

MASCULINE NORMS, PSYCHOLOGICAL SYMPTOM SEVERITY, AND
INTENTIONS TO SEEK FORMAL HELP IN MALE COLLEGE STUDENTS

By

Zahra S. Shine

A Thesis Presented to

The Faculty of Humboldt State University

In Partial Fulfillment of the Requirements for the Degree

Master of Arts in Psychology: Counseling

Committee Membership

Dr. Carrie Aigner, Committee Chair

Dr. Elena Padrón, Committee Member

Dr. Benjamin Graham, Committee Member

Dr. Carrie Aigner, Program Graduate Coordinator

July 2019

Abstract

MASCULINE NORMS, PSYCHOLOGICAL SYMPTOM SEVERITY, AND INTENTIONS TO SEEK FORMAL HELP IN MALE COLLEGE STUDENTS

Zahra S. Shine

Research has consistently found men to be less likely than women to seek help for mental health symptoms. Additionally, greater symptom severity is related to higher levels of help-seeking, although this relationship is less clear among men. Greater conformity to masculine norms may help to explain the relationship between symptom severity and help-seeking among men. The present study aimed to further research on men's help-seeking by examining whether conformity to masculine norms would moderate the relationship between symptom severity and help-seeking intentions in male college students ($N = 89$). A multiple regression analysis was conducted with all three predictors entered into the same model. Inconsistent with hypotheses, results did not find conformity to masculine norms, psychological symptom severity, or their interaction to significantly predict intentions to seek formal help for mental or emotional problems. Given that the study was underpowered, the chance that the nonsignificant findings are due to Type II errors is high in the present study. Future research should aim to recruit a larger sample including men experiencing a wider range of symptom severity.

Acknowledgements

I would like to thank my committee chair, Dr. Carrie Aigner, and my committee members, Dr. Elena Padrón and Dr. Benjamin Graham, for all of their support and guidance throughout the thesis writing process. This project would not have been possible without their valuable attention and feedback. In addition, I would like to acknowledge all of my many professors and advisers that have taught, mentored, and encouraged me throughout my educational journey. I would also like to thank my family and friends for being my support network throughout the years of this long, challenging, and rewarding educational journey. Lastly, I would like to give a special thank you my counseling psychology cohort members for all of their friendship and comradery during the arduous and valuable process of graduate school.

Table of Contents

Abstract	ii
Acknowledgements.....	iii
List of Tables	vi
List of Appendices	vii
Introduction.....	1
Literature Review.....	8
Men’s Health Disparities	8
Men’s Mental Health	9
The Theory of Planned Behavior and Help-Seeking	12
Help-Seeking and Symptom Severity.....	16
Gender and Help-Seeking.....	19
Gender and Masculinity.....	22
Precarious Manhood Theory.....	25
Other theories related to masculinity and help-seeking.....	29
Precarious Manhood Theory and Psychological Help-Seeking.....	31
Masculinity, Symptom Severity, and Help-Seeking.....	36
Hypotheses	43
Hypothesis 1.....	43
Hypothesis 2.....	43
Hypothesis 3.....	44
Method	45
Participants.....	45

Sample.....	45
Instrumentation	46
Masculine norms.	47
Intentions to seek psychological help.	48
Psychological symptom severity.....	49
Procedure	51
Data collection.	51
Data Analysis	51
Benefits and Potential Risks	52
Results.....	53
Preliminary Analyses	53
Primary Analyses	54
Hypothesis 1.....	58
Hypothesis 2.....	58
Hypothesis 3.....	58
Discussion	59
Limitations	62
Implications and Recommendations for Future Research	65
References.....	67

List of Tables

Table 1	55
Table 2	56
Table 3	57
Table 4	58

List of Appendices

APPENDIX A	81
APPENDIX B	82

Introduction

Gender and sex are two deeply intertwined yet distinct constructs. In popular culture, many still conflate the concepts of gender and sex, therefore, they are important to define in order to properly discuss masculinity. While sex represents the biological components that make up physical male and femaleness, such as the presence of X or Y chromosomes and sex hormones, gender is considered to be a social construction influenced mainly by culture (American Psychological Association, 2015). These social constructions are constantly reinforced and influenced by society at large and our daily interactions with one another (Lorber & Moore, 2002). The process of gender socialization refers to the expectations, rules, behaviors, and personal qualities that make up a person's gender identity (American Psychological Association, 2015). These socialization processes are then internalized as cognitive schemas that serve as templates for enacting socially expected portrayals of masculinity (Carter, 2014). It is important to note that individual men display variation in the degree to which they agree with and conform to these traditional ideas of masculinity, and that there are many definitions of specific masculine norms depending on culture, age, socioeconomic status, and time in history (Vogel & Heath, 2016). Nonetheless, in the dominant culture of the contemporary U.S., there exists a prevailing set of expectations and standards commonly referred to as traditionally masculine (Good & Wood, 1995).

An important aspect of gender to address is that gender is commonly thought of as synonymous with biological sex and thus structured as a strict binary of categories consisting of only man and woman. However, biological sex and socially constructed

gender are two separate aspects of an individual. Many people consider themselves to be “cisgender,” meaning their biological sex aligns with the traditional gender identity that is normally assigned to that biological sex. However, other biological males and females consider themselves to be non-binary, meaning their gender identity does not align with their biological sex in the traditionally assigned way. Individuals may also identify as gender fluid, meaning their gender identity is flexible and changes in salience, or transgender, meaning their gender identity aligns with the traditional opposite of their biological sex. Additionally, about 0.1-0.2% of infants are born with ambiguous external genitalia and receive “corrective” genital surgery, as officially documented by hospitals. However, as many as 2 % of live births are considered biologically intersex, meaning their genitals, genes, or sex hormones do not conform to categories identifiable as distinctly male or female (Blackless et al., 2000).

This concept of gender as binary is often mirrored in research, and generalizations based on this binary lens are a limitation found in the literature on men and masculinity. The majority of masculinity research is conducted with cisgender, heterosexual men. The use of gender binary in help-seeking research results in a failure to examine factors related to within-person, or within-group variability among men’s help-seeking, and can serve to further reinforce gender stereotypes that can be harmful or restrictive to both genders (Addis & Mahalik, 2003). Another weakness of current research on masculinity is that existing measures of masculinity are intended to be used by individuals who identify as male, therefore, they are not appropriate for measuring socialized masculinity across the spectrum of gender identities. These issues point to the need for more diverse

samples and inclusive measures so that future research findings can differentiate between groups of men, be generalizable to a larger variation of men, and examine masculinity in more diverse samples. The research discussed here on masculinity and health outcomes largely represents research on individuals identifying as ‘male.’

Despite holding largely privileged positions in society regarding leadership positions, legal rights, and financial compensation, when compared to women, research suggests that men experience poorer health outcomes across a variety of domains. Men have an average life expectancy that is 4.9 years shorter, on average, than women in the U.S. In addition, men experience higher rates of the three leading causes of death and exhibit higher rates of many chronic diseases, suicide, risky behaviors, and violent behaviors when compared to women (Murphy et al., 2017).

Differences in mental health outcomes between men and women are less clear. Men are often reported to have lower rates of certain mental health problems including depression and anxiety, (e.g. Eaton, Chen, & Bromet, 2011; McLean, Asnaani, Litz, & Hofmann, 2011; Piccinelli & Wilkinson, 2000). However, men have consistently higher rates of substance abuse, antisocial behaviors, and behavioral problems (Eaton, Chen, & Bromet, 2011), as well as higher rates of diagnosed ADHD (American College Health Association, 2017). In fact, when behavioral problems, substance abuse, and antisocial behaviors are included in total rates of mental health issues, overall prevalence of psychological problems actually becomes higher for men when compared with women (Eaton et al., 2011).

Unfortunately, men are significantly less likely to seek the help they need to address these problems. Generally, only 30 to 50% of individuals with mental health problems will access professional help (Brown et al., 2014), and delays in treatment exacerbate conditions making them more difficult to treat, while prompt treatment can reduce the burden of mental health problems. Research on men's health has consistently found men to be less likely than women to seek help for medical care (O'Hara & Caswell, 2012) and mental health issues (Nam, et al., 2010), even when they endorse similar levels of distress or dysfunction (Mansfield, Addis, & Mahalik, 2003). In fact, disparities in men's help-seeking rates stand out as one of the most stable findings in the field of help-seeking research (e.g. Addis & Mahalik, 2003; Nam, et al., 2010). In addition, men display a pattern of not seeking professional help until problem severity becomes very high, whereas women seek more help at lower levels of severity (Biddle et al., 2004). Gender differences in delays to contact treatment are especially unfortunate because therapy has been shown to be comparatively effective for both men and women (de Jonghe et al., 2001).

In the research on masculinity and health, higher endorsement of traditional masculine norms may help to explain men's lower rates of help-seeking. Psychological research on masculinity has identified themes making up masculinity such as emotional restriction, self-reliance, achieving social status, physical toughness, and adhering to anti-femininity in feelings and behavior (e.g. Thompson & Pleck, 1986; Courtenay 2000, Mahalik et al., 2003b). An expanding body of research has found degree of endorsement of traditional Western masculinity to be an important predictor of both higher rates of

psychological and behavioral problems and lower rates of help-seeking in men. A wide array of research has consistently found higher endorsement of traditional masculine norms to be associated with a broad range of negative outcomes including higher depression, anxiety, substance abuse, interpersonal violence, intimacy problems, overall psychological distress, and lower self-esteem (Mahalik, Good, & Carlson, 2010; Sloan, Conner, & Gough, 2015).

The Precarious Manhood Theory (PMT) helps to explain why masculinity is associated with men's health and willingness to seek help. PMT posits that the social status of manhood is both elusive and tenuous when compared to womanhood (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). In order to fully attain and defend manhood, men are expected to repeatedly prove a sufficient level of "gender-typicality" in both behaviors and personality. To do this, men must overcome exceedingly difficult and sometimes contradictory social hurdles to prove that a masculine status has been achieved. However, this arduous process is never over because men must also avoid the expression of un-masculine traits or behaviors that could diminish this achievement (Bosson et al., 2009).

The continuous process of proving oneself as a "real man" makes attaining and maintaining the social status of manhood a sometimes volatile, isolating, and anxiety producing experience for many men (Vandello & Bosson, 2013). Courtenay (2000), argues that in some cases, men demonstrate their masculinity by rejecting health care and healthy behaviors. For example, Mahalik et al. (2003b) argue that the masculine norms of self-reliance, emotional control, and physical toughness conflict with the key help-

seeking skills of admitting when help is needed, relying on others, and being able to identify and name an emotional issue. The fundamental precariousness of manhood may serve to explain why higher endorsement of traditional masculine norms is linked to increases in physical and mental health problems and decreases in help-seeking attitudes, intentions, and behaviors.

Although research on the relationships between higher masculinity and lower help-seeking has been replicated many times, few studies have included the effects of contextual factors such as level of psychological distress when examining this relationship. Research has found that individuals experiencing higher psychological distress and problem severity are more likely to seek mental health care (e.g. Brown et al., 2014; Sullivan, Ramos-Sánchez, & McIver, 2007). However, this relationship appears to be more nuanced in men, considering that higher levels of distress do not consistently predict the higher rates of help-seeking seen in other groups. Therefore, the variability among help-seeking in men experiencing distress may be explained by the moderating effect of masculinity.

In the absence of available research simultaneously examining psychological distress, masculinity, and help-seeking, PMT provides theoretical support for the hypothesis of the present study, that higher conformity to masculine norms will be associated with reduced help-seeking intentions in men, even when psychological distress is present. According to PMT, men will be more reluctant to seek mental health care if they endorse traditional masculine gender norms, even if symptoms are present, because seeking help threatens their masculine status. Therefore, even the threat of experiencing

significant mental health symptoms may not outweigh the threat of seeking help for men who highly conform to traditional masculinity. The present study will help increase understanding in this important area by examining the potential moderating effect of masculinity on the relationship between psychological symptom severity and formal help-seeking among men.

Literature Review

Men's Health Disparities

Men experience significantly higher rates of many of the most common and harmful physical health issues. According to the National Vital Statistics Report of the Centers for Disease Control and Prevention (Murphy et al., 2017), men experienced higher rates of the leading causes of death in the US, cancer and heart disease, and are more likely to be overweight when compared to women. In the 20 to 24 age group, the leading causes of death are accidents, suicide, and assaults, which are also overwhelmingly higher in men compared to women (Murphy et al., 2017).

In many countries, men live significantly shorter lives than women. For example, Russian men live on average 13 years less than their female counterparts, living to be only 59 instead of 72 (Haub, 2007). In Japan, where life expectancy is very high, disparities in men's longevity are still apparent, with men's average life expectancy at 79 and women's at 86, a substantial seven year difference. In the US, the average life expectancy was 4.9 years shorter for men in 2015 (Murphy et al., 2017).

There are many factors that have been identified that may explain these disparities, ranging from biology to participation in various health behaviors. For men, premature death and chronic disease have been largely attributed to higher rates of risky and unhealthy behavior patterns (Murphy et al., 2017). According to the Surgeon General, improving health behaviors is considered the single most important factor for improving health and wellbeing (Benjamin, 2010). Health behaviors include engaging in

healthy diet and exercise, seeking help for physical and mental health issues, and avoiding risky behaviors and the use of alcohol, tobacco, and other substances. These findings indicate the importance of understanding factors related to improving rates of men's engagement in health behaviors.

Men's Mental Health

Men's physical and mental health have been found to influence each other across various dimensions. In a survey study examining the health behaviors of men, researchers found that men who were experiencing mental health issues had higher rates of substance use and higher engagement in risky behaviors, compared to men who were not experiencing mental health problems (Acevedo, Lowe, Griffin, & Botvin, 2013). Mental health problems that remain untreated can exacerbate medical issues and are linked to shorter life expectancy. For example, research has linked symptoms of depression to cardiovascular disease (the number one cause of death in men) and hypertension (Scherrer et al., 2003). Also, distressing emotional states of loneliness and bereavement have been associated with increased risk for mortality among men (Folden, 1996). In some cases, untreated mental health issues such as depression can tragically contribute to higher rates of completed suicide in men (Flaskerud, 2014). In other words, men's mental health is intimately related to their physical health in many ways.

