, 189, 251–258. http://dx.doi.org/10.1016/j.psychres.2011.07.019
- Pigeon, W., Allen, C., Possemato, K., Bergen-Cico, D., & Treatman, S. (2015). Feasibility and acceptability of a brief mindfulness program for veterans in primary care with posttraumatic stress disorder. *Mindfulness*, 6, 986–995. http://dx.doi.org/10.1007/s12671-014-0340-0
- Pinto-Gouveia, J., Duarte, C., Matos, M., & Fráguas, S. (2014). The protective role of self-compassion in relation to psychopathology symptoms and quality of life in chronic and in cancer patients. *Clinical Psychology and Psychotherapy*, 21, 311–323. http://dx.doi.org/10.1002/ cpp.1838
- Polusny, M. A., Erbes, C. R., Thuras, P., Moran, A., Lamberty, G. J., Collins, R. C., . . . Lim, K. O. (2015). Mindfulness-based stress reduction for posttraumatic stress disorder among veterans: A randomized clinical trial. *Journal of the American Medical Association*, 314, 456–465. http://dx.doi.org/10.1001/jama.2015.8361
- Price, E. C., Gregg, J. J., Smith, M. D., & Fiske, A. (2018). Masculine traits and depressive symptoms in older and younger men and women. *American Journal of Men's Health*, 12, 19–29. http://dx.doi.org/10.1177/ 1557988315619676
- 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. http://dx.doi.org/ 10.1002/cpp.702
- 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 and Masculinity*, 15, 22–28. http://dx.doi.org/10.1037/a0031028
- Selim, A. J., Rogers, W., Fleishman, J. A., Qian, S. X., Fincke, B. G., Rothendler, J. A., & Kazis, L. E. (2009). Updated U.S. population standard for the Veterans RAND 12-item Health Survey (VR-12). Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation, 18, 43–52. http://dx.doi.org/10 .1007/s11136-008-9418-2
- Serpa, J. G., Taylor, S. L., & Tillisch, K. (2014). Mindfulness-based stress reduction (MBSR) reduces anxiety, depression, and suicidal ideation in veterans. *Medical Care*, 52, S19–S24. http://dx.doi.org/10.1097/MLR .00000000000000202
- 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, 334–347. http://dx.doi.org/10.1080/15298868.2014.996249
- Snell, W. E., Jr. (1989). Development and validation of the Masculine Behavior Scale: A measure of behaviors stereotypically attributed to males vs. females. Sex Roles, 21, 749–767. http://dx.doi.org/10.1007/ BF00289806
- Thompson, E. H., & Bennett, K. M. (2015). Measurement of masculinity ideologies: A (critical) review. *Psychology of Men and Masculinity*, 16, 115–133. http://dx.doi.org/10.1037/a0038609

- U.S. Department of Veterans Affairs, Veterans Health Administration. (2015). FY 2015 VHA complementary and integrative health (CIH) services (formerly CAM). Retrieved from https://sciencebasedmedicine.org/wp-content/uploads/2016/07/FY2015_VHA_CIH_signedReport.pdf
- Wallace, A. E., Lee, R., Mackenzie, T. A., West, A. N., Wright, S., Booth, B. M., . . . Weeks, W. B. (2010). A longitudinal analysis of rural and urban veterans' health-related quality of life. *The Journal of Rural Health*, 26, 156–163. http://dx.doi.org/10.1111/j.1748-0361.2010.00277.x
- Whorley, M. R., & Addis, M. E. (2006). Ten years of psychological research on men and masculinity in the United States: Dominant methodological trends. Sex Roles, 55, 649–658. http://dx.doi.org/10.1007/ s11199-006-9120-1
- Yarnell, L. M., Neff, K. D., Davidson, O. A., & Mullarkey, M. (2018).Gender differences in self-compassion: Examining the role of gender

- role orientation. *Mindfulness*, 10, 1136–1152. Retrieved from https://link.springer.com/article/10.1007/s12671-018-1066-1
- Yarnell, L. M., Stafford, R. E., Neff, K. D., Reilly, E. D., Knox, M. C., & Mullarkey, M. (2015). Meta-analysis of gender differences in selfcompassion. Self and Identity, 14, 499–520. http://dx.doi.org/10.1080/ 15298868.2015.1029966
- Yousaf, O., Popat, A., & Hunter, M. S. (2015). An investigation of masculinity attitudes, gender, and attitudes toward psychological helpseeking. *Psychology of Men and Masculinity*, 16, 234–237. http://dx.doi.org/10.1037/a0036241

Received January 15, 2019
Revision received July 15, 2019
Accepted August 12, 2019

Members of Underrepresented Groups: Reviewers for Journal Manuscripts Wanted

If you are interested in reviewing manuscripts for APA journals, the APA Publications and Communications Board would like to invite your participation. Manuscript reviewers are vital to the publications process. As a reviewer, you would gain valuable experience in publishing. The P&C Board is particularly interested in encouraging members of underrepresented groups to participate more in this process.

If you are interested in reviewing manuscripts, please write APA Journals at Reviewers@apa.org. Please note the following important points:

- To be selected as a reviewer, you must have published articles in peer-reviewed journals. The
 experience of publishing provides a reviewer with the basis for preparing a thorough, objective
 review.
- To be selected, it is critical to be a regular reader of the five to six empirical journals that are most
 central to the area or journal for which you would like to review. Current knowledge of recently
 published research provides a reviewer with the knowledge base to evaluate a new submission
 within the context of existing research.
- To select the appropriate reviewers for each manuscript, the editor needs detailed information. Please include with your letter your vita. In the letter, please identify which APA journal(s) you are interested in, and describe your area of expertise. Be as specific as possible. For example, "social psychology" is not sufficient—you would need to specify "social cognition" or "attitude change" as well.
- Reviewing a manuscript takes time (1-4 hours per manuscript reviewed). If you are selected to review a manuscript, be prepared to invest the necessary time to evaluate the manuscript thoroughly.

APA now has an online video course that provides guidance in reviewing manuscripts. To learn more about the course and to access the video, visit http://www.apa.org/pubs/journals/resources/review-manuscript-ce-video.aspx.