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Masculinity: Exploring Relevant Cues to Promote Help Seeking Intentions in College Men

by

Carin Molenaar

A Dissertation

Presented to the Graduate and Research Committee

of Lehigh University

in candidacy for the Degree of

Doctor of Philosophy

in

Counseling Psychology

Lehigh University

May 2017

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Approved and recommended for acceptance as a dissertation in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

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Abstract

Men, especially young men (18-25), consistently face disproportionate risks to both physical and psychological health (e.g., SAMHSA, 2012). Informed by social constructionist (see Addis, Mansfield, & Syzdek, 2010), masculinity theories (e.g., dysfunction strain; Pleck, 1995), and the regulatory focus theory (e.g., ought self guide; Higgins, 2012), I suggest that men's demonstration and enactment of masculinity in context, above and beyond biological male sex, is a foundation for the health disparities facing men. Despite the theoretical relationships between masculinity and health-related outcomes, the identification of social cues that may elicit adaptive intentions or expectations remains a necessary step in gender research (see Addis et al., 2010). In response to current literature, the present dissertation utilized a series of three experimental studies to gain a deeper understanding of relevant social cues, informed by positive masculinity, that may help prime college men for more adaptive help-seeking expectations (i.e., lower conformity to the norm of self-reliance) and more positive attitudes toward professional support.

As hypothesized, the current studies found that as conformity to masculine norms increased, participant attitudes and intentions to seek adaptive forms of support decreased as evidenced by responses to both the self-reliance vignettes and the ATSPPH-SF. This significant relationship was found across all conditions in all three of the experimental studies. However, contrary to predicted hypotheses, none of the experimental conditions for any of the three studies resulted in significantly different responses to or relationships with the self-reliance vignettes or the ATSPPH-SF, even when controlling for conformity to masculine norms. In light of the findings, limitations, implications, and future

directions are discussed and presented with a focus on informing theorists and researchers.

Chapter I

Introduction

Men experience higher mortality rates (Mansfield, Addis, & Mahalik, 2003), smoke more daily cigarettes (Sanchez-Lopez, Flores, & Dresch, 2012), drink more often and more heavily (Peralta, Steele, Nofziger, & Rickles, 2010), are at higher risk for lifelong illicit drug use (Brady & Randall, 1999), and experience more chronic illnesses (Blackwell, Lucas, & Clarke, 2014) than women. Young adult men (18-25) are particularly at risk as they occupy the lowest academically attaining demographic group in regard to bachelor's degrees (National Center for Education Statistics, 2013) and face the highest risk for heavy substance use (e.g., binge drinking; Peralta, 2007; SAMHSA, 2012). The transition to adulthood for young men attending college is further complicated by the academic and social stress inherent in pursuing higher education (Brougham, Zail, Mendoza, & Miller, 2009; Laska, Pasch, Lust, Story, & Ehlinger, 2009). Research suggests that men may be more likely to engage in damaging behaviors such as alcohol consumption to cope with stress (Wang et al., 2009). The risk to men's health is compounded by the realization that men, particularly young men, underutilize helping services (Addis & Mahalik, 2003; Berger, Levant, McMillan, Kelleher, & Sellers, 2005; Lee, 2002; O'Brien, Hunt, & Hart, 2005).

The greater health risks for men compared to women run deeper than biological, sex-based, traits (Addis & Mahalik, 2003; Huselid & Cooper, 1992; Peralta et al., 2010; Yamawaki, 2010). More telling than biological sex may be an individual's conformity to masculinity ideology, or the socialization and exhibition of gendered norms and gendered roles. Masculinity ideology within the United States is founded within the social

experiences of White, heterosexual, able-bodied, Christian, upper middle class men (see O'Neil, 2014). This dominant form of masculinity ideology, also known as hegemonic masculinity, is often unrealistic for all men. Hegemonic masculinity within the culture of the United States is broadly conceptualized through expressions of power, success, competition (Good, Dell, & Mintz, 1989), self-reliance, emotional control (Mansfield, Addis, & Courtenay, 2005), and fear of femininity (O'Neil, 2008). Hegemonic masculinity is reinforced socially through prescriptive (i.e., what men 'should' do) and proscriptive (i.e., what men 'shouldn't' do) norms. Examples for prescriptive and proscriptive norms are as follows: men 'should' be strong, men 'should not' ask for help (Prentice & Carranza, 2002). Within the framework of Regulatory Focus Theory (Higgins, 2012), hegemonic masculinity represents one form of an 'ought self-guide' that men use to make decisions and take action.

Proscriptive and prescriptive norms for masculinity ultimately restrict men's behaviors and set unrealistic expectations. Men, regardless of their background, are often unable to achieve or maintain the unrealistic and rigid expectations for demonstrating hegemonic masculinity (O'Neil, 2008; Pleck, 1995). Depending on distinct constellations of identity (i.e., race, sexual orientation, etc.), men may have different ways to access power and may uniquely understand, construct, identify with, and enact behaviors associated with masculinity (see Courtenay, 2000a; Liang, Molenaar, & Heard, 2016). In this way, men may often struggle with the discrepancies between their 'actual' self and their 'ought' self-informed by the proscriptive and prescriptive norms for men (Higgins, 2012). When men do manage to endorse hegemonic masculine norms by engaging in behaviors that are socially accessible but potentially detrimental to their

health (i.e., drinking, fighting, not seeking help; see Levant, Wimer, Williams, Smalley, & Noronha, 2009), they experience dysfunction strain (Pleck, 1995).

Bosson and Vandello (2011) characterized masculinity as precarious because it must be earned and consistently demonstrated through actions associated with proscriptive and prescriptive masculine norms. When asked to provide ways in which men and women could lose their respective 'manhood' and 'womanhood,' college students largely reported that manhood would be lost socially (e.g., by behaving badly, not providing for their family). In contrast, womanhood was largely seen as only being lost through physical means (e.g., not having children; Vandello, Bosson, Cohen, Burnaford, & Weaver, 2008). Although women also face social criticism for not conforming to feminine norms, their identity and 'femaleness' is not easily socially lost (Bosson & Vandello, 2013). The precariousness of masculinity may provide an explanation for men's relationship with risky behaviors and lowered sense of well-being. As Bosson and Vandello (2011) hypothesized, men may utilize aggressive and physical actions in order to regain and 'prove' their masculinity. Men may also ignore risks to their health and well-being in order to maintain their masculinity.

Although masculinity is not limited to biological males, it is widely understood that proscriptive and prescriptive masculine roles are more commonly socialized in boys and men than girls or women. In other words, masculinity is not a static biological trait nor is it necessarily limited to the male sex. Instead, masculinity is something that is 'done,' demonstrated, earned, or lost (Bosson & Vandello, 2011; Mansfield et al., 2003). Therefore, research focused on masculinity ideology, as opposed to simply utilizing men and women as subjects, is essential (see Courtenay, 2000a).

Attitudes and expectations associated with masculinity may, unfortunately, manifest in damaging behaviors, such as substance use and abuse, which are aimed at reducing the 'precariousness' of their manliness. In a large-scale review of the literature, Lemle and Mishkind (1989) found that social drinking was a cultural expression of an individual's manliness in the United States. Drinking alcohol, even at an early age, may be a behavior associated with masculine ideology and attitudes. For example, masculine norms in adolescent boys continue to be positively associated with alcohol use (Iwamoto & Smiler, 2013). Additionally, women who highly identify with masculine norms also reported higher levels of alcohol use (Peralta et al., 2010). More complex studies have found that specific proscriptive and prescriptive masculine norms are associated with higher levels of alcohol use (i.e., restrictive emotionality, dominance, and playboy norms; Iwamoto, Corbin, Lejuez, & MacPherson, 2014; Levant, Wimer, & Williams, 2011) while others are associated with lower levels of alcohol use (i.e., 'efforts to win'; Levant, Wimer, & Williams, 2011). It is clear that the troubling association between masculinity and alcohol and other substance use continues to threaten the health and well-being of boys and men within the United States. College-aged, young adult men are even more at risk, as they seem to adhere more rigidly to masculine norms than older men (Berger et al., 2005; O'Brien, Hunt, & Hart, 2005). It appears to be an unfortunate reality that risky alcohol use is a relevant and realistic experience for college men.

Alcohol use is not the only behavior associated with 'proving' masculinity that places men's health at risk. Dysfunction strain (Pleck, 1995) may also occur when men adhere to masculine norms regarding help seeking attitudes (i.e., self-reliance). Seeking help has previously been identified as one way men may risk losing masculine status and

control within Western societies (Moller-Leimkuhler, 2002). This is unsurprising given the understanding that "help seeking entails social costs; by seeking help, one publically acknowledges incompetence, inferiority, and dependence" (Lee, 2002; p. 29). Research has demonstrated the relationship between masculinity ideology and help-seeking attitudes, is above and beyond biological sex. Yamawaki (2010) reported that high masculine identification appeared more indicative of negative attitudes toward mental health help-seeking than male sex. Similarly, women with higher identification with masculine norms also reported negative perceptions of help seeking (Magovcevic & Addis, 2005). These studies, together, found that conformity to masculine expectations and attitudes, not biological sex, contributed to negative help seeking attitudes (i.e., self-reliance) that placed men at a disproportionate risk.

Recent conceptualizations of masculinity are stepping away from the image of masculinity as solely damaging and maladaptive. For example, the Positive Psychology/Positive Masculinity Model (PPPM; Kiselica & Englar-Carlson, 2010) recognizes aspects of masculinity as healthy and adaptive by drawing attention to ways in which men, societally and culturally, utilize their strengths to support their communities in creative and prosocial ways (Englar-Carlson & Kiselica, 2013). The PPPM model highlights 10 traditionally orientated masculine strengths as a framework for recognizing other additional strengths within masculinity (e.g., responsibility, protection of others; Englar-Carlson & Kiselica, 2013; Hammer & Good, 2010). Although the PPPM has been theoretically applied to clinical work (see Englar-Carlson & Kiselica, 2013) and represents an integral movement in understanding conceptualizations of masculinity literature (see *possible masculinities*; Davis, Shen-Miller, & Isacco, 2010), an empirical

understanding of the social mechanisms that shift maladaptive masculinity to positive masculinity is still unknown.

Previous literature studying masculinity, beyond biological sex, is primarily framed within the social constructionist framework (see Wong & Rochlen, 2008). The social constructionist framework posits that men's enactment of masculine behaviors may vary considerably based upon their situational or contextual environment – or even change as they age (see Addis et al., 2010). If manhood is socially earned and socially lost, expressions of masculinity are also contextually and environmentally dependent. College cultures, with strong perceived norms of widespread alcohol use (e.g., Peralta, 2007), provide one example of a socially risky and stressful context. Within the already risky college culture, masculine ideology can be particularly problematic. For example, the masculine norm of power may be demonstrated by drinking more than or equal to other men (i.e., binge drinking). The high-risk substance use and risky behaviors exhibited by college populations may have a profound influence on how young men demonstrate their masculinity (Courtenay, 2000a) and how young men's health is at risk. Mitigating social factors, such as college cultures, that influence behaviors detrimental to young men's health and future well-being is reason enough to find out how expressing masculinity relates to risky behavior.

It is clear that college campuses represent a risky environment for men to understand and demonstrate their masculinity. Yet, the risks inherent in college campuses also present an opportunity for men to cultivate and demonstrate positive masculinity as well. For example, college men recognizing the strength needed to take responsibility for their physical well-being, developing the courage to speak to friends

about concerning and dangerous behaviors (i.e., binge drinking), and gaining awareness of factors which hold them back from being the men they want to be may all help to reduce risky alcohol use on campuses. Understanding social, environmental, and behavioral cues for demonstrating positive masculinity may lead to more effective means of male-friendly campus outreach and strength-based work with college men (Englar-Carlson & Kiselica, 2013). Therefore, research into relevant cues that prime expressions of masculinity, both maladaptive and positive, in college populations is needed.

Drawing from the theory of social constructionism, gendered behaviors are dependent on contextual and environmental cues (see Addis et al., 2010). Therefore, gendered roles (e.g., masculinity) are flexible and open to priming. Gender priming stems from Bargh, Chen, and Burrow's (1996) study that found that implicitly presenting a construct (e.g., 'being old') would have real, explicit, impacts on behavior (e.g., 'walking slower'). Gender priming studies, more specifically, have examined how the presentation of prescriptive or proscriptive gender norms impact individuals' intentions, expectations, and behaviors. For example, one study found that utilizing language associated with 'masculine' cultures (e.g., English) to describe the rules for a prisoner's dilemma game increased participant competitiveness more so than utilizing language associated with cooperative cultures (e.g., Dutch; Akkermans, Harzing, & Witteloostuijn, 2010). Gender priming has previously been studied in many ways (see Ben-Zeev, Scharnetzki, Chann, & Dennehy, 2012; Boucai & Karniol, 2008; Chiou, Wu, & Lee, 2013; Hundhammer & Mussweiler, 2012, Lemus, Moya, Lupianez, & Bukowski, 2014). Although the diversity in gender priming literature supports the robust and dynamic nature of socially constructed gender roles, the specific pathways from which primes, in

turn, become either adaptive or maladaptive behaviors, intentions, or expectations are still in need of ongoing exploration (see Doyen, Klein, Pichon, & Cleeremans, 2012).

Many studies of gender priming have explored the immediate impact of primes on gendered judgments, intentions, and behaviors. When implicitly primed with gender-stereotyped behaviors (e.g., dependent - stays unhappily married), individuals judged female targets as more “dependent” and male targets as more “aggressive”–judgments in line with gendered stereotypes (Banaji, Hardin, & Rothman, 1993). Further, male participants, whose masculinity was “threatened” through behavioral feedback (i.e., researchers would make “bogus” comments about participant’s masculinity as they completed gender-neutral tasks) consumed more energy drinks and rated themselves as “less masculine” than men whose masculinity was “affirmed” by the researchers (Chiou, Wu, & Lee, 2013). Viewed from a precarious masculinity framework, it appears likely that the men in Chiou et al.’s (2013) study were primed to ‘prove’ their masculinity through behaviors by drinking larger amounts of energy drinks, despite still judging themselves as less masculine. In other words, Chiou and colleagues (2013) gender primes appear to have threatened both the men’s self-concept (i.e., ‘manhood’) and health.

Gender priming studies examining masculinity have also largely focused on understanding how men, and their endorsement of masculinity, relate socially and emotionally to others. For example, priming men with videos of other men overtly emotionally withdrawing significantly increased participants’ intent to withdraw from affective communication in comparison to subtle emotional withdrawal or control video cues (Ben-Zeev, Scharnetzki, Chann, & Dennehy, 2012). Previous studies focusing on

gender priming have largely found that priming men with masculine stereotypes led to more 'masculine' behaviors.

However, only one study has explored the potential to 'undo' traditional gender stereotyped intentions/behaviors. Hundhammer and Mussweiler (2012), in their final study in a series of six, demonstrated that when participants were primed with "modern/non-traditional" gender roles (i.e., a day in the life of a house husband or career woman) as opposed to 'traditional' gender roles (i.e., house wife) or control primes, they were significantly less likely to self-stereotype based upon their sex (i.e., women in the non-traditional condition no longer reported significantly higher 'feminine' scores than men). Therefore, utilizing counter-stereotypic primes ('modern' as opposed to 'traditional') appeared to offset sex based self-stereotyping (e.g., men 'should be' assertive; Hundhammer & Mussweiler, 2012). The findings of this study suggest the potential for sex-based proscriptive and prescriptive norms to be counteracted by the presentation of conflicting gendered norms (e.g., brave house husband). In other words, it may be useful to explore whether adaptive proscriptive and prescriptive masculine norms could impact men's expectations or intentions above and beyond 'traditional' sex-based expectations. However, up until this point, current gender priming literature has yet to explore the relationships between adaptive counter-stereotypic masculine primes (e.g., it takes strength to know your limits) and expectations and intentions associated with masculinity (i.e., self-reliance, use of alcohol).