Although the negative impacts of gender disparities in physical health have been well documented, the findings are less clear in regards to mental health. Men are less likely than women to report common mental health issues including depression and

anxiety (e.g. Piccinelli & Wilkinson, 2000; Eaton et al., 2011; McLean, Asnaani, Litz, & Hofmann, 2011). However, suicide rates among men are 3.5 to 4 times higher when compared to women (Flaskerud, 2014; Murphy et al., 2017). According to the National Institute of Mental Health (2019), this disparity is in part related to the more lethal ways in which men attempt suicide (for example, with firearms), while women often attempt with less lethal means (for example, through poisoning). In some circumstances men display similar, or higher rates, of less common mental health disorders when compared to women. For example, researchers have found that while men are less likely than women to meet diagnostic criteria for anxiety and depression, there were no gender differences in rates of bipolar disorder (Piccinelli & Wilkinson, 2000). Additionally, McLean et al. (2011), reported that while the ratio of lifetime prevalence of all anxiety disorders were 1:1.7 (male: female), there were no differences in chronicity of anxiety symptoms or age of onset (McLean et al., 2011).

When taking a closer look at the evidence, it becomes clear that comparing men's mental health as globally better than women's mental health is not accurate. Men have consistently higher rates of substance abuse, behavioral problems, and antisocial behaviors (Eaton, Chen, & Bromet, 2011), as well as higher rates of diagnosed ADHD (American College Health Association, 2017). In fact, when behavioral problems, substance abuse, and antisocial behaviors are included in total rates of mental health issues, overall prevalence of psychological problems is higher for men compared with women (Eaton et al., 2011).

Multiple studies have cited additional factors that may specifically be contributing to the underdiagnosis of depression in men. Flaskerud (2014) reports that depression may manifest differently across genders. This hypothesis is supported by a number of significant differences between men and women, including that men tend to report more irritability, fatigue, somatic symptoms, loss of interest in once enjoyable activities, and sleep problems when compared to symptoms more reported by women which include feelings of worthlessness, sadness, and excessive guilt (Flaskerud, 2014). These gender differences in depression symptoms might indicate the need to update diagnostic criteria to be more sensitive to detecting depression in men. As it stands, this oversight likely contributes to underdiagnosis of depression in men. For example, Potts, Burnam, and Wells (1991), found that mental health clinicians were more likely to correctly identify depression in women, failing to correctly diagnose almost two thirds of men who were actually depressed. Additionally, gender stereotypes regarding symptomology can impact the perceptions of providers and lead clinicians to underdiagnose depression in men and overdiagnose it in women (Salk, Hyde, & Abramson, 2017). For these reasons, some researchers argue prevalence rates of mental health issues might not accurately capture distress in men (Salk et al., 2017).

Another factor to consider in the current field of research, which relies largely on self-reported correlational studies, is that studies have shown men to be generally less effective than women at identifying nonspecific feelings of distress as signs that they have emotional or psychological problems (Wang et al., 2005). This tendency indicates the likelihood of a generally diminished self-perception of distress in men, and may

contribute to lower rates of reported mental health symptoms in general. These gender disparities in the recognition of emotions and acknowledgement of problem severity could partially explain observed gender differences in the prevalence of psychological issues.

In summary, research reports that men's physical health and mental health are closely related, influencing each other across many dimensions. While men display higher rates of the most common physical health problems, many studies report lower mental health problems in men compared to women. However, other researchers argue that methodological issues, such as differences in men and women's ability to identify problems as emotional and willingness to report symptoms, cloud our view of true differences in prevalence rates of mental health problems. Moreover, studies show that men have higher rates of overall psychological problems when substance use and behavioral problems are included. Understanding and improving health behaviors, such as seeking help, have been identified as key factors in responding to these disparities in men's well-being. In order to effectively research help-seeking behaviors, it is important to integrate theory in the understanding of how to measure and predict help-seeking.

The Theory of Planned Behavior and Help-Seeking

Help-seeking behavior has been defined as a series of interrelated behaviors and cognitions beginning with the detection of a problem, judgment of need for assistance, appraisal of personal and social attitudes toward help-seeking, and choosing actions to access various helping services (Downs & Eisenberg, 2012; Lee, Friesen, Walker,

Colman, & Donlan, 2014). Yousaf, Grunfeld, and Hunter (2015), found a general order of preference when it comes to when and with whom help is sought. Initially, most people solicit help from family and close friends, while organizations, relief agencies, and other professional resources are typically used as a final resort. Hinson and Swanson (1993), also found that for personal problems, family and friends are asked first with professional counselors last.

Understanding help-seeking behavior is important for developing interventions to improving men's access to care and increased physical and mental health. One of the most widely used theories used to predict health behaviors is the Theory of Planned Behavior (e.g. Ajzen, 1991; Kauer, Buhagiar, & Sanci, 2017; Schomerus, Matschinger, & Angermeyer, 2009; Smith, Tran, & Thompson, 2008). The Theory of Planned Behavior (TPB) posits that subjective social norms, attitudes toward a behavior, and the perception of behavioral control serve to explain and predict intention, which in turn predicts behavior. Subjective social norms include the ways in which an individual believes others in their social group might positively or negatively evaluate their behavior, whereas attitudes represent the individual's own negative or positive evaluation of their behavior. Perceived behavioral control encompasses an individual's beliefs about any internal or external barriers to engaging in the behavior such as risks, benefits, and level of personally agency associated with an outcome (Ajzen, 1991). Demonstrated predictors of help-seeking behavior align with the predictive components of TPB and include attitudes and intentions regarding help-seeking, subjective norms, and personal

and social stigma for psychological help-seeking, which are closely related to TPB's social norms (Rogers, 2009).

Research specifically testing the components of TPB supports its utility as an effective model to predict intention and behavior change related to help-seeking. For example, Bohon et al. (2016) tested components of TPB regarding help-seeking for depression. Results indicated that TPB was a good fit in that more affirmative attitudes about seeking help and perceptions about behavioral control predicted higher intentions to seek professional help for depression among college students. Additionally, Goddard (2002) evaluated the utility of TPB to predict psychological help-seeking in college students. In support of the TPB model, help-seeking attitudes and subjective norms in regards to help-seeking were significant predictors of intentions to seek psychological help. Lastly, in a sample of high school participants, intentions to seek help for personal and emotional problems were found to significantly correlate with self-reported actual help-seeking behavior three weeks later (Wilson et al, 2005).

In a sample of German adults, Schomerus, Matschinger, and Angermeyer (2009), tested the utility of TPB in predicting mental health help-seeking among people with depression. Results demonstrated that attitudes toward seeking-help for mental health care, perceived control in seeking help, and the perceived attitudes of peers' about mental health care were unique predictors of intentions to seek help for mental health care for depression. Likewise, in a survey study with Chinese adults, more positive attitudes toward mental health help-seeking, behavioral control, and perceived social norms were all predictive of intentions to seek psychological health care (Mak & Davis, 2009).

TPB has also been identified as an efficacious model specifically in understanding the role of masculinity in predicting help-seeking among men. In a review of the psychology of men, masculinity, and help-seeking, Vogel and Heath (2016), list TPB as one of three main theories used to understand masculinity's effects on help-seeking. Smith, Tran, and Thompson (2008), tested the mediational power of attitude in regards to explaining the relationship between help-seeking intentions and masculine ideology. Using structural equation modeling they found that the relationship between traditional masculine ideology and psychological help-seeking intentions was mediated by attitudes toward psychological help-seeking, lending further support to the use of TBP in predicting help-seeking behavior among men.

The current body of research provides ample support for the utility of TPB in predicting help-seeking intentions. Within TPB, attitude is seen as the main antecedent to intention and intention is seen as the main antecedent to behavior. Many studies utilize either attitude or intentions as dependent variables, especially when there are methodological limitations to measuring help-seeking behavior. When considering that intentions are considered a more closely related construct in relation to predicting behaviors, in the present study, help-seeking intentions rather than attitudes, will be measured as the primary outcome variable.

Although TBP has been used extensively in research, limitations of its use are important to note. Firstly, intention and attitude are widely accepted proxy variables to actual help-seeking behaviors, however, there is no substitute for true longitudinal studies that can measure the degree to which attitudes and intentions actually predict help-

seeking behavior. Such studies are important in better understanding the directionality of these relationships. Another noteworthy limitation is the over-use of college student samples in the current body of research. While the availability of this population makes research easier to conduct, this practice poses a threat to the generalizability of these findings.

Help-Seeking and Symptom Severity

The Theory of Planned Behavior highlights the psychological and social factors that influence help-seeking behavior. Symptom severity is an additional factor that has been found to relate to mental health help-seeking. Symptom severity describes the overall severity or impact on functioning a person is experiencing related to psychological symptoms. Only 30 to 50% of individuals with mental health problems will access professional help, highlighting the need to better understand the factors that encourage people to seek help (Brown et al., 2014).

Symptom severity has been shown to be an important predictor of help-seeking in a number of studies. Hinson and Swanson (1993), investigated the effects of problem severity, self-disclosure, and self-disclosure flexibility on willingness to seek mental health care. Results indicated that the factor predicting the most variance in help-seeking were the interaction between being willing to self-disclose and problem severity. The direct effect of problem severity was the second best predictor of help-seeking. Participants considered the high severity problem condition as more appropriate for professional help compared with informal help (Hinson & Swanson, 1993).

Brown et al., (2014), utilized interview data from the South East London Community Health (SELCoH) study to examine divergent patterns related to formal and informal help-seeking. Researchers found that individuals who did not have suicidal ideation or depression, and had a lower overall clinical severity score, were more likely to exclusively use informal help. In contrast, individuals with suicidal ideation, a diagnosis of depression, or higher clinical severity scores were more likely to use formal help (Brown et al., 2014). Also, in a representative sample of young adults in Great Britain, Biddle, Gunnell, Sharpe, and Donovan (2004), found that symptom severity and past help-seeking behaviors were the best predictors of help-seeking for mental health problems.

Symptom severity has also been found to be related to help-seeking among diverse populations. Sullivan et al. (2007), identified that college counseling service use was predicted by symptom severity and gender in Asian/Pacific Islander and White students, while symptom severity was the only predictor for Latino students. Students experiencing more severe problems displayed double the likelihood of using counseling compared to those experiencing problems that were less severe (Sullivan et al., 2007).

Although severity of mental health problems has been generally shown to be an important predictor in help-seeking behaviors, some mixed findings have been reported. Lopez, Melendez, Sauer, Berger, and Wyssmann, (1998), examined symptom severity, internal working models, and willingness to seek counseling in college students. In this study, internal working model of others is defined as a cognitive schema of “core expectations” regarding the dependability and trustworthiness of

others in close social relation and internal working model of self refers to the perception of the worth and lovability of the self. Results suggested a significant interaction between symptom severity, negative internal working model of others, and willingness to seek counseling, $F(1, 241) = 5.18, p < .05$. No such interaction was detected regarding negative internal working model of the self. In other words, students' negative view of others and higher symptom severity significantly predicted lower willingness to seek counseling (Lopez et al., 2007).

The pattern of higher severity/higher help-seeking is even less clear among men. Few studies have examined this relationship specifically among men. Chang (2007), examined the relationship between psychological symptom severity, gender, and help-seeking attitudes in Chinese college students in Taiwan. Results indicated that higher depression scores significantly predicted lower help-seeking attitudes, and that a depression-gender interaction contributed significantly to predicting help-seeking attitudes ($\beta = 0.35, p = 0.02$). In other words, while all students experiencing more severe depression symptoms were less likely to be willing to seek counseling, this relationship was significantly stronger for male students (Chang, 2007). This provides some initial evidence that the relationship between symptom severity and help-seeking may be more complex than previously thought. More research is needed to explore this relationship, especially among men.

In summary, although many studies suggest that psychological distress is generally positively associated with help-seeking, findings are mixed. Moreover, this relationship appears to be even less clear in men. Considering how consistently

gender disparities in service utilization rates are reported in epidemiological literature, the importance of examining gender in relation to symptom severity and help-seeking is clear.

Gender and Help-Seeking

Studies examining demographics associated with differences in utilization of helping resources have identified gender as one of the most reliable factors predicting lower help-seeking in the literature. Men are less likely to seek help for both medical care (O'Hara & Caswell, 2012) and mental health issues (Nam, et al., 2010). The gender difference in rates of seeking help is not because men lack a need for help; in fact, even when experiencing severe problems, men often have lower rates of help-seeking compared to women. However, findings are mixed and point to the need to identify factors that can more clearly predict help-seeking in men. For example, divergent help-seeking patterns appear among men when specifying different disorders, severity levels, and sources of help. According to Wang et al. (2005), women had significantly higher odds of contacting with treatment for four out of seventeen psychological disorders measured, with no difference between men and women found on the remaining disorders. Wendt and Shafer (2016), found that men and women endorsed informal help-seeking from family and friends for depression and schizophrenia to a similar degree, but that formal help for depression was much less likely to be endorsed by men.

Biddle, Gunnell, Sharpe, and Donovan (2004), found differences in help-seeking rates between genders and a significant interaction between symptom severity and gender

on help-seeking. Results indicated that men were less likely to report previous help-seeking than women and much less likely than women to seek informal help for mental health problems; however, men were equally as likely to have recently sought professional help. An interaction between gender and symptom severity indicated that men displayed a pattern of not seeking professional help until symptom severity became very high, whereas women sought more help at lower levels of severity. The authors posited that this delay in men's help-seeking may make them vulnerable to reaching crisis levels of symptom severity (Biddle et al., 2004). A limitation of this study was that the base rate for severe symptoms in the sample was relatively low, which could help to explain the lack of difference in recent professional help-seeking between genders.