It would be beneficial to men to increase their likelihood of seeking help for behaviors, such as substance use or abuse, that place their health and the well-being of their communities at risk. Presently, researchers studying masculinity and gender

priming and substance use are seeking to understand the complexity of how gender primes influence attitudes or intentions. With this understanding, future researchers may create interventions that encourage men to engage in more adaptive behaviors in line with positive masculinity. For example, college-aged men are presently socially discouraged from help-seeking because they are influenced by society to act in ways perceived to be masculine. Yet, existing interventions appear to, in some way, help support men's health and well-being. For example, utilizing the theory of possible selves appears beneficial for helping college men identify ways of reaching their goals and overcoming barriers (Davies, Shen-Miller, & Isacco, 2010). Additionally, statements that describe normative or persuasive (e.g., "Real Men. Real Depression; Rochlen, McKelley, & Pituch, 2006) gendered messages towards help-seeking have previously been found to increase men and women's intentions to seek professional psychological help (Christopher, Skillman, Kirkhart, & D'Souza, 2006; Rochlen et al., 2006). However, research has not identified what makes gender-sensitive brochures (Rochlen et al., 2006) effective or how gender primes impact individuals' expectations, intentions, and ultimately, behaviors.

Positive masculinity (Kiselica & Englar-Carlson, 2010) represents a masculinity that inhabits the area between traditional proscriptive and prescriptive masculinity and modern/non-traditional masculinity. Positive masculinity may also help men imagine more adaptive, healthy, and positive possible selves. In this way, perceived discrepancies between men's 'actual' self, their 'ideal' self, and their 'ought' self may be reduced (Higgins, 2012). Positive masculinity may also be a mechanism in which to frame help seeking in a way that reduces perceived social costs (see Bosson & Vandello, 2011; Lee, 2002). Although it represents a theoretical avenue to increase the adaptive and healthy

enactment of masculinity, to date, the social mechanisms surrounding the priming of positive masculinity remain unexplored. Understanding ways of supporting more adaptive expectations and intentions may open new avenues for supporting the health and well-being of young men. The identification of relevant cues that may potentially elicit adaptive intentions or expectations, such as those in line with positive masculinity, is a necessary step in gender research (see Addis et al., 2010).

Present Study

The purpose of this study is to gain a deeper understanding of relevant cues that may help prime college men for more adaptive help-seeking expectations and intentions in line with positive masculinity. Expanding upon our understanding of how masculinity is constructed and enacted in college environments can inform the development of relevant and informed programs that support the well-being of college students. This study seeks to combine the literature on masculinity, gendered priming, and help-seeking in order to explore the following overarching questions: Does priming positive masculinity increase college men's help seeking intentions? Does identification with masculinity and exposure to a counter-stereotypic gendered prime predict men's intentions toward help seeking within a college context?

Study 1 Hypothesis: Participants exposed to a positive masculinity informed sentence scrambling prime will express more positive attitudes toward help seeking (i.e., lower endorsement of self-reliance) than participants exposed to a neutral prime when controlling for conformity to masculine norms.

Study 2 Hypotheses: There will be different relationships of conformity to masculine norms and men's endorsement of help-seeking (i.e., self-reliance and

ATSPPH-SF) based upon exposure to experimental condition (i.e., counter stereotypic, stereotypic, and control).

As conformity to masculine norms increases, men's endorsement of help-seeking (i.e., self-reliance and ATSPPH-SF) will remain the same when exposed to a counter-stereotypic prime.

As conformity to masculine norms increases, men's endorsement of help-seeking (i.e., self-reliance and ATSPPH-SF) will decrease when exposed to a stereotypic prime.

As conformity to masculine norms increases, men's endorsement of help-seeking (i.e., self-reliance and ATSPPH-SF) will decrease when exposed to a control prime.

Participants in the counter-stereotypic and control prime conditions will report higher endorsement of help-seeking intentions than participants in the stereotypic condition.

Participants in the counter-stereotypic condition will report higher endorsement of help-seeking intentions than participants in the control condition.

Study 3 Hypothesis: When participants are asked to reflect on their ideal possible masculine self, they will be more likely to endorse positive attitudes toward help seeking (i.e., lower endorsement of self-reliance) than participants exposed to a neutral prime, or an 'ought' masculine self prime, when controlling for conformity to masculine norms.

Chapter II

Literature Review

Sex and Gender

The American Psychological Association (APA) Task Force on Gender Identity and Gender Variance (2009) differentiates between sex, gender, gender expression, and gender identity. According to APA, "sex refers to attributes that characterize biological maleness and femaleness…[such as] sex-determining genes, the sex chromosomes, the H-Y antigen, the gonads, sex hormones, the internal reproductive structures, the external genitalia, and secondary sexual characteristics" (p. 28). In contrast, "gender refers to the psychological, behavioral, or cultural characteristics associated with maleness and femaleness" (p. 28). Although sex and gender are distinct, they are also inherently associated as evidenced by gender's reliance on cultural associations with maleness and femaleness.

APA seeks to clarify the distinction between sex and gender through gender role and gender expression. For example, although "gender role refers to behaviors, attitudes, and personality traits that a society, in a given historical period, designates as masculine or feminine…" (APA, 2009, p. 28), individuals can differ in their expression of cultural norms surrounding gender. As such, APA (2009) defines gender expression as "the way in which a person acts to communicate gender within a given culture" (p. 28). Individuals may express gender in ways that do not coincide with societal or cultural gender roles or reflect their gender identity (i.e., "personal sense of being male, female, or of indeterminate sex" APA, 2009, p.28). Therefore, it is important to consider how

individuals express their own masculinity or femininity, above and beyond biological sex.

Masculinity

In line with APA's (2009) emphasis on the fluidity of gender expression above and beyond biological sex, scholars in the field of men and masculinity call for the use of a multicultural, social constructionist (Addis & Mahalik 2003; Addis, Mansfield, & Syzdek, 2010) perspective for understanding the diverse ways in which the expression of masculinity is impacted by culture, society, and systemic oppression (e.g., racism, homophobia; Wester & Vogel, 2012). A social constructionist perspective views the demonstration of masculinity as fluid and contextually dependent (Addis et al., 2010; APA, 2009), in stark contrast to viewing masculinity as static and stable (i.e., sex-based). Although masculinity is largely associated, socialized, and displayed by boys and men, social constructionist frameworks recognize that masculinity – both positive and negative – is not biologically determined and is not limited to males (see Englar-Carlson & Kiselica, 2013).

Hegemonic masculinity, or the culturally sanctioned personality traits, behaviors, and attitudes associated with maleness (APA, 2009) within the United States, has long been understood through the dominant cultural lens of White, heterosexual, able-bodied, Christian, upper middle class men (see O'Neil, 2014). Recent additions of intersectionist perspectives have built upon social constructionist perspectives by recognizing that, despite hegemonic masculinity, different cultures within the United States value unique expressions of masculinity (see Liu & Chang, 2007; Torres, Solberg, & Carlstom, 2002). However historically, hegemonic masculinity has led generations of diverse boys and

men in the United States to seek ways of gaining success, demonstrating toughness, strength, and self-reliance, and avoiding femininity (O'Neil, 2014). Yet, as evidenced by the gender role strain paradigm (Pleck, 1981; Pleck, 1995), and systemic challenges (i.e., racism or heterosexism; Franklin, 2004; Liang, Salcedo, & Miller, 2012; Syzmanski & Ikizler, 2013) most men face distress when they are unable to live up to the expectations of hegemonic masculinity (i.e., discrepancy strain; Pleck, 1995). Additionally, men may risk health and well-being (e.g., drinking, substance use, fighting) in order to attempt to prove or demonstrate their masculinity (i.e., dysfunction strain; Pleck, 1995).

Studying Masculinity. Thompson and Pleck (1995) originally distinguished between two branches of study of masculinity ideologies (i.e., "proscriptive and proscriptive social norms that sanction men and masculinity performances" (Thompson & Bennett, 2015, pp 115); the trait approach (e.g., dispositions) and the normative approach (e.g., culturally based). The trait approach posits that self-identification with masculinity or femininity traits differentiates between males and females (Thompson & Bennett, 2015). The Bem Sex Role Inventory (BSRI; Bem, 1974), draws from the trait approach of studying masculinity. The BSRI also represents one of the first psychometric tools to assess individual's perception of their masculinity and femininity. The BSRI utilizes 60 adjectives, 20 of which are masculine (e.g., aggressive, makes decisions easily, self-reliant, ambitious) and 20 of which are feminine (e.g., shy, soft-spoken, childlike, flatterable). In addition to the BSRI, the Personal Attributes Questionnaire (PAQ; Spence & Helmreich, 1978) also draws from the trait perspective of studying masculinity. In contrast, the normative approach to studying masculinity ideologies recognizes multiple masculinities within the context of culture, time, places,

and groups. Here, masculinities reside outside of individuals - impacting, but not holistically determining, individual's actions, behaviors, and feelings (Thompson & Bennett, 2015).

Drawing from the social constructionist perspective of the present study, the third, relatively recent, branch of the study of masculinity ideologies is referred to as masculinity beliefs. Drawing from numerous theorists (e.g., Pleck, 1995), masculinity beliefs are informed and communicated through culturally based standards of manhood – similar to the normative perspective – but reside in an individual self – similar to the trait perspective. In this way, the masculinity beliefs perspective highlights an individual's internalization of culturally sanctioned beliefs about men and masculinity (Thompson & Bennett, 2015). Scales that draw from a masculinity beliefs perspective are the Conformity to Masculine Norms Inventory - 46 (CMNI-46; Parent & Moradi, 2009), the Male Role Norms Inventory- Revised (MRNI-R; Levant, Rankin, Williams, Hasan & Smalley, 2010), and the Gender Role Conflict Scale-Short Form (GRCS-SF; Wester, Vogel, O'Neil, & Danforth, 2012).

The present study will utilize the Conformity to Masculine Norms Inventory – 46 (CMNI-46; Parent & Moradi, 2009). The CMNI-46 was chosen as this scale was created to assess respondent's conformity - affectively, behaviorally, and cognitively – to masculinity norms within the United States culture. The CMNI-46 has also been frequently utilized by researchers investigating masculinity (see Thompson & Bennett, 2015).

Not until recently has the theoretical understanding of masculinity stepped away from an emphasis on deficits and moved towards an understanding of ways in which

masculinity may also be positive (see Englar-Carlson & Kiselica, 2013). Kiselica and Englar-Carlson (2010) identified a non-exhaustive list of 10 strengths that stem from traditional proscriptive and prescriptive gender norms that, instead of representing deficits of masculinity, represent prosocial and adaptive traits. Three of these ten strengths are related directly to the present study; Male Ways of Caring, Male Self-Reliance, and Male Courage, Daring, and Risk-Taking. These strengths encompass the socialization of how men care for and protect their friends, how men solve problems, and how men's risk-taking socialization can benefit others (i.e., protecting others), respectively (Kiselica & Englar-Carlson, 2010). Positive masculinity traits are directly related to ways in which college men can help support the health and well-being of not only themselves but also their communities. For example, college men may utilize courage to step in when their friends are making dangerous or risky decisions (i.e., binge drinking). Although Positive Masculinity framework remains largely theoretical and in need of empirical exploration (Liang & Molenaar, In Press), a great deal of literature has explored which masculine norms may place men at risk and which masculine norms may serve to protect or harm the well-being of men.

Maladaptive and Adaptive Masculine Norms. Previous literature has already established correlations between masculine norms and adaptive outcomes and masculine norms and maladaptive outcomes. Identification with Restrictive Emotionality, Self-Reliance, Rejection of Homosexuals, Avoidance of Femininity, all measured using the MNRI-R (see Levant et al., 2010) in addition to Restrictive Affectionate Behavior Between Men, a factor of gender role conflict (GRCS; O'Neil et al., 1986), all appear significantly associated with more negative attitudes toward help seeking (Berger et al.,

2005). Endorsement of Success, Power, and Control (GRCS) appears significantly associated with both increased alcohol and other drug use and decreased attitudes toward help seeking (Blazina & Watkins, 1996). High identification with Winning and Risk-Taking subscales on the CMNI-46 appear related to the reduction in proper use of health care resources whereas high levels of Self-Reliance (CMNI-46) was related to reduced preventative self care (Levant & Wimer, 2014). Endorsing, believing, and demonstrating traditional masculinity, based upon the present status of the literature, appears to suggest that masculinity appears more risky than adaptive when it comes to men's health and well (see Levant & Wimer, 2014; McCreary, Newcomb, & Sadava, 1999).

Yet, relevant to the present study and to the theory of positive masculinity, are aspects of masculinity that appear to serve an adaptive role in the well-being of men. For example, McCreary et al. (1999) reported that men's endorsement of 'agentic' traits (e.g., independence; PAQ) was protective both directly and indirectly in regard to alcohol use. More recently, Levant and Wimer (2014) explored the relationships between various measures of masculinity and health behaviors. Utilizing the Health Behaviors Inventory – 20 (HBI-20; see Courtenay, McCreary, & Merighi, 2002), Levant and Wimer (2014) reported that the Winning and Emotional Control subscales of the CMNI-46 and the Success/Power/Competition subscale of the GRC-SF were related to reduced substance use. The Success/Power/Competition subscale was also associated with higher preventative self care and increased proper use of health care resources. Iwamoto et al. (2014) identified higher identification with Emotional Control and Heterosexual Presentation (CMNI-46) as protective for college men in regard to problematic alcohol use. Specifically in relation to attitudes toward help seeking Good et al. (1989) reported

that men, who on a whole did not endorse traditional masculinity, also had more positive views in regard to seeking professional help.

The adaptive associations of various factors related to masculinity in regard to health and help-seeking, however, does not minimize the potential risks that may also manifest (e.g., high scores on the Success/Power/Competition (GRCS-SF) subscale also relate to increased anger and stress; Levant & Wimer, 2014). Therefore, when considering the risks facing various populations of men, it is important to recognize the complexity of masculinity and the currently limited nature of masculinity literature.

The masculinity literature is currently limited in a variety of ways. For example, it has provided conflicting information regarding adaptive and maladaptive factors of masculinity (see Blazina & Watkins, 1996; Levant & Wimer, 2014). These limitations may be in part due to the use of updated scales (i.e., GRCS and GRCS-SF), but may also be in part to the nature of the cross-sectional designs. As such, a clearer understanding of the ways in which masculinity is demonstrated and enacted in contexts that are more relevant and applicable to lived experiences of men is an integral direction for future research. Gender priming research may provide an avenue to continue exploring the complexity of masculinity in addition to providing a wider understanding of how gender informs help seeking.

Help Seeking

The act of help seeking can be either convenient or instrumental (see Chan, 2013). Convenient help seeking occurs when, although individuals could complete a task on their own, motivation is increased through the support of a helper. In contrast, instrumental help seeking occurs when personal resources or ability to cope are exceeded

by an event or task, preventing successful completion without a helper. Furthermore, individuals can seek out support from others (e.g., interpersonal support) or may utilize more impersonal types of support (e.g., 'do-it-yourself' manuals; DePaulo & Fisher, 1980).

Although seeking help is useful, and at times necessary to effectively reach goals, it is understood that the social costs in seeking help – and the type of help sought - may be high (see Ackerman & Kenrick, 2008; Lee, 2002). The costs to seeking help are complex as they may be internal or external and may be real, anticipated, or only perceived (see DePaulo & Fisher, 1980). For example, the act of seeking help involves an interaction where the individual seeking help may lose self-respect, appear incompetent (DePaulo & Fischer, 1980), may feel or appear inferior to the helper, and may be perceived as reliant on the helper (see Lee, 1997). The social costs for seeking help appear more salient in the experience of men. For instance, Lee (2002) found that men, especially men in relative positions of status, perceived higher social costs to seeking help than women, and subsequently sought lower levels of support from peers.

Chan (2013) utilized the Theory of Planned Behavior (TPB; Ajzen, 1991; Ajzen & Fishbein, 2005) to conceptualize how individuals both make the decision to seek help and decide what form of help to seek. In Chan's (2013) conceptualization, an individual first encounters a task that triggers beliefs associated with help seeking. In addition to the specific task, person (e.g., personality) and situation (e.g., gender ideology/masculinity) factors inform beliefs associated with help seeking within a unique context. Utilizing this framework, a college man who encounters course material that he feels unable to complete on his own may weigh his beliefs regarding the costs and benefits of seeking

help. For example, “Is the cost of failing more or less than the cost of asking for help?” He may also consider situation factors such as “Do my friends use tutoring or do they cheat by paying someone to do the homework for them?” Most relevant to the present dissertation are situation factors (i.e., masculinity) informed beliefs about help seeking in young adult college men.

Drawing from Higgins’ (2012) Regulatory focus theory, young adult men faced with events or tasks that exceed their resources, experience discrepancies between their ‘Actual,’ ‘Ideal,’ and ‘Ought’ selves. Within the masculinity literature, ‘Ideal’ selves (i.e., “Who I’d like to be”) may be understood through the lens of ‘possible masculinities’ (Davies et al., 2010) or ‘positive masculinity’ (Kiselica & Englar-Carlson, 2010). In contrast, ‘Ought’ selves (i.e., “Who I ought to be based on obligation or duty”) may be understood through the lens of hegemonic masculinity.

Depending on the context, different ‘self guides’ may be more salient to college men and may inform their actions and behaviors at that time. As such, contexts in which beliefs about masculinity and help seeking intersect are problematic to the health and well-being of men. For instance, when men experience anxiety and insecurity about their manhood, they may be more likely to view the risks of looking incompetent or seeking help (i.e., losing masculinity) as higher than the risks associated with failure. This may then lead them to cope in ways that are informed by masculine norms (e.g., self-reliance or drinking) to move their ‘actual’ self closer in line with their ‘ought’ self, instead of seeking adaptive forms of help. From the Regulatory focus theory (Higgins, 2012) perspective, men may understandably engage in self-destructive behaviors if – within that

context – they believe it helps them to reduce the discrepancy between their ‘actual’ and ‘ought’ selves.

Due to the importance of context, different ‘self guides’ may become more or less salient. Depending upon which self guides are primed, individuals may express different intentions, expectations, or behaviors when weighing the costs and benefits of seeking different types of help (see Higgins, 2012). As men who seek to reduce the discrepancies between ‘ought’ and ‘actual’ selves may align more closely with maladaptive hegemonic masculinity in times when help is needed, it may also be true that men who are guided by ‘ideal’ selves may move in a more adaptive direction in order to reach their goals. The application of regulatory focus theory within the masculinity literature is needed to answer the question of whether or not priming men with ‘Ideal’ or ‘Ought’ self guides may impact their health and well-being when faced with tasks that may be supported by seeking adaptive help. Additionally, do men who are informed by either ‘Ideal’ or ‘Ought’ self guides experience different outcomes in regard to their health and well-being?

Foundation for Gender Stereotype Priming

Bargh, Chen, and Burrow’s (1996) study first demonstrated that the implicit presentation of a construct (e.g., stereotypes) would have an explicit impact on behavior. In a series of three studies (N = 34, 60, 41), they utilized modified scrambled sentence tasks (Srull & Wyer, 1996) and found evidence for automatic social behavior – or the idea that behaviors, intentions, or expectations are triggered by relevant cues in an individual’s immediate environment. Previous literature within the field of social psychology has continually reflected that the activation of stereotypes is powerful enough

to trigger information associated with intentions and expectations, but also to impact behaviors (Ferguson & Bargh, 2004).

Although Bargh, Chen, and Burrow's (1996) did not explicitly address gender roles, they set the framework for gender priming literature. Gender priming studies, more specifically, explore primes related to proscriptive or prescriptive gendered stereotypes. This expands upon previous literature such as Bargh et al.'s study (1996) that explored the effects of stereotypes not directly related to gender; interpersonal, age-based, and racism-based. Specifically, Bargh et al.'s (1996) first study found that college students primed with 'rude' (i.e., intrude, bother, obnoxious) constructs interrupted the experimenters significantly faster ($F\ (2,33) = 5.76$, $p = .008$) than those primed with 'neutral' (i.e., exercising, watches, prepares), or 'polite' (i.e., patiently, cautiously, courteous) constructs. Their second study found that college students primed with elderly stereotypes (i.e., bitter, wise, conservative) walked significantly slower than those primed with neutral (i.e., private, clean, thirsty) constructs during two separate trials ($t(28) = 2.86$, $p < .01$; $t(28) = 2.16$, $p < .05$). Finally, their third study found that priming college students with faces of African American men significantly increased participant hostility in comparison to participants primed with faces of non-Hispanic White men ($F(1,39) = 6.95$, $p < .05$), even after controlling for racist attitudes.

The priming effects from this seminal article have been successfully reproduced to varying degrees (see Aarts & Dijksterhuis, 2002; Cesario, Plaks, & Higgins, 2006, Hull, Slone, Meteyer, & Matthews, 2002), however these studies either dealt primarily with biases instead of behaviors or faced similar challenges to Bargh et al. (1996) such as imprecise timing methods. Yet, they add to the increasing complexity of the effects of

priming. For example, Cesario, Plaks, and Higgins (2006) successfully replicated Bargh et al.'s (1996) findings in a series of three studies. However, instead of simply automatically acting in ways that aligned with the primed stereotypes (i.e., walked slower after elderly primes), college students appeared to anticipate interpersonal interactions based upon the primed stereotypes (i.e., walked faster after elderly primes if they implicitly disliked older adults and did not want to interact or be associated with older adults). Here, participants primed with elderly stereotypes did not simply walk slower than individuals in other priming conditions, participants walked in ways that aligned with their implicit beliefs about older adults. In other words, participants that disliked the elderly walked faster both because their implicit dislike of older adults was primed and they did not want to be like older adults.

In their second study, Cesario et al. (2006) investigated the role of implicit attitudes about stereotyped groups (e.g., the 'elderly') on behavior by hypothesizing that participants that exhibited positive attitudes towards older adults would walk more slowly as a 'preparation' for positively interacting with older adults. In contrast, it was hypothesized that those that exhibited negative attitudes towards older adults would walk faster in 'preparation' for distancing themselves from older adults and stereotypes associated with older adults. They further hypothesized that opposite effects would arise from priming 'youth.' In order to test their hypotheses, Cesario et al. (2006) created an experimental design, and advertised it as a 'perceptual and motor activity' study. Here, in addition to 'filler tasks' unrelated to the study, they measured participants' implicit beliefs about both youth and older adults through implicit attitude measures (i.e., sequential priming task; Fazio, Jackson, Dunton & Williams, 1995). As such, faster

response latencies when evaluating the valence (i.e., positive or negative) of target adjectives after being primed by either elderly or youth category labels were used to determine implicit attitudes. In order to prevent contamination from the explicit and implicit attitude measures, participants waited approximately a week before returning to participate in the second study. During the second study, participants were subliminally primed with faces of older adult men (i.e., elderly), teenage boys (i.e., youth), or no faces (i.e., control) before being timed by a confederate with a stopwatch as they exited the room.

In a sample of 80 men and women college students in the United States, Cesario et al. (2006) found a significant difference in exit speed between elderly prime and youth prime conditions [$F(1,64) = 5.81$, $p = .02$], with no significant difference between the control prime conditions for either the youth or elderly condition. Participants within the elderly condition exhibited faster walking speeds as negative attitudes toward older adults increased [$\beta = .71$, $t(18) = 2.64$, $p = .02$, $R^2 = .42$] and slower walking speeds as positive attitudes increased [$\beta = -.74$, $t(18) = -2.78$, $p = .01$]. Participants within the youth condition demonstrated opposite effects - exhibiting faster walking speeds as positive attitudes toward youth increased [$\beta = .51$, $t(19) = 2.26$, $p = .04$] and slower walking speeds as negative attitudes increased [$\beta = .46$, $t(19) = -2.38$, $p = .03$, $R^2 = .61$]. As such, Cesario et al.'s (2006) hypotheses were confirmed – participants' behaviors were altered depending upon both their implicit stereotyped attitudes and their desire to be associated with valued groups after being primed.

Doyen, Klein, Pichon, and Cleeremans (2012) also sought to address the challenges faced by Bargh et al. (1996) and the replications of their study. In a series of

two studies, Doyen et al. (2012) replicated Bargh et al.'s (1996) methodology. However, they translated the scrambled sentence task to French for relevancy to their sample. Their first study, utilizing 120 Belgian college students and an objective measurement of walking speed (i.e., infrared beams) failed to reproduce a priming effect. However, when they added researchers with stopwatches that were aware of the priming conditions, in addition to retaining their objective time measurement, they successfully replicated Bargh et al.'s (1996) findings, measured both subjectively ($F(1, 24) = 12.32$, $p = .002$, $\eta^2 = .339$) and objectively ($F(1, 24) = 7.07$, $p = .014$, $\eta^2 = .228$). This finding, along with Cesario et al.'s (2006) report, suggests a complex interplay between implicit stereotypes, primes, environmental contexts, and behavior.

Although Doyen et al. (2012) provided an important expansion of Bargh et al.'s (1996) study, they presented significant confounds by translating the primes into French and by not assessing for participants implicit attitudes about older adults (Cesario et al., 2006). The importance of language, especially in relation to the cultures and gendered stereotypes contextually associated with the language, is essential. For example, in a sample of first year Dutch college students, utilizing English, a language associated with 'masculine' cultures, to present rules for a prisoner's dilemma game significantly increased participant competitiveness in comparison to the same rules translated in Dutch, a language associated with cooperative cultures (Akkermans, Harzing, & Witteloostuijn, 2010). Therefore, studies replicated in English may be necessary for controlling for this particular confound.

Casper and Rothermund (2012), in a series of two studies, found further evidence that primes must be accompanied by relevant contexts, specifically when exploring

gendered self-stereotyping. In both studies, participants were exposed to a sequential priming paradigm involving a lexical decision task (see Lun, Sinclair, & Cogburn, 2009). Participants were first primed with a context phrase (i.e., “to carry the boxes”) and then either the self (i.e., I) or others (i.e., Others). Next, participants viewed ‘target words.’ Relevant to their hypotheses, a list of 6 stereotypical masculine ‘target words’ (i.e., assertive, strong, ambitious) were matched with either contextually relevant (i.e., strong – to carry the boxes) or contextually irrelevant (i.e., ambitious – to comfort a crying friend) conditions. Participants were exposed to four combinations for each of 6 masculine ‘target words’ (Self-relevant context, self-irrelevant context, others-relevant context, others-irrelevant) totaling 24 trials. Twenty four additional trials with neutral ‘target words’ (i.e., musical – to learn to play an instrument), and 48 trials with non-word ‘target words’ were added so each participant, in total, was exposed to 96 separate trials. After viewing the ‘target words’ the participants were asked to indicate, as quickly as they could, whether or not the ‘target word’ was a real word or not. After every 4 trials, participants also were asked whether the context phrase was referencing their self or others.

In Casper and Rothermund’s (2012) first study, they found a significant interaction between “self” primes and context ($F(1, 25) = 4.11$, $p < .05$, partial η^2=.14), but only when the context was relevant to the masculine stereotype ($t(25) = 2.47$, $p < .05$, $d = .33$) in a sample of 26 male German college students. This finding, in addition to the findings of their second study with a sample of 20 men and 24 women German college students, suggests that men specifically [$F(1, 19) = 3.33$, $p < .05$, partial η^2=.15], are more likely to quickly identify masculine stereotypes when primed with their ‘self’ and a

context relevant to a masculine stereotype. As such, Casper and Rothermund (2012) suggested that men's behavior might be uniquely regulated by stereotypes relevant to environments.

When combined, these studies present a complex and multifaceted understanding of the impact of primes on behaviors, intentions, and expectations. Cesario et al. (2006) found that implicit attitudes towards stereotyped groups impacted participant behaviors uniquely when primed. This, as they hypothesized, was motivated by individuals' preparation for interacting with their disliked or liked social group members – or a desire to be associated with favored groups. Similarly, Doyen et al. (2012) found stereotype primes were only influential when combined with relevant information from the environment. Combined, these studies create support for the potential moderating impact of context. For example, in an effort to be associated with other guys at college parties, men may be more likely to engage in risky alcohol use (e.g., binge drink, 'pre-game') when in the context of a party than in another context (e.g., out to dinner with parents). Therefore, when investigating the impact of primes we must take into account existing implicit attitudes in addition to environmental contexts relevant to the experience of college men.

Although the combined results of the aforementioned articles provide evidence that implicitly priming various stereotyped constructs automatically impacted participant behavior in relevant contexts, regardless of their explicit attitudes, the specific pathways are still unknown. In response to these collective findings, the present study utilizes a variety of gender primes relevant to college campuses, in addition to a contextually relevant task – vignettes created to capture situations relevant to risky college cultures in

order to explore positive masculinity on college campuses. Additionally, in an effort to control for contrast effects, the current study utilizes implicit primes (Wheeler & Petty, 2001).

Additionally, based upon the findings of Cesario et al. (2006), it seems unlikely that men would implicitly distance themselves from 'manhood' as, in the United States, men are socialized to defend their group membership through demonstrations of masculinity (see Vandello et al., 2008) even to the detriment to their health (i.e., dysfunction strain; Pleck, 1995). This presents a significant challenge for researchers and clinicians seeking to support the health and well-being of young men and their surrounding communities. Therefore, one of the main questions leading the current study asks 'Is there a way to utilize positive masculinity primes to increase men's likelihood of making positive and healthy decisions?' In other words, can masculinity truly be seen and demonstrated positively (i.e., Positive Psychology/Positive Masculinity Framework (PMMM); Kiselica & Englar-Carlson, 2010).

Gender Priming: What Do We Know?

Gender stereotype priming research has largely focused on the immediate impact of gendered primes on judgments, intentions, or behaviors or how men, when primed to self-stereotype, relate to others. The following section will delineate what we, as a field, presently know about gender stereotype priming in addition to critically examining the gaps in the current literature. First, this will involve a separate exploration of previous studies examining masculine gender priming on judgments, masculinity gender priming on behaviors, and masculinity gender priming on intentions. Although these represent

different real-life implications they cumulatively represent the impact of stereotypical masculinity on the beliefs and behaviors of individuals.

Judgments. Banaji, Hardin, and Rothman (1993) conducted three experiments that provided support for the impact of implicit gender stereotype priming on the judgments of participants. In their first of two studies, Banaji et al. (1993) requested that participants complete a modified scrambled sentence task (Srull & Wyer, 1979) with 45 sentences. Two conditions included primes related to the study, with 30 of the 45 sentences describing either stereotypically aggressive (e.g., 'threatens other people.' 'belongs to NRA') or stereotypically dependent (e.g., 'can't make decisions,' 'stays unhappily married') behaviors. The rest of the sentences, including all 45 in a third neutral condition, described neutral behaviors (e.g., 'crossed the street'). After unscrambling the sentences in one of the three conditions, and completing an unrelated 'filler' task (i.e., ten minutes), participants were asked to complete an unrelated 'reading comprehension task,' comprised of stories referring to either a male or female target person behaving in ways weakly related to the primes. After reading the story, participants were asked to rate the target person on a 10-point Likert scale in regard to 17 traits, nine that were either stereotypically aggressive (e.g., ambitious, hot-headed, stubborn) or stereotypically dependent (e.g., polite, cooperative, insecure), and eight neutral traits (e.g., neat, talented, unhealthy).

In a sample of 222 undergraduate men and women in the United States, Banaji et al. (1993) found that participants, regardless of sex, judged the female target person as significantly more 'dependent' than male target person when primed with dependent behaviors [$t(38) = 3.15$, $p = .003$]. Furthermore, when primed with dependent behaviors,

participants rated male target persons significantly less ‘dependent’ than participants primed with neutral behaviors [$t(44) = 2.26$, $p = .03$]. Similarly, participants judged male target persons, not female target persons, as significantly more aggressive when primed with aggressive primes than when primed with neutral primes [$t(69) = 2.84$, $p = .006$]. The trait ratings, when exposed to neutral primes, did not differ significantly for male or female target persons in regard to dependent or aggressive traits. This study demonstrated the impact of stereotypical gendered primes on participant judgments of target persons.