These gender differences in help-seeking rates are especially unfortunate because therapy has been shown to be equally effective for both men and women (de Jonghe et al., 2001). It is clear that consistent differences in help-seeking behaviors exist between genders across age groups, social backgrounds, and ethnicities. Although prompt treatment can reduce the burden of mental health problems, Wang et al. (2005) reported that long delays in seeking mental health care are pervasive in the U.S. These delays tend to exacerbate psychological problems, often making them more disabling and difficult to treat. Results from Wang et al. (2005) indicated that, while the majority of individuals who experienced severe symptoms and impairment eventually sought treatment, median delays for those with mood disorders ranged from six to eight years, and nine or more years for those with anxiety disorders. In a study on veterans with psychiatric diagnoses, the median time from return from deployment until treatment utilization was nearly seven

and a half years, with men waiting almost two years longer on average than women to seek adequate mental health care (Maguen, Madden, Cohen, Bertenthal, & Seal, 2012).

As previously discussed, there are a variety of factors associated with lower help-seeking. Studies focusing on men have found specific barriers they face in seeking mental health care. According to Mansfield, Addis, and Courtenay (2005), men's barriers to seeking mental and medical health care included emotional control, resignation, minimizing problems, privacy, distrust of caregiver, concrete barriers, and need for self-reliance and control. In a review of research on factors related to barriers to help-seeking in men, the most prominent predictors of longer delays in help-seeking behaviors were aversion to expressing emotions, embarrassment, anxiety, and poor communication (Yousaf, Grunfeld, & Hunter, 2015).

Considering these findings on men's barriers to help-seeking, it becomes clear that social factors play a prominent role in the reluctance to seek help, even when help is needed. Traditional masculine norms have emerged as an important factor in understanding significant differences in men's health and help-seeking. Endorsement of masculine norms may help to explain why symptom severity has been found to be inconsistently related to help-seeking among men. Men who endorse higher levels of masculine norms may be unwilling to seek help, even at higher levels of symptom severity. Further examination of the factors that promote and discourage help-seeking among men will help in providing targeted interventions to this population.

Gender and Masculinity

An expanding body of research has found masculinity to be an important predictor of physical and mental health and help-seeking in men. Masculinity is a broad term that encompasses more specific constructs often used in research including masculine norms, gender socialization, masculine ideology, and gender role conflict. Three of the most commonly used measures of masculinity include gender role conflict, traditional masculine ideology, and conformity to masculine gender norms (the focus of the present study). Although there is considerable overlap among these constructs, utilizing different constructs and measures of masculinity makes comparison across studies more difficult. Throughout this review, ‘masculinity’ refers to a broader concept that encompasses these different constructs. Masculinity has been defined as “characteristics such as attitudes, beliefs, and behaviors often associated with being or behaving male in our society” (Robertson & Fitzgerald, 1992). While specific definitions of masculinity are highly dependent on social learning, and thus can change over time, research has established themes of traditional masculinity in the U.S. that are fairly stable. Foundational psychological research has sought to outline the sociocultural structure of masculine role norms measured by public attitudes of the behaviors and attitudes expected of men (e.g. Thompson & Pleck, 1986). Results of this research identified three factors making up masculine role ideals: achieving social status, possessing and displaying toughness, and adhering to anti-femininity in feelings and behavior. Traditional masculinity in the U.S. has also been characterized to include

restriction of emotions, independence, dominance, control, and high value of work and success (e.g. O'Neil et al., 1986; Thompson & Pleck, 1995). More recently, Courtenay (2000), reviewed current literature on masculinity and found that men strongly endorse beliefs that men must be self-reliant, strong, independent, and tough. Mahalik et al. (2003b), conducted a literature review and conducted focus groups to determine the content of current masculine norms. They identified masculine norms spanning affective, cognitive, and behavioral domains which included: emotional control, self-reliance, risk-taking, winning, dominance, pursuit of status, sexual conquest, violence, power over women, and disdain for homosexual men.

Although major themes of Western traditional masculinity have been found to be relatively consistent across studies and still relevant in today's society, it is important to distinguish that it is unknown whether the current body of research is generalizable to masculinity in cultures not sampled. Given the highly social and culture-specific nature of gender norms, research findings that are acquired using both Western methodology and samples might not apply to men from dissimilar cultures. Therefore, the current body of research may only be applicable to studies on men who endorse traditional Western masculinity.

Higher masculinity has been associated with many negative physical and mental health outcomes in men. Research on men's health has demonstrated that higher masculinity is associated with lower levels of positive health patterns and higher levels of negative health patterns. For example, Sloan, Conner, and Gough (2015), measured male role norms, male gender role stress, and both positive health behaviors (exercise and diet)

and negative health behaviors (alcohol, tobacco, and saturated fat intake) in both men and women and found that male role norms and gender role stress predicted both low positive and high negative health behaviors. Although these relationships were significant for both men and women, they were stronger and more frequent for men (Sloan et al., 2015).

Masculinity has also been associated with mental and behavioral health problems. Limited research has reported that endorsing some aspects of traditional masculinity may have positive correlations with aspects of men's functioning and well-being, such as appropriate risk taking, assertiveness, logical thinking, and problem solving; however, these possibilities have not been widely studied (Levant, 1995). Instead, a wide array of research has consistently found higher endorsement of traditional masculine ideology to be associated with a broad range of negative outcomes. These outcomes include higher rates of depression, anxiety, substance abuse, interpersonal violence, intimacy problems, overall psychological distress, and lower self-esteem (Mahalik, Good, & Carlson, 2010).

Review papers investigating masculine ideology in relation to various mental health issues have helped to further illuminate these negative effects. For example, Mahalik et al. (2003b), presented a review of literature examining links between higher rates of mental health problems and higher endorsement of the traditional masculine norms of dominance, self-reliance, emotional control, and violence in male college students. Nguyen et al. (2012) found higher gender role conflict to be related to higher symptom severity and psychological distress, negative appraisal regarding problem solving skills, and negative attitudes toward seeking professional help. McKenzie, Jenkin, and Collings (2016), conducted a meta-synthesis of qualitative research regarding

men's perspectives of common mental health problems and found "pressure to subscribe to dominant masculine ideals" as one of five main themes identified as causes of psychological distress in men. Thus, endorsing traditional masculinity is associated not only with lower help-seeking, but also with higher levels of mental health symptoms and psychological distress.

Precarious Manhood Theory

Theories examining characteristics of masculinity help to explain masculinity's contributions to disparities in men's health and help-seeking rates. Two psychological theories relevant to help-seeking behavior have been generated and tested through intersecting lines of study: precarious manhood theory and gender role conflict theory. These theories are related yet, as we will see, precarious manhood theory makes a wider and more inclusive theoretical basis for the present study.

The precarious manhood theory posits that the social status of manhood is both elusive and tenuous when compared to womanhood (Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). According to this theory, achieving manhood is based on social demonstrations required to earn and maintain masculinity and less on naturally occurring processes. This cultural structure forms manhood into a more precarious state when compared to womanhood. Once physical maturation occurs for a woman her status as a "real woman" is not as easily questioned or lost, relative to manhood (although gender stereotypes certainly create a structure of bias through which women are evaluated in society). According to PMT, even after physical maturation occurs for a

man, there are countless ways to be socially emasculated through being too weak, submissive, low achieving, or being perceived as homosexual or feminine (Vandello et al., 2008).

In order to fully attain and defend manhood, men are expected to repeatedly prove a sufficient level of “gender-typicality” in both behaviors and personality. To do this men must overcome exceedingly difficult and sometimes contradictory social hurdles to prove that a masculine status has been achieved. However, this arduous process is never over because men must also continuously avoid the expression of un-masculine traits or behaviors that could diminish this achievement (Bosson et al., 2009). The never-ending process of proving oneself as a “real man” makes attaining and maintaining manhood a sometimes volatile, isolating, and often anxiety producing experience for many males (Vandello & Bosson, 2013). The fundamental precariousness of manhood may serve to explain why higher endorsement of traditional masculine norms is linked to increases in stress and physical and mental health problems and decreases in help-seeking attitudes, intentions, and behaviors.

An expanding body of research testing the main assumptions of precarious manhood theory has provided support for its utility in the field of masculinity research. Vandello, Bosson et al. (2008), conducted a series of correlational survey studies and found that traditional beliefs about the relative precariousness of manhood as compared to womanhood were still relevant in modern society and that the requisites of manhood were attributed more to meeting and maintaining social requisites versus natural biological development when compared to womanhood (Vandello et al.,

2008). In another study Bosson, Vandello, Burnaford, Weaver, and Wasti (2009), common cultural norms were identified by asking college students to describe scenarios in which manhood and womanhood could be lost. Many social reasons were generated for men losing their manhood such as “being unable to support a family” or “losing a job.” Conversely, very few examples were generated when participants were asked about how a woman could lose her status, with these reasons also being less social and more physical such as “getting a sex change” or “having a hysterectomy” (Bosson et al., 2009).

While correlational studies help to broaden our view of masculinity in relation to associated constructs, precarious manhood theory has also been examined and supported through the use of experimental methods. One of this theory’s main assumptions is that manhood is tenuous, therefore, challenges to an individual’s masculinity should instill more threatening and anxious thoughts and feelings in men compared to women. In one such study Vandello, Bosson, Cohen, Burnaford, and Weaver (2008), stimulated threats to masculinity and femininity through giving men and women feedback that they did not perform typically on a knowledge of gender test. Results showed that men, but not women, experienced this negative feedback as a threat to their gender status.

Himmelstein, Kramer, and Springer (2018), tested whether beliefs about precarious manhood would moderate physiological stress responses to masculinity threats.

Masculinity threats were manipulated through feedback about performance on a test of gender-based knowledge and were compared to a control group. Results found that men who highly endorsed items describing manhood as precarious displayed stronger cortisol stress response when they were given feedback that their masculinity score dropped.

Men who did not endorse manhood as precarious did not display a cortisol stress response in response to a drop in masculinity score.

Another violation of masculine norms includes being misclassified into a group stigmatized as un-masculine. Bosson, Taylor, and Prewitt-Freilino, (2006) suggested men would be familiar with the social rule that engaging in stereotypically feminine behaviors would be threatening and likely result in being miscategorized as gay by observers. Male and female participants were instructed to visualize performing behaviors stereotypical of the opposite sex and rate both their discomfort and the likelihood that they would be miscategorized by observers as gay or lesbian. Results confirmed that when men violated their traditional gender roles, they reported higher discomfort than women who violated their female gender roles, which was mediated by men's fears of being miscategorized as gay. These findings support the hypothesis that expectations of identity misclassification by observers is a powerful influence over heterosexual men's adherence to traditional male gender norms.

In another study Bosson, Vandello, Burnaford, Wasti, and Weaver, (2008) stimulated threats to masculinity by having men engage in stereotypically feminine tasks in public, compared to men engaging in more gender neutral behaviors. Men in the feminine task group were more apt to publicly display aggression by choosing to punch a punching bag, and did so harder than men who punched the bag but had engaged in the more gender neutral task (Bosson et al., 2008). While this study examined the potential link between masculinity and aggression, they assert this is not an all-encompassing or inevitable association. In fact, it is clear that the majority of men whose gender status is

threatened do not behave aggressively, as there are many more nonaggressive versus aggressive options through which to recover lost manhood (Bosson, et al., 2008). Yet, when looking at the instances in which masculinity likely influences men's behavior in harmful ways, such mechanisms are important to understand.

In summary, research has consistently supported precarious manhood theory. Correlational studies examining attitudes of masculinity have generally found support for the assertion that masculinity is difficult to attain and easily threatened when compared to womanhood. Results have found that traditional gender norms in contemporary western industrialized societies are still relevant today, that manhood is seen as more precarious than womanhood, and that manhood is attained through social achievement more than biological markers (Vandello et al., 2008). Several experimental studies on PMT have found that threats to masculinity produced discomfort, stress, embarrassment, and self-consciousness (Bosson et al., 2006); higher anxiety, more threat-related and physically aggressive thoughts, and urges to hide (Vandello, et al., 2008); and increased likelihood of publicly displayed aggression (Bosson et al., 2008). These findings suggest that the urge to avert threats to men's masculinity may be an influential psychological force in shaping men to comply with strict social rules (Bosson et al., 2006).

Other theories related to masculinity and help-seeking. Another prominent theory used in the field of masculinity research, gender role conflict theory (GRC), focuses on specific processes in which manhood is threatened. Gender role conflict theory is a widely used theory in the current literature and builds on precarious manhood theory in understanding how conflicts in fulfilling masculine gender roles impact men.

GRC mainly seeks to describe the level of stress, anxiety, psychological conflict, and negative emotion men generally experience about their gender role, or their tendency to feel stress when faced with situations in which they fail to conform to gender norms (Eisler, Skidmore, & Ward, 1988).

Researchers have sought to identify which constructs of masculinity are most relevant to understanding men's mental health help-seeking. Gender role conflict has been widely used in numerous studies examining masculinity and help-seeking (e.g., Good & Wood, 1995; Pederson & Vogel, 2007). However, gender role conflict has been shown in multiple studies to be less strongly related to help-seeking than masculine ideology or conformity to masculine norms (e.g., Berger et al., 2005; Levant & Richmond, 2007; Levant et al., 2009). While some studies report that men endorsing higher gender role conflict indicate lower intentions and less positive attitudes toward seeking psychological help, they fail to compare the influences of multiple masculinity constructs simultaneously, and thus miss an important opportunity to compare the degree of influence these constructs have on men's help-seeking.