Muller and Rothermund (2014), in an attempt to reproduce stereotype prime classifications, reported that gender-categorization of names (i.e., identifying the sex associated with names which are unambiguously male or female) was significantly faster [$F(1, 293) = 75.54$, $p < .001$, partial η^2=.20] after participants were primed with stereotypically congruent gender primes (e.g., man, king, computer, to drink, brutal) than incongruent primes (i.e., neutral or opposite sex stereotypes; mother). However, Muller and Rothermund (2014) also reported that the priming effect was more pronounced with gender primes that are, by definition, male or female (e.g., father; $F(1,293) = 67$, $p < .001$, partial η^2=.19) in comparison to primes which are, stereotypically, masculine or feminine [e.g., brutal; $F(1,147) = 50.41$, $p < .001$, partial η^2=.15]. These findings may suggest that reminding participants of associations with explicit maleness (i.e., father) or femaleness may prime a more direct pathway from sex to gender for individuals to categorize based upon traditional stereotypes. These findings also may highlight a potentially more nuanced fluidity with gender primes that are stereotypically masculine or feminine but not, by definition, male or female.

Behaviors. Mast, Sieverding, Esslen, Graber, and Jancke (2008) utilized gender priming to establish a link between masculinity and risky driving (i.e., speeding). They utilized an 8-minute driving simulator in order to safely assess driving speed. Participants were allowed 3-5 minutes to become comfortable with the driving simulator. In this study, gender priming involved words read over the radio of the driving simulator at a rate of one word every three seconds. Participants were each assigned to one of three priming conditions: Masculine (e.g., strong, suit, father), feminine (e.g., empathic, lipstick, mother), and neutral (e.g., rent, private, blind). In the two gendered conditions, participants heard 56 masculine or 56 feminine words randomly interspersed with 59 gender-neutral words. In the neutral condition, participants heard 115 gender-neutral words. Mast et al. (2008) utilized a sample of 83 European (i.e., mainly from Germany and Switzerland) men in college with active driving licenses. Although driving was not significantly different in the first two minutes of the driving simulator, they found a significant increase in driving speed [$F(2,80) = 4.36$, $p = .16$] for only men in the masculine condition ($t = 2.92$, $p = .00025$, $d = .65$). Here, the presentation of implicit stereotypically masculine terms had a real, risky, impact on men's driving.

In a sample of college men in Taiwan, Chiou, Wu, and Lee (2013) explored the relationship between masculinity and energy drink consumption. Chiou et al.'s (2013) first study utilized two modified scrambled sentence tasks (Srull & Wyer, 1979), one that included phrases with masculine (e.g., assertive, ambitious, risk-taking) words and one with only gender-neutral (e.g., sociable) words. After completing either the masculine or neutral condition, participants were offered either a mineral water or energy drink for participating. In a sample of 72 men, significantly more participants in the masculine

prime condition (69%) requested the energy drink as opposed to in the neutral condition (44%), odds ratio = 2.83, 95% confidence interval: 1.35-1.54, B = 1.04, Wald = 4.48, p = .034, Cox & Snell R^2 = .06. As both the drinks were found to be equally appealing in a pilot study, it appears as though priming with masculine-related terms was significant enough to activate the desire to consume energy drinks – a drink associated with manhood, risk-taking, and adventure (see Chiou et al., 2013).

In their second study, Chiou et al. (2013) sought to expand their exploration of masculinity and energy drink consumption to include perceived threats to manhood. In a sample of 93 undergraduate men, participants were randomly assigned to one of three conditions: affirmed masculinity, threatened-masculinity, and control. A male researcher greeted all participants and requested they complete a 'bogus' measure of masculinity-femininity where participants rated their interest in gender-neutral activities (i.e., drinking coffee). This scale allowed for the researcher to provide 'bogus' feedback regarding participant masculinity based upon the experimental condition they were randomly assigned. Participants in the 'threatened-masculinity' condition were told they scored low in masculinity, participants in the 'affirmed-masculinity' condition were told they scored high in masculinity, and participants in the control group were not provided any feedback. Participants were then asked to rate their own adherence to masculine traits (e.g., assertiveness, competence) on a 7-point Likert scale. Finally, each participant was given 900 ml of energy drinks for an 'unrelated' taste test.

Chiou et al. (2013) reported that participant's perceived masculinity differed significantly depending on the experimental condition [$F(2,90) = 10.46$, $p < .001$, partial η^2=.188], with participants in the 'threatened-masculinity' condition rating themselves

significantly less masculine than the control group [$t(90) = -2.20$, $p = .031$, $d = .23$], and 'affirmed-masculinity' participants rating themselves significantly more masculine than the control group [$t(90) = 2.38$, $p = .02$, $d = .25$]. Similarly, energy drink consumption differed significantly based upon experimental condition [$F(2,89) = 16.775$, $p < .001$, partial $\eta^2 = .261$]. Participants in the 'threatened-masculinity' condition consumed significantly more energy drinks than both participants in the control group [$t(89) = 3.20$, $p = .001$, $d = .38$], and participants in the 'affirmed-masculinity' group [$t(89) = 5.58$, $p < .001$, $d = .59$]. Participants in the 'affirmed-masculinity' group also consumed significantly less than participants in the control group [$t(89) = -2.42$, $p = .027$, $d = .24$]. Combined, Chiou et al.'s (2013) study demonstrates the association between masculinity, the demonstration of masculinity through energy drink consumption, and the implications of feedback regarding one's own masculinity.

Intentions. Ben-Zeev, Scharnetski, Chan, and Dennehy (2012) established a link between masculinity priming and intentions for affective communication in heterosexual relationships. In their study, participants would watch a video clip described as part of a 'memory for visual and audio information' (p. 56) before reading about a second study involving a 'clinical case.' Participants were assigned to one of three priming conditions that were each comprised of 60-second movie clips: blatant (i.e., a man physically walking away from an emotional conversation), subtle (i.e., a man silencing/re-directing an emotional conversation), or neutral (i.e., video of reptiles or amphibians). The unrelated clinical case involved a video of a heterosexual romantic couple. Participants were asked to rate their willingness to participate as a default 'participant' (i.e., willingness to participate in another study) or an 'affective facilitator' (i.e., willingness to

actively lead a group discussion regarding an interaction between romantic partners). However, after rating their willingness to take on one of the roles, participants were informed that they had run out of time and would not participate in the second study.

In a sample of 84 United States college students (41 women and 43 men), Ben-Zeev at al. (2012) identified a significant interaction between sex and condition [$F(2,78)= 4.05$, $p = .02$, $f = .269$]. Only the men who watched the blatant withdrawal condition ($M=1.78$, $f = .269$) rated their interest in serving as an 'affective facilitator' significantly lower than men in either the subtle [$t(34) = 3.45$, $p=.002$, $d = 1.20$] or the neutral [$t(28) = 2.71$, $p=.011$, $d = 1.17$] conditions. Women did not differ across priming conditions. Here, being primed with blatant affective withdrawal, is implicated in placing both men and their heterosexual romantic partners at risk for decreased communication and, in turn, potentially reduced relational satisfaction.

Good and Sanchez (2009) built upon gender priming research by utilizing a communal stereotype priming procedure (see Jost & Kay, 2005) to explore the relationship between complimentary gendered stereotypes on participant intentions and expectations for men and women. Complimentary gendered stereotypes are described as the 'separate but complimentary' stereotypes about men (i.e., agentic but not communal) and women (i.e., communal but not agentic). Participants were exposed to questionnaires asking them to explicitly reflect on stereotypes surrounding men and women. These questions, depending on the experimental condition, asked participants whether men and women differed in regard to communal (e.g., honest, moral, warm) traits and to what degree they differed on a 10-point Likert scale (e.g., 0 = "Men are more considerate" to 9 = "Women are more considerate"; Jost & Kay, 2005). These explicit questionnaires were

then implicitly connected to other measures; romantic relationships and benevolent sexism (Good & Sanchez, 2009).

Good and Sanchez (2009) randomly assigned 47 heterosexual undergraduate men to either a communal prime or no-prime condition. They found that, although men consistently rated women as more communal, when men explicitly reflected on communal stereotypes (i.e., prime condition) they also reported significantly more benevolent sexism [$F(1, 45) = 5.74$, $MS = 5.63$, $p = .02$, $d = .69$], investment in family [$F(1, 45) = 12.86$, $MS = 12.13$, $p = .001$, $d = 1.08$], and investment in romantic ideals [$F(1, 43) = 5.56$, $MS = 16.40$, $p = .02$, $d = .72$]. They suggested that their findings indicated that, although men perceived women as more communally competent, complimentary gender roles in romantic relationships (i.e., benevolent sexism) presented an opportunity for men to show more investment in relationships (Good & Sanchez, 2009).

Limitations. Although, all of the above studies utilize samples of college students, they fail to study the factors that place college students at the greatest risks, such as the experience and demonstration of masculine stereotypes (i.e., binge drinking and self reliance). Currently, gender priming literature has largely reported that priming with masculine stereotypes has increased 'masculine' judgments, behaviors, and intentions in men. However, this is often maladaptive, risky, or damaging to the health and well-being of men, their families, and communities. Yet, even this literature is limited as men's attitudes about masculinity or their personal identification with masculine gender roles are often not assessed (Ben-Zeev et al., 2012; Cesario et al.,. 2006).

Furthermore, much of the masculinity gender priming literature takes place in Europe (e.g., Hundhammer & Mussweiler, 2012; Mast et al., 2008). Although many of the studies took place in Western European countries where traditional gender roles are similar to those socialized within the United States, they are still theoretically and socially understood in unique ways (see Vandello et al., 2008). Specifically, stereotypically masculine roles, particularly within the US, are rigid and damaging (see Addis & Mahalik, 2003). In order to better support men and boys within the United States, a better understanding of the empirical evidence for positive masculinity and counter-stereotypic gender primes on judgments, behaviors, and enactments of masculinity are needed.

Counter-Stereotypic Gender Priming

Counter-stereotype primes are a relatively new construct in the gender priming literature. To date, it appears that only several studies have explicitly utilized counter-stereotypic gender primes. Currently, no studies have explored counter-stereotypic primes informed by positive masculinity in relation to the masculinity norm of self-reliance (i.e., help seeking intentions) regarding risky substance use in college contexts.

Goclowska, Crisp, and Labuschagne (2012) explored the implications of counter-stereotypic gender primes on mental processes. They utilized a priming method (see Hutter, Crisp, Humphreys, Waters, & Moffitt, 2009) that asked participants to create ten single adjectives to describe either stereotypic (i.e., male mechanic) or counter-stereotypic (i.e., female mechanic) statements. In a sample of 65 undergraduate British men and women, participants primed with counter-stereotypic statements demonstrated

more creativity and flexibility generating adjectives [$F(1,63) = 7.05$, $p = .01$, partial $\eta^2 = .10$] than those primed with stereotypic statements (Goclowska et al., 2012).

Although this study does not directly test whether or not counter-stereotypic gender primes have implications regarding men or women's gendered judgments, behaviors, or intentions, it provides support for the successful utilization of counter-stereotypic gender primes.

The most relevant demonstration of the implications of counter-stereotypic gendered primes on participant's gendered stereotyping of himself or herself was provided in Hundhammer and Mussweiler's (2012) final study in a series of six. They utilized a covert gender role priming manipulation (Macrae, Bodenhausen, Milne, & Jetten, 1994) by first asking participants to imagine the details of either a 'modern/non-traditional' target (i.e., a day in the life of a house husband or career woman) as opposed to 'traditional' target (i.e., house wife). Participants then completed a sex prime manipulation that consisted of completing a 12 word, 19 X 17 letter matrix word search (Mussweiler & Forester, 2000). In the sex priming condition, six of the words were related to sexuality (e.g., wet, bed, stiff) and six were neutral to sexuality (e.g., clock). In the neutral condition, all 12 words were unrelated to sexuality. Sex priming was utilized as, in their preceding studies, participants primed with sex-related words resulted in a significantly stronger personal identification with stereotypical gender roles [$F(1,52) = 4.43$, $p = .04$, partial $\eta^2 = .08$] than participants in the control condition [$t(54) = 2.64$, $p = .01$, $d = .70$]. It was Hundammer and Mussweiler's (2012) intention to see if this priming effect could be counteracted by counter stereotypic primes. Finally, participants were asked to describe the extent to which they felt they personally endorsed gender

stereotypes (i.e., Masculine - decisive, confident, fearless or Feminine – sensitive, emotional, understanding) in their everyday life using the Gender Typicality Scale (GTS +; Altstotter-Gleich, 2004).

In Hundhammer and Mussweiler's (2012) sample of 72 women and 64 men from an undergraduate university in Germany, they found significant 2-way interaction effects in their planned 2 (sex vs. control priming) X 2 (female vs male participants) ANOVAs for both the traditional [$F(1,67) = 4.60$, $p = .04$, partial $\eta^2 = .064$] and non-traditional [$F(1,61) = 4.74$, $p = .03$, partial $\eta^2 = .072$] gender prime conditions. In the traditional gender role prime condition, sex-primed women reported significantly higher endorsement of feminine scores than sex-primed men [$t(32) = 4.02$, $p < .001$, $d = 1.35$]. In contrast, neutral-primed men and women did not differ in their reports of gender typicality. This consistently replicated their previous study utilizing only traditional gender role primes.

However, Hundhammer and Mussweiler (2012) found that, in their sample primed with counter-stereotypic (i.e, 'modern') gender roles, women and men in the sex-primed condition [$t(30) < 1$, $p = .99$] did not significantly differ in their self-reported gender typicality. Thus the previously replicated pattern of gendered self-stereotyping after sex-primes was eliminated. Interestingly, when primed with counter stereotypic primes and control (i.e., no sex primes), women and men differed significantly [$t(31) = 2.45$, $p = .02$, $d = .84$] in their reports of gender typicality. As such, Hundhammer and Mussweiler (2012) highlighted the complexity of self-stereotyping after exposure to counter stereotypic gender roles and although their replicated prime effect was eliminated, they were unsure what to make of the significant difference in gender

typicality following counter stereotypic gender primes without sex primes. Although compelling, their study is significantly limited due to the lack of situation or context that is relevant to their primes (see Casper & Rothermund, 2012; Doyen et al., 2012).

Taken together, Goclowska, Crisp, and Labuschagne (2012) and Hundhammer and Mussweiler (2012) present the compelling, novel, and potentially beneficial implications of counter-stereotypic gendered primes. Cumulatively, the rigid sex-based proscriptive and prescriptive norms appear to become more flexible in light of counter stereotypic imagery (e.g., brave house husband). Individuals appear to demonstrate the ability to expand their understanding of themselves, their judgments, their intentions, and potentially even their behaviors. This becomes a particularly necessary path of research in light of the rigid, maladaptive, and damaging proscriptive and prescriptive masculine norms rampant throughout college communities. Not only do these proscriptive and prescriptive masculine norms restrict the development of young men, but they also place the well-being of college communities at risk. As such, it is essential to explore the potential for adaptive proscriptive or prescriptive masculine norms to influence men's expectations or understanding of themselves above and beyond traditional sex-based gender stereotypes. In other words, we must seek to identify ways in which masculinity can support the health and well-being of men and their communities, instead of resulting in damaging outcomes (i.e., dysfunction strain).

In response to the gaps in current gender priming literature, this study seeks to explore the relationships between counter-stereotypic masculine primes, positive masculinity (e.g., it takes strength to know your limits) and expectations and intentions associated with masculinity on college campuses (i.e., self-reliance, help seeking). This

proposed experimental design was chosen with the purpose of understanding the mechanisms that may foster less self-reliance, and further explore ways of avoiding triggering the precariousness of participants' masculinity (Bosson & Vandello, 2011). In other words, it is important to study whether or not counter-stereotypic masculine primes can reduce self-reliance (i.e., reluctance to seek help) in regard to relevant college contexts (i.e., problem drinking). Positive masculinity may provide a way to explore counter-stereotypic masculine primes without threatening men's masculine self-concept (i.e., precarious masculinity). If precarious masculinity is triggered, it may elicit intentions or behaviors that may be counterproductive or lead participants to anticipate the need to act in ways that demonstrate hypermasculinity (i.e., dysfunction strain). Therefore, primes that are intentionally in line with positive masculinity, as opposed to overtly challenging masculinity with gender counter-stereotypic tasks, will be explored (Bosson & Vandello, 2011).