To highlight this point, a handful of studies directly compared the three most common measures of masculinity (gender role conflict, traditional masculine ideology, and conformity to masculine gender norms) and report that gender role conflict was the masculinity construct least predictive of negative help-seeking attitudes. For example, Levant and Richmond (2007) reported that, when including all three constructs in the same model, regression analysis results indicated that conformity to masculine gender norms uniquely predicted help-seeking attitudes. This pattern of findings was replicated

in a subsequent study where conformity to masculine gender norms was again a unique predictor of attitudes toward seeking mental health care, beyond the influences of both traditional masculine ideology and gender role conflict (Levant, Wilmer, Williams, Smalley, & Noronha, 2009). One possible explanation for these findings is that gender role conflict is more narrowly defined construct when compared to masculine gender norms and, as a result, is not as predictive of help-seeking. Based on this research, the construct of conformity to masculine norms, which is often examined in the context of PMT, has been selected to measure masculinity in the present study.

Precarious Manhood Theory and Psychological Help-Seeking

Precarious manhood theory (PMT) has been used in research studying the relationship between masculinity, threats to manhood, and physical aggression (e.g. Bosson, Vandello, Burnaford, Wasti, & Weaver, 2009; Weaver, Vandello, Bosson, & Burnaford, 2010). However, in the existing field of research on the relationship between masculinity and mental health help-seeking, PMT has surprisingly not been widely referenced. This gap in the current literature indicates the importance of applying this uniquely useful theory in the present study to help inform hypotheses examining the relationship between traditional masculinity, symptom severity, and help-seeking. The relationship between higher masculinity and lower help-seeking has been one of the most robust findings in help-seeking literature. Additionally, research supports a significant positive relationship between symptom severity and seeking psychological help, although this pattern is less clear among men. Drawing from PMT, endorsement of masculine

norms may help to explain why symptom severity is inconsistently related to help-seeking in men. From the PMT perspective, men who endorse higher levels of masculine norms may be unwilling to seek help, even at higher levels of symptom severity.

If we refer back to the common themes of masculinity and the main tenets of PMT, it becomes clear that core aspects of help-seeking behaviors violate many of the central commandments of traditional Western masculine norms. In this way, help-seeking threatens the already difficult to attain and easily lost status of manhood, even when experiencing significant mental health symptoms. For example, Mahalik, Good, and Englar-Carlson (2003), state in their review of research on masculinity and mental health help-seeking that seeking therapy runs counter to traditional male gender socialization. They observe that men who endorse traditional masculine gender norms have more difficulty accessing mental health care because of the restrictive nature of masculinity. Specifically, they argue that the masculine norms of self-reliance, emotional control, and physical toughness conflict with the key help-seeking-skills of admitting when help is needed, relying on others, and being able to identify and name an emotional issue.

Campbell (1996), describes in a review how key aspects of traditional masculine socialization are at odds with the important tasks of seeking mental health care and thus prohibit men from pursuing this route. First, self-sufficiency and independence are highly prized abilities in traditional masculinity, therefore asking for help represents a failure to rely only on one's self. Second, from a young age some males are taught to restrict expressing emotions, often to avoid appearing weak. Since expressing and

exploring emotions are core interventions in traditional talk therapy, this concept of mental health care conflicts with powerful messages many men are taught from boyhood through manhood. Lastly, Campbell states that men have a tendency to be more achievement oriented toward tangible, success-oriented goals versus being self-reflective and process oriented. Since therapy is often more process focused and self-reflective, men who endorse traditional masculine norms often see therapy as a waste of time or irrelevant to their typical goals (Campbell, 1996). In order to engage in help-seeking behaviors an individual must be vulnerable, expressive, and willing to rely on others. However, expressing these qualities can result in fear of being categorized by the self and others as less masculine. Therefore, avoidance of help-seeking serves to maintain and protect the hard-earned and precarious status of manhood.

Although PMT has not yet been widely integrated into research on help-seeking in men, there is considerable research demonstrating links between masculinity constructs and help-seeking that provide support for this theory in the context of help-seeking. Masculinity has been one of the most robust and consistent predictors of lower help-seeking in the current field of literature. Higher conformity to masculine norms has been found to be negatively related to seeking medical and mental health care (e.g., Levant, Wimer, & Williams, 2011; Mahalik, Good, & Englar-Carlson, 2003). In a review of current research on masculinity and mental health help-seeking, Vogel and Heath (2016) report that higher endorsement of various measures of masculinity, including masculine ideology, conformity to gender norms, and gender role conflict, have been consistently associated with lower rates of help-seeking across diverse settings and

populations. This negative relationship is an unfortunate paradox which exacerbates existing disparities in men's well-being, considering that higher endorsement of masculine norms both increases the severity of men's issues and acts as a barrier to getting help.

More specifically, researchers have examined the link between masculinity and help-seeking attitudes across a variety of specific problem types. For example, McDermott et al. (2018), found that higher conformity to masculine role norms has been associated with lower psychological help-seeking intentions for suicidal ideation in male college students. In this study, structural equation modeling revealed that the domains of self-reliance and emotional control had the strongest associations with lower intentions to seek help from both formal and informal sources (McDermott et al., 2018).

Regarding depression, Seidler, et al. (2016), reported that conformity to traditional masculine norms was found to negatively impact not only symptom expression and symptom management in depressed men, but also attitudes, intentions, and actual behaviors regarding seeking psychological help. In another study by Mahalik and Rochlen (2006), results revealed that men were far less likely to seek professional mental health care for depression if they endorsed traditional masculine norms to a higher degree, with evidence that this relationship became stronger as endorsement increased in the domains of dominance, pursuit of status, violence, power over women, playboy, and disdain for homosexuals. Lastly, in a dissertation by Cole (2013), results found both gender role conflict and conformity to masculine gender norms to be associated with

lower levels of willingness to seek help for depression from friends, family, and professionals.

Vogel, Heimerdinger-Edwards, Hammer, and Hubbard (2011), examined the generalizability of previous findings that masculinity has a negative influence on psychological help-seeking by analyzing data on men across diverse racial/cultural groups and sexual orientations. Results found that the relationship between masculine norms and help-seeking attitudes was significant across most racial/cultural groups. Specifically, this link was significant for African American, European American, and Latino American men, with the strongest association found for African American men. However, this link was not significant for Asian American men. In addition, a significant link was found between masculine norms and help-seeking attitudes for men identifying as heterosexual, whereas masculinity did not display this significance for men identifying as gay (Vogel, et al., 2011).

In summary, targeting help-seeking behavior is vital in the effort to improve men's mental health. The reviewed research details current empirical findings on the negative relationship between masculinity and help-seeking and builds support for the utility of PMT in informing hypotheses for the present study. Integrating PMT with Theory of Planned Behavior (TPB) can provide broader context for understanding this relationship. TPB's model states that social norms influence attitudes, which predict intentions, which then predict behaviors. PMT and TPB are complementary in specifically explaining help-seeking as related to masculinity among men. Traditional

gender norms (which align with TPB's social norms) are associated with men's attitudes and intentions toward seeking help, thereby reducing their rates of help-seeking behavior.

Masculinity, Symptom Severity, and Help-Seeking

The above findings establish theoretical and empirical connections between masculinity and psychological help-seeking, laying the groundwork for the present study. Researchers have developed different theories to understand measurement of masculinity, distinguished predictive qualities of different measures of masculinity and domains within measures, and validated this relationship in diverse populations and across different psychological problems. However, limitations of this field of research include that it has largely neglected to frame the connection between masculinity and help-seeking simultaneously in relation to levels of symptom severity. As previously discussed, psychological symptom severity is an important predictor of help-seeking, but findings have been less consistent among men specifically.

Vogel and Heath (2016), state that it is critical to avoid overgeneralizing male gender norm socialization as a monolithic cause of lower help-seeking in men, and assert the need to account for the role of contextual issues such as problem severity. This represents a considerable gap in the current literature. Although research has established a generally positive relationship between symptom severity and help-seeking intentions, studies are still limited that have measured this relationship while simultaneously examining degree of conformity to masculine gender norms.

Research from the masculinity and help-seeking literature overwhelmingly suggests that men have lower levels of help-seeking for mental health. Some studies have suggested that higher levels of symptom severity are related to greater levels help-seeking among men, although findings are mixed. These studies are limited and it is unclear if this relationship is true for *all* men. For example, many studies have found that men are less likely than women to seek help for medical care (O'Hara & Caswell, 2012) and mental health issues (e.g. Nam, et al., 2010; Wendt & Shafer, 2016; Wang et al., 2005), even when they endorse similar levels of distress or symptom severity (Biddle et al., 2004). Moreover, men wait almost two years longer on average than women to seek adequate mental health care (Maguen et al., 2012). However, other studies have found that men only endorsed seeking less help than women when problem severity was low, and that men endorsed seeking equal to or greater help than women when problems were more severe (Vogel & Heath, 2016). One of the limitations of previous research on problem severity and help-seeking is that analyses are conducted on all men, not allowing for examination of how this severity-help-seeking relationship may differ in different groups of men. Some men may be willing to seek help at lower levels of symptom severity. Others may be hesitant to seek help at any level of symptom severity, as indicated by lower levels of help-seeking and longer delays in help-seeking among men overall. The relationship between symptom severity and help-seeking may depend on levels of conformity to masculine norms.

According to PMT, the threat posed by seeking help may help to explain why some men avoid accessing help, even in the face of psychological symptoms. PMT states

that a structural feature of socialized masculinity is it's easily lost and difficult to attain nature. The precariousness of its structure can explain why masculinity may shape men's behaviors in harmful ways. According to PMT, men who endorse traditional masculine gender norms must continually guard against displaying behaviors or traits that would threaten the elusive and tenuous social status of manhood (e.g. Bosson, Taylor, & Prewitt-Freilino, 2006; Vandello et al., 2008; Vandello & Bosson, 2013). Researchers have argued that seeking professional counseling is, in many ways, fundamentally at-odds with masculine norms. Experimental studies testing PMT have found that, compared to control groups, men whose manhood was threatened displayed compensatory strategies that included exaggerating their masculinity, avoiding stereotypically feminine preferences (Cheryan, 2015), aggression (Bosson et al., 2009; Bosson & Vandello, 2011; Vandello & Bosson, 2013), risk-taking, and deriding others who present as gender atypical (Kosakowska-Berezecka, 2016). Therefore, if the distress of higher symptom severity stimulates masculine men to feel vulnerable and threatened, this may activate compensatory strategies of increasing avoidance of un-masculine behaviors, such as seeking help, and exaggerating their masculinity by bolstering self-reliant, emotionally controlled, and invulnerable aspects of their self-concept.

In other words, the threat of significant mental health symptoms may not outweigh the threat posed by seeking help for men who highly endorse traditional masculinity. Although a positive relationship generally exists between symptom severity and help-seeking, within the population of men with mental health symptoms, there is considerably more variation in help-seeking. Therefore, the severity-help-seeking

relationship is more complex among men, considering that more severe symptoms do not predict higher help-seeking as consistently compared to women. Higher masculinity may significantly lessen the strength of the relationship between severity and help-seeking. For example, when masculinity is low, increases in symptom severity would lead to increases in help-seeking indicators, but when masculinity is high, increases in severity would not lead to the same corresponding increases in help-seeking. However, few studies have examined the potential moderating effect of masculinity on the relationship between symptom severity and men's help-seeking attitudes.

Studies that have measured symptom severity, masculinity, and help-seeking in the same model are limited, and even fewer studies have examined the potential moderating role of masculinity in this relationship. A dissertation by Campbell (2006), provides one such rare example. Campbell hypothesized that, in a sample of 120 male African American college students, masculine gender role would act as moderator on the relationship between problem severity and attitudes toward help-seeking. Hierarchical multiple regression analyses results found that the moderation hypothesis was supported, with a significant interaction between problem severity and masculine gender role ($\beta = -.181, p < .05$). In comparison, androgynous and feminine gender roles did not serve to moderate the problem severity and help-seeking attitude relationship. This researcher concluded that problem severity showed less impact on male African American college student's help-seeking attitudes when they endorsed a higher level of masculine gender role (Campbell, 2006).

A second study examined psychological distress as a moderator on the relationship between masculinity self-threat and help-seeking. In a dissertation by Blake (2008), the relationships between masculine ideology, “self-threat,” psychological distress, and help-seeking attitudes were examined. Self-threat was a composite variable created for the purpose of the study and was comprised of self-stigma, shame, self-disclosure tendency, and self-disclosure expectations. Higher masculine ideology was related to higher self-threat and more negative attitudes toward seeking help. However, psychological distress was not found to be a moderator between self-threat and help-seeking attitudes.

Few studies have tested the potential moderating effect of either masculinity or symptom severity. There is theoretical justification for examining either variable (masculinity or symptom severity) as the moderator. Statistically speaking, the analysis and results would be the same whether masculinity or symptom severity were included as the moderator. For the purpose of the present study, we argue that PMT provides the stronger theoretical justification for examining masculinity as the moderator. It was proposed that masculinity would lessen the effect of symptom severity on help-seeking because higher masculinity results in more salience of the precariousness of manhood when faced with seeking help. In addition, since masculinity is already known to be one of the most robust and consistent predictors of lower help seeking, it is not as imperative to examine why some highly masculine men seek help while others don't. Conversely, because less is known about why symptom severity is such an inconsistent predictor of help seeking in men, it is more pressing to understand why some men experiencing

symptoms do not seek help. Some men may be willing to seek help at lower levels of symptom severity, while others refuse to seek help at any level of symptom severity, as indicated by lower levels of help-seeking and longer delays in help-seeking among men overall. Therefore, the present study seeks to examine whether the relationship between symptom severity and help-seeking depends on levels of conformity to masculine norms.