Chapter III

Method

Participants

Participants were recruited through Amazon's Mechanical Turk (MTurk) after receiving approval from Lehigh University's Institutional Review Board. MTurk, a website often used by social scientists, allows researchers to reach diverse samples of participants and obtain data that are comparable in quality to data collected by other traditional online methods (Buhrmester, Kwang, & Gosling, 2011). Sample sizes were determined using G*Power 3.1 (Faul, Erdfelder, Lang, & Buchner, 2007) with the following input parameters: power = .8, α= .05, and $f^2 = .15$ ($R^2 = .24$). Two dollar incentives were provided for participation.

A total of 34 men, aged 18-25, presently enrolled in undergraduate studies in the United States, completed the pilot. Other demographic information for pilot participants was not requested. A total of 266 men completed the full study materials with valid data. Participant ages were 18 (<1%), 19 (5%), 20 (12%), 21 (11%), 22 (18%), 23 (13%), 24 (20%), and 25 years (20%). Regarding racial/ethnic background, participants identified as one or more of the following: "White/Caucasian" (76%), "Asian American" (11%), "Black/African American" (11%), "Latino" (6%), "Bi-racial/Multiracial" (2%), and "Native/Native American" (1%). Participants reported being in the 1st (6%), 2nd (17%), 3rd (28%), 4th (35%) or 5th and above (13%) year of university study in the United States. Participants reported majoring in the Arts (6%), Business/Accounting (22%), the Humanities (24%), and STEM (44%) fields.

Measures

Conformity to Masculine Norms. Participants in all three studies were asked to complete a bogus 'Brief Personality Assessment." The 'Brief Personality Assessment' served to conceal the *Conformity to Masculine Norms Inventory-46* (CMNI-46; Parent & Moradi, 2011) within an additional series of questions unrelated to masculinity. The unrelated questions were adapted from Forer's (1949) Diagnostic Interest Blank for use in this study. This deception was necessary to assess conformity to masculine norms prior to the experimental primes, without prematurely priming for masculinity (see Boschini, Muren, & Persson, 2012) and to help control for demand characteristics (Orne, 1962).

The CMNI-46 is a 46-item scale that measures men's personal, explicit, conformity with nine male gender roles; Emotional Control (6 items), Winning (6 items), Primacy of Work (4 items), Violence (6 items), Risk-Taking (5 items), Heterosexual Self-Presentation (6 items), Power Over Women (4 items), Playboy (4 items), and Self-Reliance (5 items). Items from the scale include statements such as "In general, I will do anything to win" (Winning) or "If I could, I would frequently change sexual partners" (Playboy). Participants report their level of identification with each item on a 4-point Likert scale. Responses range from 0 (strongly disagree) to 3 (strongly agree). Scores on 18 items are reverse scored. Items for each subscale are summed together, with higher scores indicating higher identification with specific masculine gender norms. Subscale scores can be summed together to indicate total identification with masculine gender norms. Coefficient alphas for each of the nine norms range from .78 to .89 (median .82;

Parent & Moradi, 2011). The CMNI-46, with permission from M. C. Parent (2015), is located in Appendix E.

Coefficient alphas were calculated with the participants of this study in order to indicate the reliability of both the individual subscales within the measure and the full measure. Coefficient alphas for the individual subscales were examined, ranging from unacceptable at .05 for the Power Over Women subscale to .75 for the Work Primacy subscale. The full CMNI-46 yielded an alpha of .68. In order to improve the reliability of the full scale, the Power Over Women subscale was removed. Additionally, item 17 from the Heterosexual Self-Presentation subscale (i.e., "It would not bother me at all if someone thought I was gay") and item 19 from the Violence subscale (i.e., "Sometimes violent action is necessary") were removed as they were poorly correlated with the other items and their removal improved the measure's reliability. After removing the unreliable subscale and items, the Adapted CMNI-46 full scale yielded an alpha of .76. The Adapted CMNI-46 with 40 items was used for analysis.

Self-Reliance Vignettes. Participants in all three of the studies responded to five vignettes, modeled after those utilized by McCusker and Galupo (2011). The vignettes were adapted for use in this study by integrating relevant constructs relevant to the college context (academic stress, familial stress, relational stress, mental health, and physical health). Participants were asked to read the vignettes as if they were experiencing it themselves in order to link participant's personal expectations to a context relevant to both their experiences in college and the study (see Casper & Rothermund, 2012). The five vignettes were presented to participants in a counterbalanced order.

After reading the vignette, participants responded to questions that assessed their expectations for how they would cope with the experience in the vignette. Questions were created based upon existing assessments of self-reliance (e.g., Levant et al., 2007). Based upon participant responses to the vignette questions, a self-reliance profile of adaptive (i.e., seeking informal or formal support) and maladaptive (i.e., "doing nothing," or substance use) help seeking intentions was created. The scores on specific items were reverse scored. After reverse scoring the appropriate items, all responses were summed to create a total score of self-reliance. High scores represent lower levels of self-reliance and indicate more adaptive responses (i.e., higher levels of intentions to seek professional or informal support). Lower scores represent higher levels of self-reliance and indicate more maladaptive responses (i.e., substance use) to stress. Both the vignettes and the corresponding questions were reviewed by five experts in the fields of men and masculinity and social psychology (i.e., precarious masculinity). The vignettes, corresponding questions, and scoring instructions are located in Appendix F. The coefficient alpha for the self-reliance profiles derived from vignette responses was acceptable at .89.

After completing the self-reliance questions, participants were asked to respond to the following question: "How similar is your actual experience as a college student to the experience described in this vignette?". Participants were asked to respond to this question on a 6-point Likert scale ranging from 0 (not at all similar) to 5 (very similar). This question was used for descriptive purposes and responses can be viewed in Table 2.

Attitudes Toward Help Seeking. All participants were asked to complete the *Attitudes Towards Seeking Professional Psychological Help Scale: Short Form*

(ATSPPH-SF; Fischer & Farina, 1995). The ATSPPH-SF is a 10-item scale that measures an individual's attitudes toward seeking support for psychological issues. Items from this scale include statements such as "Personal and emotional troubles, like many things, tend to work out by themselves" and "I might want to have psychological counseling in the future." Participants respond to items on a 4-point Likert scale. Scores range from 3 (agree) to 0 (disagree). Items 2, 4, 8, 9, and 10 are reverse scored. Item scores are summed, with high scores on the ATSPPH-SF indicating more positive attitudes toward seeking psychological support. The ATSPPH-SF has good psychometric properties, with a previous coefficient alpha of .84, and test-retest reliability over a 4-week interval of .80 (Fischer & Farina, 1995). For this study, the coefficient alpha was acceptable at .85. The ATSPPH-SF is located in Appendix G.

Hypothesis Awareness. The *Perceived Awareness of Research Hypothesis* scale (PARH; Rubin, Paolini, & Crisp, 2010) is a 4-item scale that measures participants' perceived awareness of hypotheses. This scale allows the present study to explore demand characteristics, or the potential that participants respond in a confirmatory manner (Orne, 1962). Items from the scale include statements such as "I knew what the researchers were trying to demonstrate in this research." Participants respond on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Items 2 and 4 on the scale are reverse scored, and the resulting scores are averaged. Higher scores on the PARH indicate higher levels of perceived awareness of hypotheses, which may introduce the potential for demand characteristics to influence the results (Orne, 1962). The PARH has demonstrated acceptable internal consistency, with a coefficient alpha

ranging from .77 to .81 (Rubin et al., 2010). For this study, the coefficient alpha was acceptable at .91.

An additional question, prompting participants to qualitatively report their impression of the focus of the study was added to explore whether or not participants identified masculinity as a focus of the study. Participants were excluded from analyses if they identified 'masculinity' or 'manhood' as a focus of the study, and if their scores on the PARH represented positive outliers (i.e., +3.00 standard deviations from the PARH mean; Rubin et al., 2010). The PARH and added question is located in Appendix H.

Demographic Information. Participants also completed a demographic survey exploring their age, self-identified gender identity, race/ethnicity, year in college, and major. Demographic questionnaire is located in Appendix I.

Procedure

Pilot. The CMNI-46 and the modified scrambled sentence task (Srull & Wyer, 1979) for use in Study 1 were first piloted in order to determine the appropriate percentage of priming sentences and neutral sentences to include in the experimental condition. A total of 34 self-identified men, aged 18-25, currently enrolled in undergraduate studies participated. Pilot participants were recruited through MTurk. Participants were randomly assigned to one of five conditions. Thirteen of the participants were randomly assigned to either complete the 'Brief Personality Inventory' that housed the full CMNI-46 (n = 6) or a 'Brief Personality Inventory' that excluded three explicit questions related to masculinity and/or manhood (n = 7). These pilot conditions sought to determine whether or not items such as 'I love it when men are in

charge of women' were too overt to be included in a covert masculinity ideology assessment housed in the 'Brief Personality Inventory.' Twenty one of the pilot participants were randomly assigned to one condition that had either 60% priming content – 40% neutral content ($n = 8$), 80% priming content – 20% neutral content ($n = 8$) and 100% priming content ($n = 5$). After completing their randomly assigned pilot condition, participants qualitatively reported their perception of the focus of the pilot.

The findings of the pilot determined that the 'Brief Personality Inventory' was able to include the full CMNI-46 without explicitly being about manhood or masculinity. Additionally, the final percentage of sentences that are priming and that are neutral was determined based upon the highest percentage of primes where at least 80% of the participants in the condition did not explicitly identify 'masculinity' or 'manhood' as a focus of the primes. Based upon the findings of the pilot, 80% of the sentences include content relevant to priming and 20% include only neutral content.

Full Study. Participants first reviewed and gave their informed consent for participation in a study broadly exploring '21st Century College Men's Cognitive Functioning and Well-Being.' The minimally deceptive introduction to the study can be found in Appendix J. The purpose of the deception throughout the study was to help control for contrast effects (Wheeler & Petty, 2001) and demand characteristics (Orne, 1962). Immediately after completion of the study, participants were fully debriefed and provided with contact information in order to ask questions or express concerns. The debriefing statement is located in Appendix K.

Next, in line with Stevens' (2009) suggestion to measure covariates before experimental manipulations, participants completed the CMNI-46 housed within a

deceptive 'Brief Personality Assessment' to establish their preexisting affective, behavioral, and cognitive conformity with masculine gender norms. Participants were then randomly assigned to one of the eight study conditions. Participants only completed one of the conditions from one of the three studies. After completion of their randomly assigned condition, participants reviewed and responded to the self-reliance vignettes and the ATSPPH-SF that were presented in a counterbalanced order. Finally, participants completed the PARH and demographic information before receiving a debriefing statement describing the true purpose of the study. For a visual depiction of the study procedure, view Figure 1.

Study 1

Participants. A total of 87 participants were randomly assigned to either the masculinity congruent condition or the control condition. Fifteen participants were removed due to their perceived awareness of research hypotheses ($N = 5$) or incomplete data ($N = 10$). Therefore, a total of 36 participants were included in the Masculinity Congruent condition, and a total of 36 participants were included in the Control condition. Participant ages were 18 (1%), 19 (4%), 20 (8%), 21 (9%), 22 (16%), 23 (17%), 24 (22%), and 25 years (20%). Regarding racial/ethnic background, participants identified as one or more of the following: "White/Caucasian" (86%), "Asian American" (6%), "Black/African American" (3%), "Latino" (3%), "Bi-racial/Multiracial" (1%), and "Native/Native American" (1%). Participants reported being in the 1st (5%), 2nd (12%), 3rd (28%), 4th (39%) or 5th and above (15%) year of university study.

Materials.

Experimental Condition: Masculinity Congruent. The first study explored implicit gender primes that represent prescriptive norms associated with positive masculinity (e.g., loyalty). In this way, help seeking behaviors are implied to be congruent with norms associated with positive masculinity. A sentence unscrambling task was adapted from Srull and Wyer's (1979) original procedure. Participants unscrambled 15 sets of 5 words to form 15 complete sentences. Participants were instructed to form a grammatically correct sentence utilizing all but one of the words as quickly as possible. The sentence unscrambling task was piloted ($N = 21$) to determine which percentage of sentences are related to the goals of the study and which are neutral. Determined by the pilot, in 80% of the questions the sentence content was related to help-seeking efforts congruent to masculinity or men's underutilization of help-seeking services when faced with physical or psychological health problems. Sentence content was established based upon previous research about positive masculinity, men's use of help, and statistics related to the health risks facing men (e.g., brave – cry – only – couches – the). The sentences were reviewed by five experts in the psychological study of men and masculinity and social psychology (i.e., precarious masculinity). The remaining 20% of sentences included content that was neutral and unrelated to the goals of the study (e.g., puppy – cute – hat – barks – the). This task was disguised as part of an exploration of college men's cognitive functioning. The scrambled sentences used in the experimental condition are located in Appendix A.

Control Condition. The control condition also utilized the sentence unscrambling task (Srull & Wyer, 1979); however, the word sets and sentence content for each task

were neutral and unrelated to the goals of the study. The scrambled sentences used in the control condition are located in Appendix B.

Analysis Plan. Preliminary data analyses were conducted using SPSS. Based upon recommendations by Curran, West, and Finch (1996), data for the variables were assessed for univariate normality using skewness (range -2 to +2) and kurtosis (range -7 to +7). Multicollinearity was assessed for the variables based upon Leech, Barrett, and Morgan's (2011) recommendation that correlations outside of the -.6 to .6 range are problematic. Homogeneity of variance matrices was assessed based upon a non-significant Box's test. Descriptive statistics and correlations were also assessed.

For Study 1 the hypothesis was explored using a one-way, 2-group, multivariate analysis of covariance (MANCOVA) with a Wilks' λ generated F-test (Stevens, 2009). The independent variable in this study was comprised of two categorical groups: masculinity congruent and control. MANCOVA was selected to reduce within-group variance and as conformity to masculine norms, measured as a continuous variable in this study by the CMNI-46, is theoretically hypothesized to have a linear relationships with both continuous dependent variables: self-reliance and help-seeking attitudes. Homogeneity of regression was assessed by creating a custom model including a main effect for each independent variable and covariate in addition to an interaction effect between the independent variable and the covariate. Homogeneity of regression was assessed with a non-significant F-test for the interaction effect between the independent variable and the covariate. Next, the interaction was removed, and analysis continued with a test of equality of adjusted means.

If the multivariate test yielded a significant *F*-test, then equality of adjusted means would be examined. If the null hypothesis regarding the equality of adjusted means was rejected, univariate effects would be assessed and Bonferroni post-hoc comparisons would be conducted ($p < .05$; Stevens, 2009).

Study 2

Participants. A total of 102 participants were randomly assigned to one of the Counter-stereotypic, Stereotypic, or Neutral conditions. Fifteen participants were removed due to their perceived awareness of research hypotheses ($n = 10$) or incomplete data ($n = 5$). Therefore, a total of 29 participants were included in the Counter-stereotypic condition, 29 participants were included in the Stereotypic condition, and 29 participants were included in the Neutral condition. Participant ages were 18 (0%), 19 (6%), 20 (17%), 21 (13%), 22 (20%), 23 (9%), 24 (15%), and 25 years (18%). Regarding racial/ethnic background, participants identified as one or more of the following: “White/Caucasian” (68%), “Asian American” (9%), “Black/African American” (16%), “Latino” (7%), “Bi-racial/Multiracial” (0%), and “Native/Native American” (0%). Participants reported being in the 1st (3%), 2nd (23%), 3rd (29%), 4th (32%) or 5th and above (10%) year of university study.

Materials

Counter-Stereotypic Condition. The second study explored the potential impact of explicit counter-stereotypic gender primes on help seeking intentions within a college context. A gender priming method adapted from Goclowska et al. (2012) and Hutter et al. (2009) asked participants to create ten single adjectives to describe seven randomly presented counter-stereotypic (e.g., female chemist) constructs. Counter-stereotypic

constructs were established based upon stereotypical gender expectations within the United States and were reviewed by five experts in the psychological study of men and masculinity and/or social psychology (i.e., precarious masculinity). This task was disguised as part of an exploration of college men's cognitive functioning. Counter stereotypic constructs are located in Appendix C.

Stereotypic Condition. The stereotypic condition also utilized the same priming task. However, participants were asked to create ten single adjectives to describe seven randomly presented stereotypical gendered constructs within the culture of the United States (e.g., male mechanic). Stereotypic constructs are located in Appendix D.

Control Condition. Participants within the control condition were not presented with any prime before completing the rest of the study.

Analysis Plan. Preliminary data analyses were conducted using SPSS. Based upon recommendations by Curran et al. (1996), data for the variables were assessed for univariate normality using skewness (range -2 to +2) and kurtosis (range -7 to +7). Multicollinearity was assessed for the variables based upon Leech, Barrett, and Morgan's (2011) recommendation that correlations outside of the -.6 to .6 range are problematic. Homogeneity of variance matrices was assessed based upon a non-significant Box's test. Descriptive statistics and correlations were also assessed.

For study 2, the hypotheses were explored using two multiple linear regressions (MLR) with an *F*-test (Stevens, 2009). The continuous predictor variable for both of the MLR was conformity to masculine norms. As CMNI is continuous, it was centered to increase interpretability of interactions and then entered into the analysis as a covariate on SPSS (Aiken & West, 1991). The experimental condition (3 group; Counter-

stereotypic, Stereotypic, and Neutral) was the categorical predictor variable for both MLRs. As such, it was contrast coded to test the specific hypotheses for Study 2. The Stereotypic condition represented the reference group for the contrast codes. The hypothesized contrast codes were based upon those suggested by Cohen, Cohen, West, and Aiken (2003) and can be viewed in Table 1. The predictor variables were entered simultaneously. The outcome variables for use in Study 2 were self-reliance and attitudes toward help seeking. MLR was selected in order to separately explore the relationships between the sets of predictors and the outcome variables described above.

Cook's Distance was assessed to ensure that the regression model was stable across participants and not overly influenced by outliers. Based upon recommendations from Cook and Weisberg (1982), Cook's D values less than 1 are acceptable. Absence of multicollenarity was assessed with a VIF less than 10 (Myers, 1990) and a Tolerance less than .02 (Menard, 1995).

If the multivariate test of the regression models revealed a significant *F*-test, suggesting a significant relationship between the two sets of variables, follow up analyses would involve examining univariate *F*-tests for each outcome variable. This would explore the potential for a significant relationship between the set of independent variables and each of the two dependent variables separately. Next, if a significant univariate *F*-test was revealed, a follow up univariate test would explore the potential individual significance of each independent variable on the significant outcome variable.

In the case of significant univariate *t*-tests ($p < .05$), unstandardized regression weights would be explored to assess predicted change in outcome variables as the significant predictor increased, controlling for the other predictor (Stevens, 2009).

Study 3

Participants. A total of 79 participants were randomly assigned to one of the Possible "Ideal" Masculinity, "Ought" Masculinity, or Control conditions. Nineteen participants were removed due to their perceived awareness of research hypotheses (*n* = 3) or incomplete data (*n* = 16). Therefore, a total of 20 participants were included in the Possible "Ideal" Masculinity condition, a total of 20 participants were included in the "Ought" Masculinity, and a total of 20 participants were included in the Control condition. Participant ages were 18 (0%), 19 (6%), 20 (12%), 21 (9%), 22 (21%), 23 (12%), 24 (18%), and 25 years (22%). Regarding racial/ethnic background, participants identified as one or more of the following: "White/Caucasian" (64%), "Asian American" (18%), "Black/African American" (12%), "Latino" (6%), "Bi-racial/Multiracial" (5%), and "Native/Native American" (0%). Participants reported being in the 1st (6%), 2nd (16%), 3rd (28%), 4th (37%) or 5th and above (12%) year of university study.

Materials

Experimental Condition: Possible "Ideal" Masculinity. The third study explored the potential impact of positive masculinity informed primes on help seeking intentions within a college context. This study was intended to help understand the implications of positive masculinity outreach programming on intentions for help seeking. In line with *possible masculinities* (Davies et al., 2010), the 'ideal self guide' (Higgins, 2012), positive masculinity (Kiselica & Englar-Carlson, 2010), and Hundhammer and Mussweiler's (2012) covert gender role priming manipulation (Macrae, Bodenhausen, Milne & Jetten, 1994), participants were asked to fill in five qualitative responses for the following priming question: "Ideally, what kind of man

would you like to become?". Participants were also asked to reflect on the following question and provide a qualitative response: "What, besides time or money, is stopping you from becoming that man?" (with permission from A. Isacco, 2015).

Experimental Condition: "Ought" Masculinity. Within the framework of the regulatory focus theory (Higgins, 2012), men may draw from either an 'ideal' or an 'ought' self guide that can vary across different situations. As the 'Possible' Masculinity condition primes for college men to utilize their 'ideal' self guide, it may also be useful to understand if the 'ought' self guide - informed more by hegemonic masculinity – may influence different intentions regarding self-reliance and help seeking. Similar to the Possible "Ideal" Masculinity condition, participants within the "Ought" Masculinity condition were asked to fill in five qualitative responses for the following priming question: "What kind of man should you be?". Participants were also asked to reflect on the following question and provide a qualitative response: "What, besides time or money, is stopping you from becoming that man?".

Control Condition. Participants within the control condition were not asked a question prior to completing the rest of the study.

Analysis Plan. Preliminary data analyses were conducted using SPSS. Based upon recommendations by Curran et al. (1996), data for the variables was assessed for univariate normality using skewness (range -2 to +2) and kurtosis (range -7 to +7). Multicollinearity was assessed for the variables based upon Leech, Barrett, and Morgan's (2011) recommendation that correlations outside of the -.6 to .6 range are problematic. Homogeneity of variance matrices was assessed based upon a non-significant Box's test. Descriptive statistics and correlations were also assessed.

For Study 3 the hypotheses were explored using a one way, 3-group, multivariate analysis of covariance (MANCOVA) with a Wilks' λ generated *F*-test (Stevens, 2009). The independent variable in this study was comprised of three categorical groups; Possible "Ideal" Masculinity, "Ought" Masculinity, and control. A MANCOVA was selected to reduce within-group variance and as conformity to masculine norms, measured as a continuous variable in this study by the CMNI-46, was theoretically hypothesized to have a linear relationships with both continuous dependent variables; self-reliance and help-seeking attitudes. Homogeneity of regression was assessed by creating a custom model including a main effect for each independent variable and covariate in addition to an interaction effect between the independent variable and the covariate. Homogeneity of regression was assessed with a non-significant *F*-test for the interaction effect between the independent variable and the covariate. Next, the interaction was removed, and analysis continued with a test of equality of adjusted means.

If the multivariate test yielded a significant *F*-test, then equality of adjusted means would be examined. If the null hypothesis regarding the equality of adjusted means was rejected, univariate effects would be assessed and Bonferroni post hoc comparisons would be conducted ($p < .05$; Stevens, 2009).

Chapter IV

Results

Preliminary Analyses

Univariate normality was first assessed for the Adapted CMNI-46, the Self-Reliance Profile, the ATSPPH-SF, and the PARH. Skewness and kurtosis were both acceptable, with skewness ranging from -.15 to .01 and kurtosis ranging from -.88 to .50. Multicollinearity was assessed and acceptable. CMNI-46 scores were significantly negatively correlated with scores on both the Self-Reliance Profile and the ATSPPH-SF. Scores on the Self-Reliance Profile were significantly positively correlated with scores on the ATSPPH-SF. Full correlational data and descriptive statistics can be found in Table 3.

Study 1 Results

Box's test for Study 1 was non-significant (p = .76). Homogeneity of regression was found through a non-significant F-test for the interaction between CMNI-46 and the independent variable (Wilks' λ = .98, F(2, 67) = .55, p = .58). As such, the interaction was removed, and analysis continued with a test of equality of adjusted means.

A one way, 2-group, multivariate analysis of covariance (MANCOVA) with a Wilks' λ generated F-test (Stevens, 2009) was non-significant for Study 1 (Wilks' λ = .98, F(2, 68) = .84, p = .44) indicating that, even after controlling for conformity to masculine norms, participants in the Masculinity Congruent and the Control conditions did not differ significantly in their responses to the Self-Reliance Profile or the ATSPPH. As the multivariate test was non-significant, the equality of adjusted means was not examined, and univariate effects were not explored.

Study 2 Results

The first MLR explored the Self-Reliance Profile as the outcome variable. There were no outliers, and the maximum Cook's Distance was .30, indicating that no individual participant overly influenced the model. The assumption of absence of multicollinearity was also assessed and acceptable. The regression model was significant and explained 23% of the variance in participant's responses to the self-reliance vignettes ($F(5, 81) = 4.90$, $p < .001$). However, the only significant negative predictor was the adapted CMNI-46 ($p < .001$). Exposure to the experimental conditions was non-significant. This suggests that, after controlling for conformity to masculine norms, exposure to Counter-Stereotypic or Control conditions did not significantly increase or decrease participant responses to the self-reliance vignettes in comparison to those exposed to the Stereotypic condition ($p = .78$). Furthermore, participants exposed to the Counter-Stereotypic condition did not significantly differ in their responses than those exposed to the Control condition ($p = .22$). Finally, the interaction terms were also not significant, indicating that the relationship between CMNI-46 and participant scores on the self-reliance profiles did not differ significantly due to exposure to experimental conditions ($p = .58$ and $p = .33$).

The second MLR explored the ATSPPH-SF as the outcome variable. There were no outliers, and the maximum Cook's Distance was .10, indicating that no individual participant overly influenced the model. The assumption of absence of multicollinearity was also assessed and acceptable. The regression model was significant and explained 31% of the variance in participant's responses to the ATSPPH-SF ($F(5, 81) = 7.28$, $p < .001$). However, the only significant negative predictor was the adapted CMNI-46 ($p <$

.001). Exposure to the experimental conditions was non-significant. This suggests that when controlling for conformity to masculine norms, exposure to Counter-Stereotypic or Control conditions did not significantly increase or decrease participant responses to the ATSPPH-SF in comparison to those exposed to the Stereotypic condition (p = .71). Furthermore, participants exposed to the Counter-Stereotypic condition did not significantly differ in their responses than those exposed to the Control condition (p = .63). Finally, the interaction terms were not significant, indicating that the relationship between CMNI-46 and participant scores on the ATSPPH-SF did not differ significantly due to exposure to experimental conditions (p = .41 and p = .66).

Study 3 Results

Box's test for Study 3 was non-significant (p = .88). Homogeneity of regression was found through a non-significant F-test for the interaction between CMNI-46 and the independent variable (Wilks' λ = .89, $F(4, 106) = 1.61$, p = .18). As such, the interaction was removed, and analysis continued with a test of equality of adjusted means.

A one-way, 3-group, multivariate analysis of covariance (MANCOVA) with a Wilks' λ generated F-test (Stevens, 2009) was non-significant for Study 3 (Wilks' λ = .95, $F(4, 110) = .75$, p = .56) indicating that, after controlling for conformity to masculine norms, participants in the Possible "Ideal" Masculinity, "Ought" Masculinity, and Control conditions did not differ significantly in their responses to the Self-Reliance Profile or the ATSPPH. As the multivariate test was non-significant, the equality of adjusted means was not examined, and univariate effects were not explored.

Chapter V

Discussion

Developing theories of positive (PPPM; Kiselica & Englar-Carlson, 2010) and possible (Davis et al., 2010) masculinities had, prior to this dissertation, not yet joined with emergent gender priming literature in the United States (Vandello et al., 2008) or developing gender priming literature across Europe (e.g., Hundhammer & Mussweiler, 2012). The importance of empirically examining theories such as positive and possible masculinities lies in the potential of better understanding how masculinity is constructed and enacted in addition to identifying effective and relevant means for supporting the health and well-being of men and their surrounding communities (see Addis et al., 2010). Of particular importance is understanding how masculinity is constructed and enacted in the most consistently high-risk population: college men (see SAMHSA, 2012).

In order to address the aforementioned gap, the present dissertation developed and tested three experimental studies informed by social constructionist (see Addis, Mansfield, & Syzdek, 2010), masculinity theories (e.g., dysfunction strain; Pleck, 1995), regulatory focus theory (e.g., Higgins, 2012) and existing gender priming literature. Each of the three studies utilized a different approach to attempt to prime for counter-stereotypic primes in line with positive or possible masculinities. Study 1 utilized an adapted version of the widely used implicit priming method first created by Srull and Wyer (1979). Study 2 utilized a counter-stereotypic prime successfully utilized by Goclowska et al. (2012) and first created by Hutter and colleagues (2009). Finally, Study 3 utilized methodology developed from *possible masculinities* (Davies et al., 2010), positive masculinity (Kiselica & Englar-Carlson, 2010), Regulatory Focus theory

(Higgins, 2012), and Hundhammer and Mussweiler's (2012) successful adaptation of Macrae and colleague's (1994) gender role priming manipulation. Each of the three studies were reviewed by multiple experts and explored the potential for counter-stereotypic or positive masculinity informed primes to impact participant endorsement of intentions to seek help or attitudes towards professional support.

The following discussion section will first interpret the results from studies 1-3 within the context of the existing body of literature relevant to masculinity, gender priming, and help seeking. The discussion section will then turn to limitations, implications, and future directions.

Findings

As anticipated, the current study found significant relationships between participants' conformity to masculine norms and their responses to both the self-reliance vignettes and the ATSPPH-SF. The connection between men's endorsement of masculine norms and help seeking, such that as masculine conformity increases, help seeking intentions decrease, is well supported by both theoretical and empirical literature (e.g., Berger et al., 2005; Levant & Wimer, 2014). These hypothesized significant relationships with masculine ideology were evidenced by participants across the conditions of all three studies. As such, the present study strengthens the understanding that endorsement of hegemonic masculinity coincides with a decrease in men's comfort with seeking help and places them at risk (e.g., increased intentions to cope with substances).

In addition to adding to the growing literature connecting conformity to masculinity and help seeking intentions, the present study sought to empirically explore

the area between traditionally proscriptive/prescriptive masculine norms and modern/non-traditional masculinity. This study sought to assess for the potential for masculinity to be positive (see Kiselica & Englar-Carlson, 2010) in regard to men's intentions to seek help. However, despite drawing from well-established theories, seeking expert feedback, and utilizing multiple gender priming approaches, none of the experimental conditions from any of the three studies yielded significantly different participant responses regarding their self-reliance profiles or their attitudes toward help seeking. Although unexpected, the results of this study are essential to challenging existing assumptions how masculinity is constructed and enacted in addition to guiding how multiple masculinity theories continue to develop.

When considering the non-significant findings of this study, it is first essential to reflect on the content of the primes adapted for use in each study in order to better inform the growing literature surrounding counter-stereotypic gender priming. In line with the findings of Muller and Rothermund (2014), Study 1 sought to adapt primes that would demonstrate positive and possible masculinity traits in ways which were congruent to adaptive intentions (e.g., help seeking, mental health awareness) and associated, by definition, with men (e.g., fireman, dad). However, it is possible that actions such as help seeking, even when paired with men, remain so incongruent to stereotypical hegemonic masculinity that priming may not influence a man's intentions about personally seeking help. Similarly, Study 2's use of Goclowska et al.'s (2012) stereotyped and counter-stereotyped gender primes did not result in differing intentions to seek help. Although Goclowska and colleagues (2012) found that the use of this priming mechanism successfully impacted men and women's creativity and flexibility, Study 2 failed to

demonstrate the ability for increased creativity and flexibility in men's willingness to seek different types of support outside of those stereotyped by society (e.g., self-reliance). In other words, it remains possible that counter-stereotypic primes have utility in increasing creativity and flexibility even if it does not transfer to one's own help seeking intentions.

In regard to Study 3, given the extensive literature underpinning the framework of regulatory focus theory (Higgins, 2012), it is particularly surprising that men exposed to the 'ideal' masculinity prime and the 'ought' masculinity prime were not significantly different in regard to their responses toward help-seeking. As both conditions asked men to consider either their 'ideal' or 'ought' selves as men, there is the potential that they were non-significantly different as men drew from the rigid and stereotypical messages from society for both conditions. For instance, it may be that men perceived that they 'ought' to be the stereotypically, hegemonic, 'ideal' man. If this is the case, it becomes unsurprising that their responses would be non-significantly different. Exploring their qualitative responses, in addition to adding conditions that explore 'ideal' and 'ought' selves without focusing on gender, can help clarify the nature of the non-significant findings of Study 3.