In summary, available research has been limited that simultaneously examines the relationships between symptom severity, masculinity, and help-seeking. Although symptom severity is generally predictive of more positive attitudes and higher intent toward seeking help, findings have been mixed when looking specifically at men. Results from the few moderation studies available provide some information on the potential relationship of these variables. Problem severity did not moderate the relationship between masculinity and help-seeking attitudes (Blake, 2008), while Campbell (2006) reported that masculinity did moderate the relationship between problem severity and help-seeking attitudes. These moderation studies provide incremental support for the moderating effect of symptom severity compared to a significant moderating effect of masculinity. Additionally, PMT supports the moderating effect of masculinity on this relationship. Fundamental aspects of help-seeking require men to violate key masculine norms, and because manhood is difficult to attain and easily lost, seeking help becomes an emasculating threat which is avoided or delayed, even when symptom severity is high. Therefore, higher conformity to masculine norms would result in more avoidance of help-seeking and potentially outweigh the effects of symptom severity on help-seeking.

The present study builds upon previous research by seeking to clarify the potential moderating effect of masculine norms on the relationship between psychological symptom severity and intentions to seek psychological help. This study will seek to improve upon the psychometric validity of previous research. Firstly, Campbell's (2006) study used Bem's (1974) Bem Sex-Role Inventory (BSRI), to measure masculinity. However, in the current field of research on masculinity and help-seeking, the BSRI is considered an outdated measure and not as closely related to help-seeking when compared to masculinity constructs measuring conformity to masculine norms or endorsement of traditional masculine ideology (e.g., Berger et al., 2005; Thompson & Pleck, 1995). For example, conformity to masculine gender norms has been identified as a unique predictor of attitudes toward seeking mental health care, beyond the influences of both traditional masculine ideology and gender role conflict (Levant & Richmond, 2007; Levant et al., 2009). Therefore, the present study will address limitations of previous research by utilizing Mahalik's (2003a), Conformity to Masculine Norms Inventory (CMNI) to measure masculinity.

Secondly, the present study will improve upon the methodology of previous related research. The present study will utilize intention to seek help as an outcome measure as intention is a more closely related construct, when compared to attitudes, in relation to the criterion outcome of help-seeking behaviors. For example, Ajzen's (1991), Theory of Planned Behavior (TPB) posits that subjective social norms, attitudes toward a behavior, and perceived behavioral control serve to explain and predict intention which in turn predicts behavior. Since intention is a more proximal antecedent to

behavior than attitudes, intention to seek professional help will be the outcome variable of the present study.

Hypotheses

Three hypotheses are presented with the goal of assessing the relationships between conformity to masculine norms, symptom severity, and intentions to seek psychological help in male college students.

Hypothesis 1. Psychological symptom severity will predict intent toward seeking formal psychological help such that higher severity will predict higher intent toward seeking formal help. This hypothesis is based upon previous research that has associated higher levels of symptom severity to higher intent and more positive attitudes toward seeking mental health care (e.g. Biddle, Gunnell, Sharpe, & Donovan, 2004; Brown et al., 2014; Sullivan et al., 2007). However, the precise nature of the relationship between symptom severity and help-seeking specifically among men is less clear. Further research is needed in this area to clarify this relationship.

Hypothesis 2. Conformity to masculine norms will predict intent toward seeking formal psychological help such that higher conformity to masculine norms will have a negative relationship with intent toward seeking formal help. This hypothesis is based upon previous research that has consistently associated higher masculinity with lower help-seeking intention and attitudes to seek both medical and mental health care and both informal and formal help (e.g. Courtenay, 2000; Mahalik et al., 2003b; McDermott et al., 2018; Seidler et al., 2016).

Hypothesis 3. Conformity to masculine norms will moderate the relationship between symptom severity and help-seeking intention. This hypothesis is partially based on Campbell's (2006) dissertation, which found masculinity to significantly moderate the relationship between problem severity and help-seeking attitudes. However, research supporting this hypothesis is limited. The justification for this hypothesis is primarily based on Precarious Manhood Theory (PMT). PMT seeks to illuminate how a structural feature of manhood, its precarious nature, can explain why high masculinity is linked to harmful outcomes in men. PMT states that repeated social demonstrations of masculinity are needed to attain and maintain the status of manhood, which is easily diminished through a wide array of "emasculating" behaviors and traits. Since seeking help, especially for psychological issues, requires vulnerability, reliance on others, and emotional expression, seeking professional counseling is fundamentally at-odds with traditional masculine norms. Therefore, seeking help is likely to be evaluated as a threat to be avoided by masculine men, even in the face of significant psychological problem severity. In this way, PMT provides theoretical support for the hypothesis that conformity to masculine norms will moderate the relationship between symptom severity and help-seeking intentions.

Method

Participants

The present study utilized existing data that is part of a larger study. The total pool of potential participants were college students ($N = 345$), and 70.8% ($n = 250$) identified as female, 25.8% ($n = 89$) as male, and 1.7% ($n = 6$) as non-binary/non-conforming. However, given the focus on masculinity in the present study, participants were only included in analyses if they identified as “male.” Therefore, the total sample size for the present study was ($N = 89$). Participants were enrolled in psychology courses including introduction to psychology, research methods, introductory statistics, or other classes. The sample consisted of 42.7% freshmen, 23.6% sophomore, 15.7% junior, and 18.0% senior level in college. Ethnicity was reported by 41.6% ($n = 37$) of participants as Caucasian, 31.5% ($n = 28$) as Hispanic/Latino, 16.9% ($n = 15$) as Multiracial, 4.5% ($n = 4$) as African American, 3.4% ($n = 3$) as Asian/Pacific Islander, and 3.4% ($n = 3$) reported their ethnicity as “other.”

Sample. A power analysis was conducted to determine the appropriate sample size for a moderation analysis using G*Power (Faul, Erfelder, Buchner, & Lang, 2014). The analysis was based off the linear regression that will be used for this study. An estimated effect size of .024 for the hypothesized interaction between symptom severity and conformity to masculine norms was calculated based on previous research. Considering that few existing studies have measured these two constructs predicting help-seeking in the same model, effect sizes for the correlation ($r = .10$) between

psychological symptom severity and attitudes towards seeking professional psychological help (Blake, 2008), and the correlation ($r = -.25$) between masculinity and attitudes towards seeking professional psychological help (Levant et al., 2011), were multiplied to calculate the squared multiple correlation of $p^2 = .25$. This squared multiple correlation was calculated to correspond to an expected effect size of $f^2 = .024$ for the interaction between these two variables.

With an alpha of .05, a small effect size of .024, a standard power level of .80, and a total of three predictors, an a priori power analysis indicated that a minimum of 459 participants would be required to achieve appropriate power for the present study. A sensitivity analysis was conducted to estimate the power for the linear regression analysis. With the current sample size of $N = 89$, with a small effect size of .024, and a total of three predictors, the results of the estimated power was calculated as .21, indicating that the present study was underpowered.

Instrumentation

Participants provided demographic information including gender, and race/ethnicity, and completed multiple scales utilized in the present study including the Conformity to Masculine Norms Inventory (CMNI), the General Help-Seeking Questionnaire (GHSQ), and the DSM-5 Cross-Cutting Symptom Measure which are described below. Participants also filled out additional measures that will not be utilized in the present study that included measures of substance abuse and social support, among others.

Masculine norms. Conformity to traditional masculine norms was measured using the 22-item version of the Conformity to Masculine Norms Inventory (CMNI-22) developed by Mahalik et al. (2003a). This widely used measure assesses degree of endorsement of traditional masculine gender norms spanning cognitive, affective, and behavioral dimensions across 11 domains. Factor analysis confirmed support for an 11-factor model. Domains include “Winning, Emotional Control, Risk-Taking, Violence, Dominance, Playboy, Self-Reliance, Primacy of Work, Power over Women, Disdain for Homosexuality, and Pursuit of Status.” Individuals are asked to think of their own feelings, beliefs, and actions and rate their personal endorsement of each statement on a 4-point Likert scale ranging from strongly disagree to strongly agree. Nine items are reverse coded with higher total scores reflecting higher conformity to traditional masculine gender norms. Total scores can be summed using all 22 items, which produces an overall score. Alternatively, total mean scores can be calculated, or the 11 domains can be analyzed individually, using the sum of each two-item subscale. Sample items include: “I tend to share my feelings” (reverse scored), “It is important to me that people think I am heterosexual,” and “It bothers me when I have to ask for help.”

The CMNI was found to be a reliable and valid measure of masculinity. Internal consistency of the total CMNI score was found to be very high as measured by Cronbach’s alpha ($\alpha = .94$) and high test-retest reliability at 2 to 3 weeks ($r_{tt} = .95$). Significant correlations with closely related constructs indicated good convergent validity including masculine gender role conflict ($r = .56$) and masculine gender role stress ($r = .40$). Concurrent validity was established through significant correlations in predicted

directions between conformity to masculine norms and psychological distress ($r = .20$), attitudes toward seeking professional psychological help ($r = -.49$), social dominance ($r = .48$), aggression ($r = .55$), and attitudes about muscularity ($r = .29$). CMNI total score correlated significantly with social desirability ($r = -.34$) indicating discriminant validity (Mahalik et al., 2003a).

Intentions to seek psychological help. The General Help-Seeking Questionnaire (GHSQ; Wilson, Deane, Ciarrochi, & Rickwood, 2005) consists of 14-items constructed to measure help-seeking intentions. The scale asks individuals to rate their intention to seek help, if they were experiencing an emotional or personal problem, from informal sources including an intimate partner, friend, parent, and family member; and from formal sources including a mental health professional (psychologist, social worker, counselor), doctor, phone helpline, and religious leader on a seven-point Likert scale ranging from extremely unlikely to extremely likely. The item indicating “I would not seek help from anyone” is reverse coded when calculating overall help-seeking intentions. Higher scores indicate higher intentions to seek help from these categories. Total scores can be calculated with an average of all items, examined as individual sources of help, or by combining scores into informal or formal help subscales. In the present study, help-seeking intention scores from the four items indicating formal sources (mental health professional, doctor, religious leader, and phone helpline) will be averaged into one total score.

Reliability of the GHSQ has been assessed as satisfactory with Cronbach’s alpha at $\alpha = .85$, demonstrating good internal consistency, and test-retest reliability at $r_{tt} = .92$,

indicating reliability between administrations across time (Wilson et al., 2005). Validity was assessed through following up 3-weeks after the administration of the GHSQ to measure actual help-seeking behaviors across formal and informal dimensions. The validity of the GSHQ was supported with a positive relationship between the GHSQ and actual help-seeking behaviors. Validity specifically regarding the utility of using the GHSQ to measure mental health help-seeking was also supported. Researchers reported a positive relationship between perceived quality of past experiences with mental health care and help-seeking intentions for personal-emotional problems and suicidal thoughts as measured by the GHSQ; help-seeking intentions were negatively associated with perceived barriers to seeking mental health care for suicidal thoughts, but not for personal-emotional problems (Wilson et al., 2005).

Psychological symptom severity. Severity of psychological distress was measured using the DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure (APA, 2013), and will be referred to as the DSM-5 Cross-Cutting measure. This instrument was designed as a screening tool to measure severity of symptoms across a wide range of common psychological problems including depression, anxiety, mania, anger, suicidal ideation, somatic distress, sleep disturbance, psychosis, memory issues, dissociation, personality functioning, repetitive thoughts, and substance use. Participants are asked to rate “how much (or how often) [they] have been bothered by each symptom over the past two weeks” on a 5-point Likert scale ranging from 1 (none, not at all) to 5 (severe, nearly every day). A score of 2 or higher on any item suggests the presence of a clinically relevant mental health problem in most domains. Two exceptions include the items for

suicidal ideation and substance use where a score of 1 or higher suggests a relevant problem. Although the DSM–5 Cross-Cutting measure was developed as a clinical screening tool, for the present study, item scores will be averaged to indicate general symptom severity encompassing all domains, with higher scores indicating higher symptom severity.

Test-retest reliabilities of the cross-cutting symptom domains were good to excellent when administered to adults, with the exception of the two manic items which were $r_{tt} = 0.53$ and $r_{tt} = 0.56$ (Narrow et al., 2013). The DSM–5 Cross-Cutting measure has been found to have fair to good reliability and validity in a sample of college students (Bravo, Villarosa-Hurlocker, & Pearson, 2018). Cronbach's alpha internal consistency ranged from .61 to .84 for the 13 subscales corresponding to the domains of symptomatology.

Convergent validity was supported with significant correlations between domains of the DSM–5 Cross-Cutting measure and other scales measuring the same or similar construct. Results included $r = .67$ between the depression subscale and the DASS-21 depression subscale, $r = .66$ between sleep disturbance domain and insomnia, $r = .58$ between the anxiety subscale and the DASS-21 anxiety subscale, and $r = .45$ between the substance use domain and the AUDIT substance use problems subscale. All 13 subscales were significantly related to theoretically relevant constructs, including being negatively related to self-esteem and positively related to posttraumatic stress, which indicates criterion-related validity (Bravo et al., 2018).

Procedure

Data collection. The collection of the data for this study was approved by the Institutional Review Board under approval number IRB 15-224 (Dr. Carrie Aigner), with Zahra Shine designated as personnel authorized to analyze the data. Data collection for the entire data set, which was part of a larger existing study, is ongoing, however, the subset of the data used for the present study was collected from spring semester of 2018 to the spring semester of 2019. Completion of the survey takes approximately one hour. Participants are college students mainly enrolled in psychology courses including introduction to psychology, research methods, introductory statistics, or other classes. Recruitment is conducted through an online psychology research participation pool available only to university students. All participation is voluntary and the majority of participants are granted extra credit toward a selected course for their participation in the study. Informed consent is given by each participant and data collected are anonymous.

Data Analysis

For hypotheses one, two, and three a regression analysis was run using SPSS to examine the relationships between masculine norms and help-seeking intentions, psychological symptom severity and help-seeking intentions, and an interaction between masculine norms and symptom severity related to help-seeking intentions. All three variables, masculine norms, symptom severity, and their interaction were entered into the same regression model predicting formal help-seeking intentions.