Finally, across all three studies, there is the potential that covertly assessing for masculine ideology prior to the administration of the primes inadvertently primed men's awareness of masculine stereotypes and influenced their effort to respond to the outcome variables in more masculine ways due to a desire to be more like 'men.' This would be in line with Cesario et al.'s (2006) findings, which indicated an interaction between both the participant's implicit beliefs about a group and the participant's desire to be more or less

like that group. The potential for this could be assessed in a follow up study that either measured masculine ideology a week prior to exposure to the primes (see Cesario et al., 2006) or included a control condition that would not assess for men's masculine ideology.

Next, it is important to recognize the potential that hegemonic masculine norms regarding help seeking may be too far ingrained and too readily accessible by the time men reach young adulthood for counter-stereotypic primes to be effective. Although previous counter-stereotypic gender primes have also utilized young adults (see Goclowska et al., 2012; Hundhammer & Mussweiler, 2012), there may be a more nuanced and complex relationship when it comes to men's endorsement of masculine norms and their intentions regarding their own health. For instance, there may be more flexibility for masculinity to manifest positively when behaviors and actions are directed at others and not at the men themselves (e.g., protection of others, loyalty; Englar-Carlson & Kiselica, 2013; Hammer & Good, 2010). Therefore, perhaps counter-stereotypic masculinity can only be primed to be enacted in ways that appear externally adaptive – as self-sacrifice or courage – but may occur at the cost of the man's personal well-being. If this is the case, it may be that counter-stereotypic gender primes in line with positive masculinity may instead be effective for increasing men's willingness to offer help or guidance when they observe problematic behaviors in their male peers. In other words, it may be true that exposure to non-traditional/modern masculine norms could increase young adult men's ability to recognize and disrupt problematic intentions or behaviors in other male peers, even if they cannot recognize similar aspects in themselves.

However, guided by the results of the present studies, the question of how or if counter-stereotypic primes can trigger masculinity in adaptive ways for the young adult men, themselves, remains. Even if it is true that masculinity can be primed to increase prosocial interactions or manifest in positive ways when directed towards others, there may be the potential that this is only superficially adaptive. If masculinity, even in its positive or possible forms, still restricts men's ability to seek the help and support they need, then the costs of hegemonic masculinity may outweigh the potential community benefits of positive masculinity. For example, the danger to self and others becomes very real and destructive (see Chemaly, 2015) when the men who are socialized to be ill-equipped to manage personal distress perceive resources to be threatening or unacceptable (e.g., precarious masculinity, social costs, dysfunction strain; Bosson & Vandello, 2011; Lee, 2002; Pleck, 1995) and they see themselves to be out of options. Future exploration is needed to more adequately answer the questions of whether positive masculinity can support the individual man as well as truly supporting the community in which he lives and works.

Limitations

This dissertation is limited in a variety of ways. It is first important to recognize that, although the study sought to expand understanding of relevant cues that may elicit adaptive intentions or expectations (see Addis et al., 2010), it did not address actual behaviors. As such, this study can only serve to inform the future development of theories that focus on the construction and enactment of masculinity and the identification of ways of reducing risks to the health of college aged men. In regard to external validity, this study may only be generalizable to college-aged populations that

match the demographic constellation of the participants (i.e., White). It is also of note that the majority of participants reported being at the upper threshold of traditional college age (i.e., 24-25 years). Therefore, it may not be generalizable to older or younger individuals, those of different educational levels, those of different demographic constellations, or individuals outside of college communities.

Furthermore, although the study removed participants who indicated perceived awareness of hypotheses, it remains possible that covertly assessing for conformity to masculine norms prior to the experimental conditions primed for hegemonic masculinity in a way that overpowered the potential for the counter-stereotypic primes to be effective. Finally, this study did not explicitly explore the potential that counter-stereotypic gender primes triggered a form of precarious masculinity in the participants that could have influenced their endorsement of intentions to seek help (see Bosson & Vandello, 2011).

There are additional threats to construct validity. For example, although the CMNI-46 is a widely used measure of gender norms, it is only one measure of masculinity and different measures of masculinity may capture different types of participant responses. Furthermore, despite established reliability and validity in previous studies, the internal consistency coefficients found in this wide sample of college men were variable and at times unacceptable. As such, the subscale assessing for endorsement of norms relevant to Power Over Women was removed to increase the reliability of the full scale. This calls into question whether the CMNI-46 was an effective measure of masculinity for the participants in this study.

Construct validity is also threatened with the self-reliance vignettes, adapted specifically for use in this study, as the psychometric properties had not been previously

established. However, seeking expert feedback prior to inclusion in the studies guarded against this limitation. Furthermore, reliability assessed using coefficient alphas were acceptable to good for each of the five vignettes and for the full self-reliance profile.

Implications and Future Directions

The findings of the present study suggest that relevant cues to promote help-seeking intentions in college men, if they exist, remain empirically unknown. Although the three studies encompassed within this dissertation did not find support for the hypotheses, they add to our understanding of the nuances surrounding the construction and enactment of masculinity in the United States. Based upon the findings of this dissertation, future researchers are encouraged to explore the potential for counter-stereotypic gender primes in line with positive masculinity (i.e., loyalty; Englar-Carlson & Kiselica, 2013; Hammer & Good, 2010) to increase the likelihood that men identify and disrupt problematic situations and behaviors (e.g., binge drinking) by offering appropriate support or guidance to others. In this way, researchers could look to answer whether men are more willing to enact positive masculinity by offering support for seeking help directed to others, even if they do not appear open to seeking their own help for themselves. Continuing in the direction of promoting prosocial, supportive, and adaptive interactions between men, it is also essential for future researchers to explore the willingness of men to respond positively if they are offered help, support, or guidance. This may prove a more fruitful avenue than identifying ways to increase men's willingness to seek help.

Although the primes did not appear to effectively increase men's intentions to seek help, primes congruent with masculinity may still effectively reduce the distress

(e.g., precarious masculinity, social costs, dysfunction strain; Bosson & Vandello, 2011; Lee, 2002; Pleck, 1995) for men who have already sought help. For example, counter-stereotypic (i.e. modern), positive, and possible masculinities may all have applications within clinical work to increase and reinforce men's engagement in therapy (Englar-Carlson & Kiselica, 2013; Kiselica & Kiselica, 2014). Future research that investigates the clinical benefits of utilizing positive masculinity cues is needed to empirically test the validity of clinical applications. In addition to assessing the potential for positive masculinity informed or counter-stereotypic primes may effectively reduce distress associated with seeking traditional forms of social support, it may also be important for theorists and researchers to identify resources that do not necessarily fit in the mold of traditional help seeking. For example, identifying types of support which simultaneously serve to reduce distress, decrease isolation (i.e., self-reliance), and are congruent with positive or prosocial masculinities (Davis et al., 2010; Englar-Carlson & Kiselica, 2013; Hammer & Good, 2010).

Several other avenues, as guided by the findings of this dissertation are worthy of future exploration. As repeated exposure to hegemonic masculinity norms throughout childhood and adolescence may prevent counter-stereotypic gender primes from effectively impacting men's endorsement help seeking intentions, future researchers may explore counter-stereotypic primes, such as those utilized in these studies, across various age groups and different demographics. For instance, future researchers may consider controlling for age of participants or assessing counter-stereotypic primes in childhood as a means to increase young men's ability to consider more flexibility in possible masculinities (Davis et al., 2010) and increase the ability to reduce potential

discrepancies between ‘ideal,’ ‘ought’ and ‘actual’ selves (Higgins, 2012). Masculinity may also be constructed and enacted differently for men who have differential access to hegemonic masculinity based upon the simultaneous privilege and oppression associated with their demographic constellation in the United States (see Courtenay, 2000a; Liang, Molenaar, & Heard, 2016). As such, future researchers can explore the potential for counter-stereotypic primes to have different relationships with outcomes such as help-seeking intentions in different demographic groups (e.g., older adult men).

Additionally, as the endorsement of masculine norms are also problematic when socialized in females (Kaya, Iwamoto, Grivel, Clinton, & Brady, 2016), future researchers may consider exploring the potential for counter-stereotypic primes in supporting women by increasing positive attitudes towards intentions to seek help. Although college-aged men, such as the participants in this study, may not perceive the flexibility to endorse help-seeking when exposed to counter-stereotypic primes, it may remain true that similar primes may be effective for women who also endorse high levels of conformity to proscriptive and prescriptive masculinity norms stereotypically associated with men. Future researchers may consider this avenue for exploration as women may be simultaneously socialized for masculine and feminine norms in a way that is more socially acceptable, and less ‘precarious’ (Bosson & Vandello, 2011; Mansfield et al., 2003) in the United States than their male counterparts.

Finally, the findings in Study 3 suggest a need to further explore masculinity from the framework of the regulatory focus theory (Higgins, 2012). Specifically, future researchers must explore how men perceive their ‘ideal,’ ‘ought,’ and ‘actual’ selves as men and investigate whether there are discrepancies between masculine ‘selves’ and

'ideal,' 'ought,' and 'actual' selves without an overt focus on manhood. With this information, we may better be able to identify how men either adaptively or maladaptively perceive discrepancies and intersections of their identities and of their selves.

Conclusion

Men's enactment of masculinity within the United States continues to place their health, well-being, and communities at disproportionate risk when compared to other demographic groups (see Addis & Mahalik, 2003; Huselid & Cooper, 1992; Peralta et al., 2010; SAMHSA, 2012; Yamawaki, 2010). In light of the disproportionate risk, this dissertation sought to unite masculinity theories (PPPM; Davis et al., 2010; Kiselica & Englar-Carlson, 2010; Pleck, 1995) with gender priming literature in the United States (Vandello et al., 2008) in an attempt to identify whether priming masculinity would result promote men's willingness to seek support. Although the results of the experimental studies did not effectively demonstrate an increase in men's intentions or attitudes toward help seeking when exposed to the counter-stereotypic gender primes in line with positive masculinity, the findings present compelling directions for the ongoing development of empirically supported masculinity theories which focus on adaptive or pro-social demonstrations of manhood (Davis et al., 2010; Kiselica & Englar-Carlson, 2010).

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Table 1

Contrast Coding for Experimental Conditions for Study 2 (g = 3)

	Code Variables*	
Experimental Group	E_1	E_2
Counter Stereotypic	1/3	1/2
Stereotypic	-2/3	0
Control	1/3	-1/2

*(adapted from Cohen, Cohen, West & Aiken, 2003)

Table 2.

Descriptive connection to Self-Reliance vignettes (*N*= 266)

	Not at all Similar	Dissimilar	Somewhat Dissimilar	Somewhat Similar	Similar	Very Similar
1	9%	18%	21%	33%	12%	3%
2	12%	20%	18%	28%	15%	5%
3	13%	20%	21%	25%	9%	5%
4	13%	19%	21%	33%	8%	4%-
5	12%	17%	21%	26%	14%	7%

Table 3.

Descriptive statistics and correlations (*N*= 266)

Full Study	1	2	3	4
1. CMNI-46	-			
2. Self-Reliance Profile	-.46**	-		
3. ATSPPH	-.50**	.56**	-	
4. PARH	-.15*	-.07	-.01	-
M	96.23	119.47	25.25	14.71
SD	10.50	22.73	6.12	6.46
α	.76	.89	.85	.91
Study 1	**1**	**2**	**3**	**4**
1. CMNI-46	-			
2. Self-Reliance Profile	-.49**	-		
3. ATSPPH	-.44**	.55**	-	
4. PARH	-.16	-.19	.05	-
M	94.81	119.71	25.08	15.67
SD	11.03	24.03	6.04	6.41
Study 2	**1**	**2**	**3**	**4**
1. CMNI-46	-			
2. Self-Reliance Profile	-.45**	-		
3. ATSPPH	-.55**	.63**	-	
4. PARH	-.04	.05	.05	-
M	97.20	118.38	25.15	14.26
SD	9.94	24.55	6.43	6.53
Study 3	**1**	**2**	**3**	**4**
1. CMNI-46	-			
2. Self-Reliance Profile	-.45**	-		
3. ATSPPH	-.57**	.55**	-	
4. PARH	-.17	-.06	-.09	-
M	97.32	119.25	25.48	13.82.
SD	10.92	19.97	5.95	6.58.

Note: CMNI-46 = Adapted Conformity to Masculine Norms Inventory- 46, Self-Reliance Profile = Profile derived from vignettes, ATSPPH= Attitudes Toward Seeking Professional Psychological Help, PARH= Perceived Awareness of Research Hypotheses.

*$p < .05$

**$p < .01$

Table 4.

Study 2 Multiple Linear Regressions for CMNI-46 and exposure to experimental conditions on both Self-Reliance Profile and ATSPPH (*N*= 87)

1. Self Reliance Profile	*B*	*SE B*	*β*	
Constant	118.79	2.41		
Contrast 1	-.48	1.69	-.03	
Contrast 2	-3.70	2.97	-.12	
CMNI-46_C	-1.17	.24	-.47*	
CMNI*C1	-.09	.17	-.05	
CMNI*C2	.30	.30	.10	

2. ATSPPH-SF	*B*	*SE B*	*β*	
Constant	25.21	.60		
Contrast 1	-.16	.42	-.03	
Contrast 2	-.36	.74	-.05	
CMNI-46_C	-.36	.06	-.56*	-
CMNI*C1	-.04	.04	-.08	
CMNI*C2	.03	.08	.04	

Note. Contrast 1 = Counter-Stereotypic and Control vs Stereotypic, Contrast 2 = Counter-Stereotypic vs Control, CMNI-46_C = Adapted CMNI-46 centered, CMNI*C1 = Interaction between CMNI-46_C and Contrast 1, CMNI*C2 = Interaction between CMNI-46_C and Contrast 2

$^{*}p < .05$

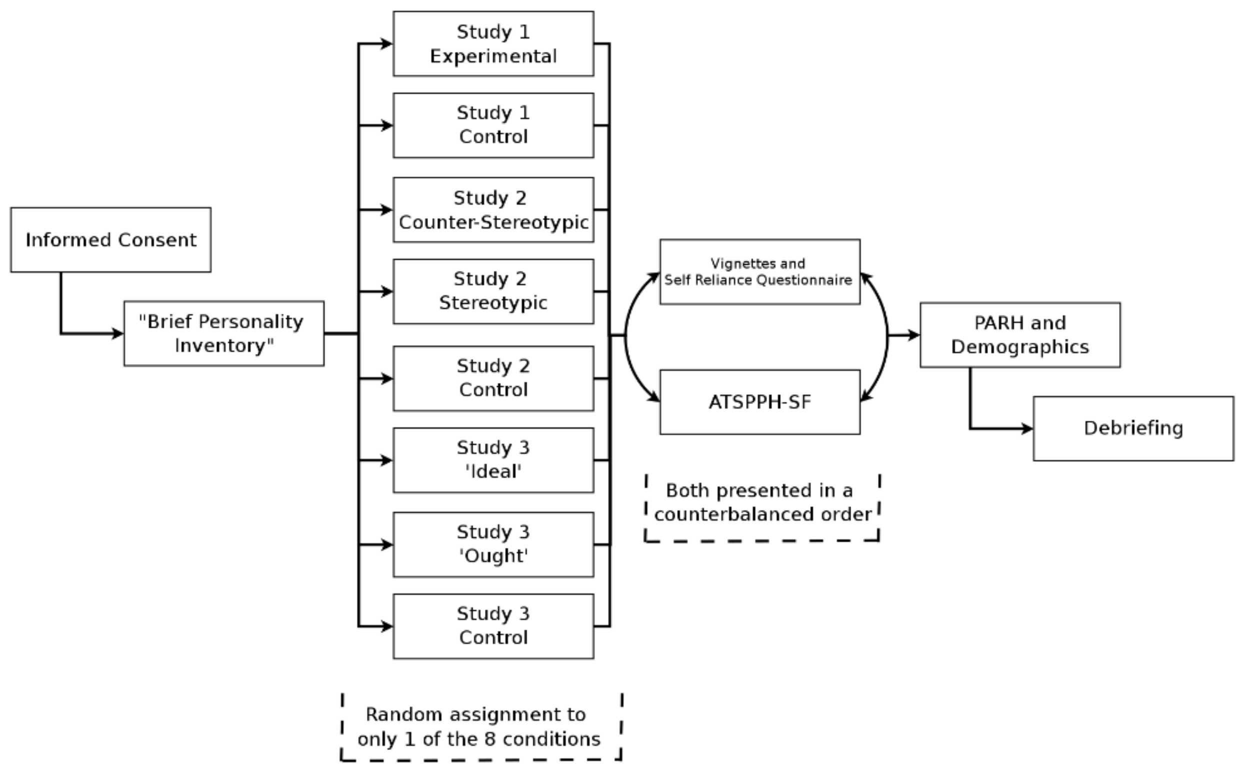

Figure 1: Visual depiction of survey procedure.