Benefits and Potential Risks

Besides the potential for a small amount of extra credit towards a course of their choosing, there were no immediate benefits to participants. The potential risks of participating in the study included the possibility of evoking negative feelings by taking the survey. This potential risk was mitigated by allowing participants to skip questions they were uncomfortable answering and providing participants with information about local psychological services that were available if needed.

Results

Preliminary Analyses

Missing data for each of the primary variables were evaluated. On the 22-item CMNI, four cases, out of 89, included any missing items. One case included four missing items on the CMNI, one case included two missing items, and two cases included one missing item each. For the DSM Cross-Cutting Measure, five cases had missing items. One case included two missing items and four cases included one missing item each. For the GHSQ formal help-seeking subscale, one case had one missing item. Total scores were averaged instead of summed, for the CMNI, DSM Cross-Cutting, and GHSQ measure, in order to conserve the sample size and lessen the impact of missing data on total scores. Both mean and sum totals have been reported for CMNI in existing literature (Levant et.al, 2011; Mahalik et al., 2003b).

Normality of the primary study variables were evaluated in regards to their skewness and kurtosis in SPSS ($N = 89$). Values of skewness and kurtosis within the limits of ± 2 are generally considered to be acceptable (Field, 2009; Gravetter & Wallnau, 2014). No problems with kurtosis or skew were detected in any of the variables, with one exception. Due to a skew ratio of 3.06 for the DSM symptom severity measure, a square root transformation was used. The square root transformation resolved the problem with non-normality and brought the skew ratio to 0.35 for the DSM measure, which is well within acceptable limits. Kurtosis for DSM was within normal limits at a ratio of $-.01$. After the square root transformation, DSM_{sq} was -1.86 , which is just within the threshold

of what is considered acceptable. All regression analyses were performed using the square root transformed DSM variable.

Descriptive statistics, including means and standard deviations were calculated for each measure used in the study and are presented in Table 1 by gender ($N = 346$) and in Table 2 by racial/ethnic group among men ($N = 89$). A series of linear regression analyses predicting total scores of measures from race/ethnicity found no significant differences between groups on the DSM Cross-Cutting measure, $R^2 = .006$, $F(1, 87) = 0.50$, $p = .48$; CMNI $R^2 = .032$, $F(1, 87) = 2.92$, $p = .09$; GHSQ formal subscale, $R^2 = .01$, $F(1, 87) = 0.89$, $p = .35$, or GHSQ informal subscale, $R^2 = .002$, $F(1, 87) = 0.17$, $p = .69$. Bivariate correlations between measures among men are presented in Table 3.

Primary Analyses

Table 4 presents the results of the multiple regression analyses of conformity to masculine norms, symptom severity, and the interaction between conformity to masculine norms and symptom severity predicting intent to seek formal help. A multiple regression analysis was conducted with all three predictors entered into the same model. Results did not find conformity to masculine norms, psychological symptom severity, or their

Table 1
Descriptive Statistics by Gender (N = 345)

Gender	Men (<i>n</i> = 89)	Women (<i>n</i> = 250)	Non-binary (<i>n</i> = 6)	Total (<i>N</i> = 345)
DSM <i>M</i> (<i>SD</i>)	0.91 (0.77)	1.10 (0.77)	1.34 (0.90)	1.06 (0.77)
GHSQ formal <i>M</i> (<i>SD</i>)	3.21 (1.32)	3.19 (1.30)	3.06 (1.65)	3.19 (1.31)
GHSQinformal <i>M</i> (<i>SD</i>)	4.67 (1.29)	4.66 (1.28)	4.24 (2.31)	4.66 (1.30)

Note. CMNI = Conformity to Masculine Norms Inventory (mean score); DSM = DSM Cross-Cutting Level 1 Measure (mean score); GHSQ formal = General Help-Seeking Questionnaire, formal subscale (mean score); GHSQ informal = General Help-Seeking Questionnaire, informal subscale (mean score).

Table 2
Descriptive Statistics by Race/Ethnicity among Men (N = 89)

Race/Ethnicity	White (<i>n</i> = 37)	Latino (<i>n</i> = 28)	Multi-Race (<i>n</i> = 15)	Asian/Pacific (<i>n</i> = 3)	Black (<i>n</i> = 4)	Other Race (<i>n</i> = 3)
CMNI <i>M</i> (<i>SD</i>)	1.68 (0.28)	1.60 (0.32)	1.59 (0.19)	1.92 (0.27)	1.57 (0.19)	1.56 (0.20)
DSM <i>M</i> (<i>SD</i>)	1.01 (0.77)	0.98 (0.77)	0.75 (0.63)	0.42 (0.20)	0.55 (0.49)	0.57 (0.49)
GHSQ formal <i>M</i> (<i>SD</i>)	3.25 (1.26)	2.98 (1.11)	3.32 (0.89)	3.50 (3.12)	3.08 (0.96)	3.67 (0.52)
GHSQ informal <i>M</i> (<i>SD</i>)	4.57 (1.30)	4.57 (1.12)	4.63 (1.13)	4.17 (2.47)	4.98 (1.17)	4.98 (1.78)

Note. CMNI = Conformity to Masculine Norms Inventory; DSM = DSM Cross-Cutting Level 1 Measure; GHSQ formal = General Help-Seeking Questionnaire, Formal Subscale; GHSQ informal = General Help-Seeking Questionnaire, Informal Subscale

Table 3
Intercorrelations between Primary Study Variables among Men (N = 89)

	CMNI	DSMsq	GHSQformal	GHSQinformal
CMNI	1	-.005	.026	.047
DSMsq		1	-.065	-.324**
GHSQformal			1	.435**
GHSQinformal				1

Note. ** Correlation is significant at the $p < .01$ level. CMNI = Conformity to Masculine Norms Inventory; DSMsq = DSM Cross-Cutting Level 1 Measure (square root transformed); GHSQformal = General Help-Seeking Questionnaire, formal subscale; GHSQinformal = General Help-Seeking Questionnaire, informal subscale

interaction to significantly predict intentions to seek formal help for mental or emotional problems, $R^2 = .007$, $F(1, 85) = 0.20$, $p = .90$. Together, the set of variables predicted only 7% of the variance in intentions to seek formal help, which did not exceed random chance. Therefore, the present study did not find support for hypothesized effects.

Below, tests of hypotheses one through three are detailed.

Hypothesis 1. Psychological symptom severity was not a significant predictor of intent toward seeking formal psychological help.

Hypothesis 2. Conformity to masculine norms was not a significant predictor of intent toward seeking formal psychological help.

Hypothesis 3. Conformity to masculine norms did not significantly moderate the relationship between symptom severity and help-seeking intention. No interaction effect was found between masculine norms and symptom severity in regards to their prediction of intent to seek formal psychological help.

Table 4
Multiple Regression Examining Masculine Norms, Psychological Symptom Severity, and their Interaction on Intentions to Seek Formal Help among Men (N = 89)

	b^*	p	r^2
DSMsq	-.079	.47	.0002
CMNI	.039	.89	-.0061
Interaction	-.012	.97	-.00002

Note. Model $df(3, 85)$, * $p < .05$

Discussion

The present study aimed to build upon existing research by examining intentions to seek formal mental health care in male college students, as predicted by conformity to masculine norms, psychological symptom severity, and an interaction between masculine norms and symptom severity. Neither psychological symptom severity nor conformity to masculine norms were related to intent toward seeking formal psychological help. Conformity to masculine norms did not significantly moderate the relationship between symptom severity and help-seeking intention.

The nonsignificant results for hypotheses one, two, and three may be due to the extremely underpowered nature of the present study, based upon the available male sample size of $N = 89$. An a priori power analysis estimated that a sample size of $N = 459$ would be required to find an effect size of $f^2 = .024$, in a multiple regression with three total predictors. In addition, a sensitivity analysis was conducted and estimated the power of the present study to be .21, based upon the existing sample size of $N = 89$. Therefore, the chance that the nonsignificant hypotheses are due to Type II errors is high in the present study. If an adequate sample size were attained, this may have resulted in different outcomes regarding the significance of the hypotheses of the present study.

For hypothesis one, regression results did not find a significant relationship between symptom severity and intention to seek formal help. Previous research has generally found higher levels of symptom severity to be associated with greater intent or more positive attitudes toward seeking mental health care in the general population (e.g. Biddle, Gunnell, Sharpe, & Donovan, 2004; Brown et al., 2014; Cramer, 1999; Sullivan

et al., 2007; Vogel & Wei, 2005). However, other studies report a negative relationship between psychological distress and help-seeking attitudes (Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998). Moreover, this relationship appears to be even more complex among men. For example, in a sample of Chinese students, Chang (2007), reported that higher depression scores predicted more negative help-seeking attitudes, and a significant depression-gender interaction suggested that more severe symptoms were a stronger predictor of negative help-seeking attitudes for male students. Therefore, the results of the present study provide further context for understanding the relationship between symptom severity and formal help-seeking among men. Of note, the present sample displayed a negative skew on symptom severity, representing overall low levels of severity. Future research should aim to recruit a larger sample including men experiencing a wider range of symptom severity.

In order to better understand the nature of these results, exploratory analyses were conducted. A non-significant correlation was found between symptom severity and formal help-seeking intent. However, in follow-up exploratory analysis, a significant negative correlation ($r = -0.24, p < .01$), was detected between symptom severity and informal help-seeking intent. This correlation indicates that higher symptom severity was related to lower intent to seek informal help from an intimate partner, friend, parent, or other family member regarding emotional or psychological problems. While previous research has reported inconsistent findings regarding symptom severity and help-seeking in general, this negative correlation with informal help seeking was unexpected. One possible explanation for this finding is that people with higher levels of mental health

symptoms can experience social isolation across all types of relationships, both as a side effect of their symptoms and as a result of stigma or social exclusion (Harvey & Brophy, 2011). A further potential explanation for this result in a male sample is that perhaps men may be more comfortable in seeking formal help because such sources are confidential and not connected to their personal lives. As such, men might be more reluctant to seek informal help, as this would expose their vulnerabilities to those in their immediate social network. Such personal exposure could be evaluated as a threat to their masculine social status. Further research is needed in order to better characterize the relationship between symptom severity and informal versus formal help-seeking in men.

For hypothesis two, regression results did not find a significant relationship between conformity to masculine norms and intention to seek formal help. These results were inconsistent with a large body of research that has consistently associated higher masculinity with lower help-seeking attitudes, intention, and behaviors regarding both medical and mental health care and both informal and formal sources of help (e.g. Courtenay, 2000; Mahalik et al., 2003b; McDermott et al., 2018; Seidler et al., 2016). Because these results are inconsistent with previous research, and the chance of a Type II error was high in the present study, these results may have simply been due to inadequate power. However, alternative reasons for these unexpected findings could include the presence of extraneous variables that were not measured or controlled for in the present study. Considering that random selection was not employed in the recruitment of participants, it is possible that self-selection bias may have skewed the results. The

sample of men who agreed to participate in a study on mental health may not have been representative of all men experiencing distress.

For hypothesis three, regression results did not find a significant interaction between symptom severity and conformity to masculine norms predicting intention to seek formal help. This hypothesis was partially based on Campbell's (2006) dissertation, which found masculinity to significantly moderate the relationship between problem severity and help-seeking attitudes. However, very little existing research has simultaneously examined these constructs in the same model, and empirical support for this hypothesis was limited. Considering that the main effects for symptom severity and masculinity were not significant in the present study, it follows that a significant moderator would not be detected. Inadequate power of the present study may have limited the extent to which this hypothesis could be tested.

Limitations

The present study examined masculinity, symptom severity, and help-seeking intentions in a sample of male college students in a rural community. This composition of participants causes an issue with external validity. Young adults who attend a four-year university may be distinctively different than young adults who do not attend a university. Therefore, results of the present study cannot be confidently generalized to all young adults, or men in general, because extraneous variables may be unaccounted for.

Furthermore, a limitation of the present study, and the field of symptom severity research, includes a lack of a consistently used measure of symptom severity. Consensus

on this matter is needed to create consistent criteria for symptom severity across studies. If the measurement of symptom severity were consistent, researchers could better examine the actual prevalence rates across populations and between studies. As of now, the lack of consistency in symptom severity research may be over- or under-inflating the prevalence rates of common psychological problems and acting as a barrier to clarifying the relationships between masculinity, symptom severity, and help seeking in men.

Scoring of the DSM Cross-Cutting measure in the present study presents another limitation regarding the measurement of symptom severity. Although the DSM Cross-Cutting measure was developed primarily as a clinical screening tool, its creators also sought to facilitate research on the dimensional nature of commonly experienced mental health symptoms. The measure was meant to address the issue of high comorbidity rates across diagnostic categories by assessing the dimensional versus categorical nature of mental health problems (Bravo et al., 2018). Considering that the present study endeavored to measure symptom severity across multiple domains, the DSM Cross-Cutting measure was selected. However, available scoring instructions for the measure were limited to clinical screening uses, and no alternative methods were found to assess total symptom severity scores across all domains for research purposes. Therefore, in the present study, total mean scores were calculated to assess general symptom severity across symptom types. However, the use of the mean as a total score may have contributed to the negative skew found regarding symptom severity. Future research utilizing the DSM Cross-Cutting measure to examine overall dimensional symptom severity should aim to develop alternative scoring methods.

Another factor that may be a limitation concerns inconsistencies in how constructs were measured in comparison with each other. For example, psychological symptom severity was measured over the past two weeks, while conformity to masculine norms and help-seeking intention were measured as generally stable non time-limited constructs. This could be a limitation in both the present study and previous research as temporal consistency across all measures could aid in assessing the mental health factors associated with masculinity and help-seeking intentions. In the present study, symptom severity was measured separately and not referred to when participants answered the items measuring intent to seek help for a non-specific emotional or psychological problem. In future research on the relationship between symptom severity and help-seeking, help-seeking intention might be better measured as related specifically to the psychological symptoms currently experienced.

An additional limitation is that the majority of masculinity research is conducted with cisgender, heterosexual men and frames gender into artificial binary categories of male and female. Although male gender was also categorized in the present study in binary terms, in order to place it within the context of previous research, such generalizations are clearly a limitation found in the literature on men and masculinity. The use of gender binary conceptualization in help-seeking research has resulted in a failure to examine factors related to within-group, or within-person variability among help-seeking (Addis & Mahalik, 2003). In order to better understand and respond to disparities in men's health and help-seeking rates, it is important to be able to compare the impact of variables such as conformity to masculine norms across gender identities.

Implications and Recommendations for Future Research

The relationship between symptom severity, masculinity, and help-seeking intentions should be further evaluated given that the present research is lacking and somewhat inconsistent. Future research might also benefit from utilizing other research designs. Although correlational research measuring help-seeking attitudes or intentions contributes to our understanding of relationships between help-seeking and variables including masculinity, longitudinal research is needed to better understand the direction of these relationships.

Future research would benefit from utilizing samples of men experiencing a wider range of symptom severity, such as clinical samples. It would also be important to assess additional factors that could explain the relationship between masculinity and help-seeking. Vogel and Heath (2016), reviewed research on the relationship between masculinity and seeking mental health care, and stated the importance of examining how masculinity interacts with other identities held simultaneously by men, including age, race, geographic location, and sexual orientation, which may also affect mental health help-seeking behavior (Vogel & Heath, 2016).

The findings of the present study also serve to highlight the importance of measuring help-seeking intentions and symptom severity in men by linking help-seeking to current symptoms. As with the present study, the majority of research examining the relationship between symptom severity and help-seeking attitude and intention utilizes measures of general help-seeking, but fails to measure help-seeking in direct relation to

current symptoms. This misalignment represents a major limitation in the current field of literature. As such, future research should include the development of new validated measures that examine these constructs as directly related to one another.

In addition, it would also benefit future research in this area to explore potential mediators and moderators of this relationship between symptom severity and lower informal help-seeking. For example, Chang (2007), found that among Chinese college students, gender interacted with depression and anxiety differently in relation to help-seeking attitudes specifically in males. Although male students with higher depression reported more negative attitudes toward help-seeking compared to females, males with higher anxiety reported more positive attitudes toward help-seeking compared to females. Therefore, perhaps males with depression symptoms have more difficulty seeking informal help compared to those experiencing anxiety symptoms. Findings such as these point to the need for future research to further investigate how different types of symptoms may interact separately with symptom severity and help-seeking in men. These types of studies could help inform both research and practice, and especially help clinicians understand how to support male clients seeking treatment for their specific symptoms.

References

- Acevedo, B. P., Lowe, S. R., Griffin, K. W., & Botvin, G. J. (2013). Predictors of intimate partner violence in a sample of multiethnic urban young adults. *Journal of Interpersonal Violence, 28*(15), 3004-3022. doi: 10.1177/0886260513488684
- Addis, M. E., & Mahalik, J. R. (2003). Men, masculinity, and the contexts of help-seeking. *American Psychologist, 58*(1), 5-14. doi: 10.1037/0003-066X.58.1.5
- American College Health Association. (2017). American College Health Association-National College Health Assessment II: Reference Group Executive Summary Spring 2017. Hanover, MD: American College Health Association; Retrieved from: 2017.NCHA-II_SPRING_2017_REFERENCE_GROUP_EXECUTIVE_SUMMARY.pdf
- American Psychiatric Association. (2013). The DSM–5 Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult. Arlington, VA: American Psychiatric Publishing.
- American Psychological Association. (2015). Guidelines for psychological practice with transgender and gender nonconforming people. *American Psychologist, 70*(9), 832–864. Retrieved from <https://www.apa.org/practice/guidelines/transgender.pdf>
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology, 42*, 155–162. doi: 10.1037/h0036215
- Benjamin, R. M., (2010). Surgeon General's report: Multiple chronic conditions: a public health challenge. *Public Health Reports, 125*. 626-627. Retrieved from: <https://journals.sagepub.com/doi/pdf/10.1177/003335491012500502>

- Berger, J. M., Levant, R., McMillan, K. K., Kelleher, W., & Selles, A. (2005). Impact of gender role conflict, traditional masculinity ideology, alexithymia, and age on men's attitudes toward psychological help-seeking. *Psychology of Men & Masculinity*, 6(1), 73-78. doi:10.1037/1524-9220.6.1.73
- Biddle, L., Gunnell, D., Sharpe, D., & Donovan, J. L. (2004). Factors influencing help-seeking in mentally distressed young adults: A cross-sectional survey. *British Journal of General Practice*, 54, 248-253. Retrieved from: <https://bjgp.org/content/bjgp/54/501/248.full.pdf>
- Blackless, A., Charuvastra, A., Derrryck, A., Fausto-Sterling, A., Lauzanne, K., Lee, E. (2000). How sexually dimorphic are we? Review and synthesis. *American Journal of Human Biology* 12(2), 151-166. doi: 10.1002/(SICI)1520-6300(200003/04)12:2<151::AID-AJHB1>3.0.CO;2-F
- Blake, J. P. (2008). Psychological distress, masculinity ideology, and self-threat: A model of men's attitudes toward help-seeking (Doctoral dissertation). Retrieved from: <http://ezproxy.humboldt.edu/login?url=https://search.proquest.com/docview/304642019?accountid=11532>
- Bosson, J. K., Taylor, J. N., & Prewitt-Freilino, J. L. (2006). Gender Role Violations and Identity Misclassification: The Roles of Audience and Actor Variables. *Sex Roles*, 55(1/2), 13-24. doi: 10.1007/s11199-006-9056-5
- Bosson, J. K., Vandello, J. A., Burnaford, R. M., Weaver, J. R., & Wasti, S. A. (2009). Precarious Manhood and Displays of Physical Aggression. *Personality & Social Psychology Bulletin*, 35(5), 623-634. doi: 10.1177/0146167208331161

- Bosson, J. K., Vandello, J. A., (2011). Precarious manhood and its links to action and aggression. *Precarious Manhood and Its Links to Action and Aggression. Current Directions in Psychological Science* 20(2) 82-86. doi: 10.1177/0963721411402669
- Bravo, A. J., Villarosa-Hurlocker, M., & Pearson, M. R. (2018). College student mental health: An evaluation of the DSM–5 self-rated level 1 cross-cutting symptom measure. *Psychological Assessment*, 30(10), 1382-1389. doi: 10.1037/pas0000628
- Brown, J. S. L., Evans-Lacko, S., Aschan, L., Henderson, M. J., Hatch, S. L., & Hotopf, M. (2014). Seeking informal and formal help for mental health problems in the community: a secondary analysis from a psychiatric morbidity survey in South London. *BMC Psychiatry*, 14(1), 1–25. doi: 10.1186/s12888-014-0275-y
- Campbell, J. L. (1996). Traditional men in therapy: Obstacles and recommendations. *Journal of Psychological Practice*, 2(3), 40-45. Retrieved from: <http://psycnet.apa.org/record/1999-01627-005>
- Campbell, D. S. (2006). African American male college students' help-seeking attitudes as a function of problem severity and gender role. (Doctoral dissertation). Retrieved from <http://ezproxy.humboldt.edu/login?url=https://search.proquest.com/docview/621587982?accountid=11532>
- Carter, M. J. (2014). Gender socialization and identity theory. *Social Sciences* 3, 242-263. doi:10.3390/socsci3020242

- Chang, H. (2007). Psychological distress and help-seeking among Taiwanese college students: Role of gender and student status. *British Journal of Guidance & Counseling, 35*, 347-355. doi:10.1080/03069880701418789
- Courtenay, W. H. (2000). Constructions of masculinity and their influence on men's well-being: A theory of gender and health. *Social Science & Medicine, 50*(10), 1385. doi: 10.1016/S0277-9536(99)00390-1
- Cheryan, S., Schwartz Cameron, J., Katagiri, Z., & Monin, B. (2015). Manning up: Threatened men compensate by disavowing feminine preferences and embracing masculine attributes. *Social Psychology, 46*(4), 218-227. doi: 10.1027/1864-9335/a000239
- Cole, B. P. (2013). An exploration of men's attitudes regarding depression and help-seeking. (Doctoral dissertation). Retrieved from <http://digitalcommons.unl.edu/cehsdiss>
- Cramer, K. M. (1999). Psychological antecedents to help-seeking behavior: A reanalysis using path modeling structures. *Journal of Counseling Psychology, 46*, 381-387. doi :10.1037/0022-0167.46.3.381
- de Jonghe, F., Kool, S., van Aalst, G., Dekker, J., & Peen, J. (2001). Combining psychotherapy and antidepressants in the treatment of depression. *Journal of Affective Disorders, 64*(2-3), 217-229. doi: 10.1016/S0165-0327(00)00259-7
- Downs, M. F., & Eisenberg, D. (2012). Help-seeking and treatment use among suicidal college students. *Journal of American College Health, 60*(2), 104-114. doi:10.1080/07448481.2011.619611

- Eaton, W. W., Chen, C. Y., Bromet, E. J. (2011). Epidemiology of Schizophrenia. In M. T. Tsuang, M. Tohen, P. B. Jones, (Eds.) *Textbook of Psychiatric Epidemiology*. Wiley Online Library. doi: 10.1002/9780470976739.ch16
- Eisler, R. M., Skidmore, J. R., & Ward, C. H. (1988). Masculine gender-role stress: Predictor of anger, anxiety, and health-risk behaviors. *Journal of Personality Assessment*, 52(1), 133-141. Retrieved from:
<http://ezproxy.humboldt.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=6380210&site=ehost-live>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2008). G*Power Version 3.1.2 [computer software]. Universität Kiel, Germany. Retrieved from
<http://www.psych.uni-duesseldorf.de/abteilungen/aap/gpower3/download-and-register>
- Field, A. (2009). *Discovering statistics using SPSS*. London: SAGE.
- Flaskerud, J. H. (2014). Depression in men: Issues for practice and research. *Issues in Mental Health Nursing*, 35(8), 635-639. doi: 10.3109/01612840.2014.903015
- Folden, H. E. (1996). *Close-in-time deaths: A phenomenological investigation of the bereavement-mortality relationship in a sample of now deceased older widowed men* (Order No. AAM9544563). Available from PsycINFO. (619001290; 1996-95006-087). Retrieved from
<http://ezproxy.humboldt.edu/login?url=https://search.proquest.com/docview/619001290?accountid=11532>

- Gravetter, F., & Wallnau, L. (2014). *Essentials of statistics for the behavioral sciences* (8th ed.). Belmont, CA: Wadsworth.
- Goddard, E. (2002). Using the theory of reasoned action to predict undergraduate and graduate student help -seeking intentions: The effects of attitudes, subjective norms, "referral of others," and gender. (Doctoral dissertation). Retrieved from <http://ezproxy.humboldt.edu/login?url=https://search.proquest.com/docview/304643089?accountid=11532>
- Good, G. & Wood, P. (1995). Male Gender Role Conflict, Depression, and Help Seeking: Do College Men Face Double Jeopardy? *Journal of Counseling & Development*, 74, 70-75. doi: 10.1002/j.1556-6676.1995.tb01825.x.
- Harvey, C, & Brophy, L. (2011). Social isolation in people with mental illness. *Psychological Medicine*, 12(10), 73-78. Retrieved from: <https://medicinetoday.com.au/2011/october/regular-series/social-isolation-people-mental-illness>
- Himmelstein, M. S., Kramer, B. L., & Springer, K. W. (2018). Stress in strong convictions: Precarious manhood beliefs moderate cortisol reactivity to masculinity threats. *Psychology of Men & Masculinities*, doi: 10.1037/men0000187
- Hinson, J. A., & Swanson, J. L. (1993). Willingness to Seek Help as a Function of Self-Disclosure and Problem Severity. *Journal of Counseling & Development*, 71(4), 465-470.

- Kauer, S., Buhagiar, K., & Sanci, L. (2017). Facilitating mental health help seeking in young adults: The underlying theory and development of an online navigation tool. *Advances in Mental Health, 15*(1), 71-87. doi: 10.1080/18387357.2016.1237856
- Kosakowska-Berezecka, N., Besta, T., Adamska, K., Jaśkiewicz, M., Jurek, P., & Vandello, J. A. (2016). If my masculinity is threatened I won't support gender equality? The role of agentic self-stereotyping in restoration of manhood and perception of gender relations. *Psychology of Men & Masculinity, 17*(3), 274-284. doi: 10.1037/men0000016
- Lee, J., Friesen, B., Walker, J., Colman, D., & Donlan, W. (2014). Youth's Help-Seeking Intentions for ADHD and Depression: Findings from a National Survey. *Journal of Child & Family Studies, 23*(1), 144-156.
- 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*(2), 130-146. doi: 10.3149/jms.1502.130
- Levant, R. F., Wimer, D. J., & Williams, C. M. (2011). An evaluation of the health behavior inventory-20 (HBI-20) and its relationships to masculinity and attitudes towards seeking psychological help among college men. *Psychology of Men & Masculinity, 12*(1), 26-41. doi: 10.1037/a0021014
- Levant, R. F., Wimer, D. J., Williams, C. M., Smalley, K. B., & Noronha, D. (2009). The relationships between masculinity variables, health risk behaviors and attitudes

toward seeking psychological help. *International Journal of Men's Health*, 8(1), 3-21. doi: 10.3149/jmh.0801.3

Lopez, F.G., Melendez, M. C., Sauer, E. M., Berger, E., & Wyssmann, J. (1998). Internal working models, self-reported problems, and help-seeking attitudes among college students. *Journal of Counseling Psychology*, 45, 79-83. doi: 10.1037/0022-0167.45.1.79

Lorber, J., & Moore, L. J. (2002). Gender and the social construction of illness. Plymouth, UK: AltaMira Press.

Maguen, S., Madden, E., Cohen, B. E., Bertenthal, D., & Seal, K. H. (2012). Time to treatment among veterans of conflicts in Iraq and Afghanistan with psychiatric diagnoses. *Psychiatric Services*, 63(12), 1206-1212. doi: 10.1176/appi.ps.201200051

Mak, H. W., & Davis, J. M. (2009). The application of the theory of planned behavior to help-seeking intention in a Chinese society. *Social Psychiatry and Psychiatric Epidemiology: The International Journal for Research in Social and Genetic Epidemiology and Mental Health Services*, 49(9), 1517. doi: 10.1007/s00127-013-0800-1

Mahalik, J. R., Locke, B. D., Ludlow, L. H., Diemer, M. A., Scott, R. P. J., Gottfried, M., & Freitas, G. (2003a). Development of the conformity to masculine norms inventory. *Psychology of Men & Masculinity*, 4(1), 3-25. doi: 10.1037/1524-9220.4.1.3

- Mahalik, J. R., Good, G. E., & Englar-Carlson, M. (2003b). Masculinity scripts, presenting concerns, and help seeking: Implications for practice and training. *Professional Psychology: Research and Practice, 34*(2), 123-131. doi: 10.1037/0735-7028.34.2.123
- Mahalik, J. R., & Rochlen, A. B. (2006). Men's likely responses to clinical depression: What are they and do masculinity norms predict them? *Sex Roles, 55*(9-10), 659-667. doi: 10.1007/s11199-006-9121-0
- Mansfield, A. K., Addis, M. E., & Courtenay, W. (2005). Measurement of men's help seeking: Development and evaluation of the barriers to help seeking scale. *Psychology of Men & Masculinity, 6*(2), 95-108. doi: 10.1037/1524-9220.6.2.95
- McDermott, R. C., Smith, P. N., Borgogna, N., Booth, N., Granato, S., & Sevig, T. D. (2018). College students' conformity to masculine role norms and help-seeking intentions for suicidal thoughts. *Psychology of Men & Masculinity, 19*(3), 340-351. doi: 10.1037/men0000107
- Mckenzie, S. K., Jenkin, G., & Collins, S. (2016). Men's perspectives of common mental health problems: A metasynthesis of qualitative research. *International Journal of Men's Health, 15*(1), 80–104. doi: 10.3149/jmh.1501.80
- McLean, C. P., Asnaani, A., Litz, B. T., & Hofmann, S. G. (2011). Gender differences in anxiety disorders: Prevalence, course of illness, comorbidity and burden of illness. *Journal of Psychiatric Research, 45*(8), 1027-1035. doi: 10.1016/j.jpsychires.2011.03.006

- Murphy, S. L., Xu, J., Kochanek, K. D., Curtin, S. C., & Arias, E., (2017). Deaths: Final data for 2015. *National Vital Statistics Reports 66(6)*. Retrieved from:
https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_06.pdf
- Nam, S. K., Chu, H. J., Lee, M. K., Lee, J. H., Kim, N., & Lee, S. M. (2010). A Meta-analysis of gender differences in attitudes toward seeking professional psychological help. *Journal of American College Health, 59(2)*, 110-116.
- National Institute of Mental Health. (2019). *Suicide*. Retrieved from
<https://www.nimh.nih.gov/health/statistics/suicide.shtml>
- Narrow, W. E., Clarke, D. E., Kuramoto, S. J., Kraemer, H. C., Kupfer, D. J., Greiner, L., & Regier, D. A. (2013). DSM-5 field trials in the United States and Canada, part III: Development and reliability testing of a cross-cutting symptom assessment for DSM-5. *The American Journal of Psychiatry, 170(1)*, 71-82.
doi:10.1176/appi.ajp.2012.12071000
- O'Hara, B., & Caswell, K. (2012). Health status, health insurance, and medical services utilization: 2010. *Current population reports*. Washington, DC: U.S. Census Bureau.
- Oliffe, J. L., Phillips, M. J., (2008). Men, depression and masculinities: A review and recommendations. *Journal of Men's Health, 5(3)*. doi:10.1016/j.jomh.2008.03.016
- Piccinelli, M., & Wilkinson, G. (2000). Gender differences in depression: Critical review. *British Journal of Psychiatry, 177*, 486-492.
- Potts, M. K., Burnam, M. A., & Wells, K. B. (1991). Gender differences in depression detection: A comparison of clinician diagnosis and standardized assessment.

Psychological Assessment: A Journal of Consulting and Clinical Psychology,
3(4), 609-615. doi: 10.1037/1040-3590.3.4.609

Pederson, E. L., & Vogel, D. L. (2007). Male gender role conflict and willingness to seek counseling: Testing a mediation model on college-aged men. *Journal of Counseling Psychology*, 54(4), 373-384. doi: 10.1037/0022-0167.54.4.373

Rickwood, D., & Thomas, K. (2012). Conceptual measurement framework for help-seeking for mental health problems. *Psychology Research and Behavior Management*, 5, 173-183. doi:10.2147/PRBM.S38707

Robertson, J. M., & Fitzgerald, L. F. (1992). Overcoming the masculine mystique: Preferences for alternative forms of assistance among men who avoid counseling. *Journal of Counseling Psychology*, 39(2), 240-246. doi: 10.1037/0022-0167.39.2.240

Rogers, T. E. (2009). Using the theory of reasoned action to predict college men's intentions to seek psychological help. (Doctoral dissertation). Retrieved from <http://ezproxy.humboldt.edu/login?url=https://search.proquest.com/docview/304831112?accountid=11532>

Salk, R. H., Hyde, J. S., & Abramson, L. Y. (2017). Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. *Psychological Bulletin*, 143(8), 783-822. doi: 10.1037/bul0000102

Scherrer, J. F., Xian, H., Bucholz, K., Eisen, S. A., Lyons, M. J., Goldberg, J., True, W. R. (2003). A twin study of depression symptoms, hypertension, and heart disease

in middle-aged men. *Psychosomatic Medicine*, 65(4), 548-557. doi:

10.1097/01.PSY.0000077507.29863.CB

Schomerus, G., Matschinger, H., & Angermeyer, M. C. (2009). Attitudes that determine willingness to seek psychiatric help for depression: A representative population survey applying the Theory of Planned Behaviour. *Psychological Medicine*, 39(11), 1855-1865. doi: 10.1017/S0033291709005832

Seidler, Z. E., Dawes, A. J., Rice, S. M., Oliffe, J. L., & Dhillon, H. M. (2016). The role of masculinity in men's help-seeking for depression: A systematic review. *Clinical Psychology Review*, 49, 106-118. doi: 10.1016/j.cpr.2016.09.002

Sloan, C., Conner, M., & Gough, B. (2015). How does masculinity impact on health? A quantitative study of masculinity and health behavior in a sample of UK men and women. *Psychology of Men & Masculinity*, 16(2), 206-217. doi: 10.1037/a0037261

Smith, J. P., Tran, G. Q., & Thompson, R. D. (2008). Can the theory of planned behavior help explain men's psychological help-seeking? Evidence for a mediation effect and clinical implications. *Psychology of Men & Masculinity*, 9(3), 179-192. doi: 10.1037/a0012158

Sullivan, K. T., Ramos-Sánchez, L., & McIver, S. D. (2007). Predicting the use of campus counseling services for Asian/Pacific islander, Latino/Hispanic, and white students: Problem severity, gender, and generational status. *Journal of College Counseling*, 10(2), 103-116. doi: 10.1002/j.2161-1882.2007.tb00011.x

- Thompson, E., & Pleck, J. (1986). The Structure of Male Role Norms. *The American Behavioral Scientist*, 29(5), 531-543. Retrieved from: https://search-proquest-com.ezproxy.humboldt.edu/docview/61237015?accountid=11532&rfr_id=info%3Axri%2Fsid%3Aprimo
- Thompson, E. H., & Pleck, J. H. (1995). Masculine ideologies: A review of research instrumentation on men and masculinities. In R. F. Levant & W. S. Pollack (Eds.), *The new psychology of men* (pp. 129–163). New York: Basic Books.
- Vandello, J. A., Bosson, J. K., Cohen, D., Burnaford, R. M., & Weaver, J. R. (2008). Precarious manhood. *Journal of Personality and Social Psychology*, 95(6), 1325-1339. doi: 10.1037/a0012453
- Vandello, J. A., & Bosson, J. K. (2013). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men & Masculinity*, 14(2), 101-113. doi: 10.1037/a0029826
- Vogel, D. L., & Heath, P. J. (2016). Men, masculinities, and help-seeking patterns. In Y. J. Wong, & S. R. Wester (Eds.), *APA handbook of men and masculinities* (pp. 685-707) American Psychological Association, Washington, DC.
- Vogel, D. L., Heimerdinger-Edwards, S., Hammer, J. H., & Hubbard, A. (2011). “Boys don't cry”: Examination of the links between endorsement of masculine norms, self-stigma, and help-seeking attitudes for men from diverse backgrounds. *Journal of Counseling Psychology*, 58(3), 368-382. doi: 10.1037/a0023688
- Wang, P. S., Berglund, P., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Failure and delay in initial treatment contact after first onset of mental

- disorders in the national comorbidity survey replication. *Archives of General Psychiatry*, 62(6), 603-613. doi: 10.1001/archpsyc.62.6.603
- Wang, P. S., Lang, M., & Olfson, M. (2005). Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Archives of general psychiatry* 62(6) 629-40.
- Weaver, J., Vandello, J., Bosson, J., & Burnaford, R. (2010). The proof is in the punch: Gender differences in perceptions of action and aggression as components of manhood. *Sex Roles*, 62(3-4), 241-251. doi: 10.1007/s11199-009-9713-6
- Wendt, D., & Shafer, K. k. (2016). Gender and attitudes about mental health help seeking: Results from national data. *Health & Social Work*, 41(1), e20-e28. doi: 10.1093/hsw/hlv089.
- Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. (2005). Measuring help-seeking intentions: Properties of the General Help-Seeking Questionnaire. *Canadian Journal of Counselling*, 39(1), 15-28.
- Yousaf, O., Grunfeld, E. A., & Hunter, M. S. (2015). A systematic review of the factors associated with delays in medical and psychological help-seeking among men. *Health Psychology Review*, 9(2), 264-276. doi: 10.1080/17437199.2013.840954

APPENDIX A

General Help Seeking Questionnaire (GHSQ)

If you were having a personal or emotional problem, how likely is it that you would seek help from the following people?

Please indicate your response by putting a line through the number that best describes your intention to seek help from each help source that is

1 = Extremely Unlikely, 3 = Unlikely, 5 = Likely, 7 = Extremely Likely

a. Intimate partner (e.g., girlfriend, boyfriend, husband, wife, de' facto)	1	2	3	4	5	6	7
b. Friend (not related to you)	1	2	3	4	5	6	7
c. Parent	1	2	3	4	5	6	7
d. Other relative/family member	1	2	3	4	5	6	7
e. Mental health professional (e.g. psychologist, social worker, counsellor)	1	2	3	4	5	6	7
f. Phone helpline (e.g. Lifeline)	1	2	3	4	5	6	7
g. Doctor/GP	1	2	3	4	5	6	7
h. Minister or religious leader (e.g. Priest, Rabbi, Chaplain)	1	2	3	4	5	6	7
i. I would not seek help from anyone	1	2	3	4	5	6	7
j. I would seek help from another not listed above (please list in the space provided, (e.g., work colleague. If no, leave blank)	1	2	3	4	5	6	7

APPENDIX B

DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult

Instructions: The questions below ask about things that might have bothered you. For each question, circle the number that best describes how much (or how often) you have been bothered by each problem during the **past TWO (2) WEEKS**.

During the past **TWO (2) WEEKS**, how much (or how often) have you been bothered by the following problems?

0 = **None** Not at all, 1 = **Slight** Rare, less than a day or two, 2 = **Mild** Several days, 3 = **Moderate** More than half the days, 4 = **Severe** Nearly every Day.

- I. 1. Little interest or pleasure in doing things?
2. Feeling down, depressed, or hopeless?
- II. 3. Feeling more irritated, grouchy, or angry than usual?
- III. 4. Sleeping less than usual, but still have a lot of energy?
- IV. 6. Feeling nervous, anxious, frightened, worried, or on edge?
7. Feeling panic or being frightened?
8. Avoiding situations that make you anxious?
- V. 9. Unexplained aches and pains (e.g., head, back, joints, abdomen, legs)?
10. Feeling that your illnesses are not being taken seriously enough?
- VI. 11. Thoughts of actually hurting yourself?
- VII. 12. Hearing things other people couldn't hear, such as voices even when no one was around?
13. Feeling that someone could hear your thoughts, or that you could hear what another person was thinking?
- VIII. 14. Problems with sleep that affected your sleep quality over all?
- IX. 15. Problems with memory (e.g., learning new information) or with location (e.g., finding your way home)?
- X. 16. Unpleasant thoughts, urges, or images that repeatedly enter your mind?
17. Feeling driven to perform certain behaviors or mental acts over and over again?
- XI. 18. Feeling detached or distant from yourself, your body, your physical surroundings, or your memories?
- XII. 19. Not knowing who you really are or what you want out of life?
20. Not feeling close to other people or enjoying your relationships with them?
- XIII. 21. Drinking at least 4 drinks of any kind of alcohol in a single day?
22. Smoking any cigarettes, a cigar, or pipe, or using snuff or chewing tobacco?

23. Using any of the following medicines ON YOUR OWN, that is, without a doctor's prescription, in greater amounts or longer than prescribed [e.g., painkillers (like Vicodin), stimulants (like Ritalin or Adderall), sedatives or tranquilizers (like sleeping pills or Valium), or drugs like marijuana, cocaine or crack, club drugs (like ecstasy), hallucinogens (like LSD), heroin, inhalants or solvents (like glue), or methamphetamine (like speed)]?