Appendix A

The following is a test of cognitive ability.
Instructions:
Please construct a grammatically correct four-word sentence out of the five words presented to you. Sentences should also make conceptual sense. Please construct each sentence as quickly as possible.

EXAMPLE

1	2	3	4	5
sky	the	blue	stop	is

The correct 4-word sentence should be:

The sky is blue.

The word that is not used is:

stop
For this task, you only enter the correct 4-word
sentence in the corresponding answer box.

You will have the opportunity to try one more example below.

brave only couches the cry

he his purposeful protects friends

families support early other each

the coffee dad vacuums house

meals delicious apartment brother cooks

strengthened cravings loyalty the team

him support Tom's cat friends

help laps asked for David

true carried courage vulnerability requires

men friends care early for

sought bravely Tom help morning

depression has the tolerant fireman

Appendix B

The following is a test of cognitive ability.
Instructions:
Please construct a grammatically correct four-word sentence out of the five words presented to you. Sentences should also make conceptual sense. Please construct each sentence as quickly as possible.

EXAMPLE

1	2	3	4	5
sky	the	blue	stop	is

The correct 4-word sentence should be:

The sky is blue.

The word that is not used is:

stop
For this task, you only enter the correct 4-word sentence in the corresponding answer box.

You will have the opportunity to try one more example below.

mice apartment cat the chases

very still tart cranberries are

couch tastes warm delicious coffee

ate a Tom exciting sandwich

purposeful commuters trains often use

beans umbrellas grind baristas coffee

all have zebras city stripes

eating houses in people live

gasoline wetness on cars run

tall giraffes mountain animals are

wrapping newspapers for journalists write

generally hot cities is summer

running hard have turtles shells

leaves insects comes tea from

apple delicate spiders webs make

sun is carrying hot the

Appendix C

The following is a test of cognitive ability.

Instructions:
You will be presented with a list of 7 randomly generated people. The only identifying information you will be provided is sex (male or female) and either a job or a characteristic. You are asked to generate 10 single adjectives to describe each person.

EXAMPLE

Female teacher

EXAMPLE RESPONSE
(10 single adjectives)

1. Friendly
2. Kind
3. Matronly
4. Old
5. Wise
6. Boring
7. Tired
8. Underpaid
9. Pretty
10. Creative

Female senator

Male housekeeper

Female pilot

Male secretary

Female engineer

Male nurse

Female computer scientist

Appendix D

“**The following is a test of cognitive ability.**

Instructions:
You will be presented with a list of 7 randomly generated people. The only identifying information you will be provided is sex (male or female) and either a job or a characteristic. You are asked to generate 10 single adjectives to describe each person.

EXAMPLE

Female teacher

EXAMPLE RESPONSE
(10 single adjectives)

1. Friendly
2. Kind
3. Matronly
4. Old
5. Wise
6. Boring
7. Tired
8. Underpaid
9. Pretty
10. Creative

:”

Male senator

Female housekeeper

Male pilot

Female secretary

Male engineer

Female nurse

Male computer scientist

Appendix E

Parent, M. C. (2013). CMNI-46 Scoring Instructions and Measure (2013).

Used and adapted with permission from M. C. Parent (2015).

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See original article for the text.

Brief Personality Assessment

Adapted from Forer (1949)'s Diagnostic Interest Blank for use in this study.

1. I can be critical of myself.
2. It's important to be liked by others.
3. Limitations and restrictions are always unsatisfying.
4. Unrealistic dreams are still important.
5. I always know what decision or choice is right for me.
6. I often have doubts when making decisions.
7. Dreams are only useful if they are attainable.
8. I am a social person.
9. At times, I prefer to be reserved and introverted.
10. Honesty is the most important part of relationships.
11. Lying is okay if it protects the feelings of others.
12. I am able to get enough sleep to feel rested.
13. Sometimes I lay awake at night and reflect on my day.
14. I am kind to myself, even when I have made a mistake.

Appendix F

Below you will find five stories describing the experiences of college students. Please read these stories and imagine yourself as the person in the story. After each story, you will be asked to indicate how you would respond. Please answer each of the questions.

> (1) "You are an undergraduate in a university. You live in an apartment near campus with four of your friends.
>
> Although you are usually very busy with schoolwork, in your free time, you enjoy playing sports, going to movies, and spending time with friends. You are a generally well-liked and happy person. Your friends see you as loyal, dependable, and honest.
>
> Over the past month, you have felt more stress and have noticed your grades slipping. Your roommates have noticed you sleeping more and not spending as much time playing sports or spending time with your friends. You have noticed differences in your behavior too."

On a scale from 0 (Not at all likely) to 5 (Very likely), how likely are you to:

(1) Seek out a tutor from your university's tutoring program.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(2) Seek out substances (e.g., Adderall) to help you focus.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(3) Make an appointment at the college counseling center.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(4) Ignore it and try harder.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(5) Ask your friends for support.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(6) Have a drink (i.e., beer, liquor, wine) to help you relax.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(7) Meet with a staff member to problem-solve.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(8) Talk about my feelings.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(9) Assume it will pass.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(10) How similar is your actual experience as a college student to the experience described in this vignette?

0	1	2	3	4	5
Not at all Similar	Not Similar	Somewhat dissimilar	Somewhat Similar	Similar	Very Similar

> (2) “You are an undergraduate in a university. You live on campus with one of your friends.
>
> You genuinely enjoy your school work and are studying a subject that you are very interested in. Even though you spend a lot of time studying, you also enjoy spending time with friends, going to parties, and watching movies. You are well liked and seen as capable and intelligent. Your friends and classmates often come to you with questions on assignments and for advice.
>
> Recently, your parents retired and can no longer afford to help support your academics. You already receive financial aid and scholarships, however you are still taking on a lot of student loans. You have noticed that you are under a lot of stress and often find yourself worrying about the future. Based upon midterms, you’ve also noticed your grades are slipping.”

On a scale from 0 (Not at all likely) to 5 (Very likely), how likely are you to:

(1) Make an appointment at the college counseling center.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(2) Seek out substances (e.g., Adderall) to help you focus.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(3) Ignore it and try harder.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(4) Meet with a staff member to problem-solve.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(5) Get an off campus job so you can make your own way and provide for yourself

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(6) Have a drink (i.e., beer, liquor, wine).

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(7) Ask your friends for support.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(8) Ignore it, lots of students graduate with student loans now. If they can handle it, so can you.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(9) How similar is your actual experience as a college student to the experience described in this vignette?

0	1	2	3	4	5

Not at all Similar	Not Similar	Somewhat Dissimilar	Somewhat Similar	Similar	Very Similar

(3) “You are an undergraduate in a university. You live on campus with several of your friends.

Although you are usually very busy with schoolwork, in your free time, you like going to parties, playing video games, and watching sports. Your friends see you as kind, strong, and dependable.

Over the past year, classes are becoming more specific to your major and are very challenging. You plan on attending graduate school, just like your parents and older siblings, however you realize that this may no longer be possible given your low GPA. You often feel like a disappointment to your family and feel frustrated with yourself. Your friends have noticed that you are sleeping less and not spending as much time with them.”

On a scale from 0 (Not at all likely) to 5 (Very likely), how likely are you to:

(1) Let your friends know you’re feeling discouraged.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(2) Have a drink (i.e., beer, liquor, wine) to help you relax.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(3) Seek out substances (e.g., Adderall) to help you focus.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(4) Ignore it and try harder.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(5) Make an appointment at the college counseling center.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(6) Meet with a staff member to problem-solve.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(7) Ask your family for support and explain what you're feeling.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(8) Do nothing

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(9) How similar is your actual experience as a college student to the experience described in this vignette?

0	1	2	3	4	5
Not at all Similar	Not Similar	Somewhat Dissimilar	Somewhat Similar	Similar	Very Similar

> (4) "You are an undergraduate in a university. You live on campus with a roommate.
>
> You really enjoy college and have been doing well in most of your courses. You have already made several close friends and often go to movies, hang out, and even study together. You had a long term romantic partner that you found attractive, funny, and caring. You always shared how you felt with your partner and they could often cheer you up when you were feeling down.
>
> Recently, however, your partner broke up with you. You have felt sad and confused. You have no longer been interested in studying and have had difficulty focusing in classes. Your friends have told you to 'just get over it, it's not like your exe was that hot anyways."

On a scale from 0 (Not at all likely) to 5 (Very likely), how likely are you to:

(1) Explain to your friends that your relationship was about more than just physical attraction.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(2) Drink (i.e., beer, liquor, wine) with the purpose of hooking up with someone new.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(3) Listen to your friends and ‘just get over it.’

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(4) Drink (i.e., beer, liquor, wine) with the purpose of feeling better.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(5) Make an appointment at the college counseling center.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(6) Join a campus organization (i.e., club, sport) to meet new people.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(7) Ignore it, the feelings for your partner will probably go away eventually.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(8) How similar is your actual experience as a college student to the experience described in this vignette?

0	1	2	3	4	5
Not at all Similar	Not Similar	Somewhat Dissimilar	Somewhat Similar	Similar	Very Similar

> (5) “You are an undergraduate in a university. You live near campus with several roommates.
>
> You enjoy college, are active in several clubs, and already have made several close friends. Overall, you feel very happy with your academic progress and social life.
>
> Recently, however, you have developed flu-like symptoms and have not been feeling up to spending time with friends or going to class. You have been feeling physically ill for about a week and have not been feeling better.”

On a scale from 0 (Not at all likely) to 5 (Very likely), how likely are you to:

(1) Do nothing.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(2) Take over-the-counter medication.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(3) Call your parents for advice.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(4) Make an appointment at the college health center.

0	1	2	3	4	5
Not at all Likely	Not Likely	Somewhat Unlikely	Somewhat Likely	Likely	Very Likely

(5) How similar is your actual experience as a college student to the experience described in this vignette?

0	1	2	3	4	5
Not at all Similar	Not Similar	Somewhat Dissimilar	Somewhat Similar	Similar	Very Similar

The following items are reverse scored so that high scores reflect lower self reliance
(1) - 2, 4, 6, 9
(2) - 2, 3, 5, 6, 8
(3) - 2, 3, 4, 8
(4) - 2, 3, 4, 7
(5) - 1, 2

The following items are related to substance use
(1) – 2, 6
(2) – 2, 6
(3) – 2, 3
(4) – 2, 4
(5) – 2

The following items are related to informal support (e.g., friends, family)
(1) – 7, 8
(2) – 4, 7
(3) – 1, 6, 7
(4) – 1, 6
(5) – 3

The following items are related to not taking action (e.g., ‘Do nothing’)
(1) – 4, 9
(2) – 3, 5, 8
(3) – 4, 8
(4) – 3, 7
(5) – 1

The following items are related to formal support (e.g., professionals)
(1) – 1, 3
(2) – 1
(3) – 5
(4) – 5
(5) – 4

Appendix G

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*, 368-373.

Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

0 = Disagree 1 = Partly disagree 2 = Partly agree 3 = Agree

_____1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

_____ 2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

_____ 3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

_____ 4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

_____ 5. I would want to get psychological help if I were worried or upset for a long period of time.

_____ 6. I might want to have psychological counseling in the future.

_____ 7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.

_____ 8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.

_____ 9. A person should work out his or her own problems; getting psychological counseling would be a last resort.

_____ 10. Personal and emotional troubles, like many things, tend to work out by themselves.

Scoring:
Reverse score items 2, 4, 8, 9, and 10, then add up the ratings to get a sum. Higher scores indicate more positive attitudes towards seeking professional help.

Appendix H

Rubin, M., Paolini, S., & Crisp, R. J. (2010). A processing fluency explanation of bias against migrants. *Journal of Experimental Social Psychology, 46*, 21-28

Your Thoughts About the Research

Using the key below, please circle a number beside each statement to indicate how much you agree or disagree with that statement.

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

1.	I knew what the researchers were investigating in this research.	1 2 3 4 5 6 7
2.	I wasn't sure what the researchers were trying to demonstrate in this research.	1 2 3 4 5 6 7
3.	I had a good idea about what the hypotheses were in this research.	1 2 3 4 5 6 7
4.	I was unclear about exactly what the researchers were aiming to prove in this research.	1 2 3 4 5 6 7

5. What do you think the research was about?

Appendix I

Age:

Gender Identity/Gender with which you identify:

Racial/Ethnic Background:
____ White/Caucasian
____ Black/African American
____ Latino/Latina
____ Native/Native American
____ Asian American
____ Bi-Racial/Multiracial
____ Other (Specify)

Major:

Year in College:

Recruited From:
____MTurk

Appendix J

CONSENT FORM

You are invited to participate in a research study exploring 21st century college men's cognitive functioning and well being. You were selected as a potential participant as you are currently are enrolled in an undergraduate college, are between the ages of 18 and 25, and self-identify as a man. We ask that you read this form before agreeing to participate in the study.

This study is being conducted by: Carin Molenaar, doctoral student under the supervision of Dr. Christopher T.H. Liang, Associate Professor, Lehigh University. The study has been approved by the Institutional Review Board at Lehigh University (REF # 813427-3).

Purpose of the study

The purpose of this study is to gain a better understanding of the cognitive functioning and well being of college men in the 21st century. This exploration, in no way, is a measure of intelligence or current achievement. In completing this study, we hope to learn more about how to support the health and well being of college men by providing relevant and informed support.

Procedures

If you agree to be in this study, we would ask you to do the following things:
Complete a survey packet consisting of a 60-item Brief Personality Assessment; a brief cognitive functioning task, 5 vignettes, a 10-item attitudes towards help seeking scale; 4-items exploring your thoughts about the research study; and a demographic questionnaire. Your total time commitment will be approximately 35 minutes. Completion of the survey serves as your consent to participate.

***Risks* and *Benefits* of being in the study**

Possible risks:
Anticipated risks associated with participation in this study are minimal. However, you may experience minor psychological discomfort as you complete the cognitive functioning task and/or reflect upon your experiences. In this event, we encourage you to contact a trusted colleague for consultation.

The benefits to participation are:
Although there are no direct individual benefits, participating in this study may help you to gain a greater awareness and understanding of your experiences as a college student in

the 21st century. The findings of this study will assist us in better understanding the cognitive functioning, well being, and experiences of college men.

Compensation

You will receive two dollars for your participation.

Confidentiality

Your anonymity will be maintained throughout the study. Individual responses will not be identifiable. The data you provide will only be accessible to the principal investigator and the research team. Information collected through your participation may be published in a professional journal or presented at a professional meeting in a group aggregate format. No individual information will be identifiable.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision as to whether or not to participate will not affect your current or future relations with Lehigh University. If you do participate, you may choose to withdraw at any time by closing the web browser or by discontinuing the survey.

Contacts and Questions

If you have any questions about this study, please contact Carin Molenaar at cmm712@lehigh.edu or Christopher Liang at ctl212@lehigh.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Naomi E. Coll, Lehigh University's Manager of Research Integrity, at (610)758-2985 or nac314@lehigh.edu. All reports or correspondence will be kept confidential.

You may print a copy of this letter to keep for future reference.

Statement of Consent

If you wish to participate in this study after reading the above information, please click on the "Next" button below. **Please note that participation in this study serves as your consent to participate.**

CONSENT FORM: PILOT

You are invited to participate in a research pilot. You were selected as a potential participant as you are currently are enrolled in an undergraduate college, are between the ages of 18 and 25, and self-identify as a man. We ask that you read this form before agreeing to participate in the study.

This study is being conducted by: Carin Molenaar, doctoral student under the supervision of Dr. Christopher T.H. Liang, Associate Professor, Lehigh University. The study has been approved by the Institutional Review Board at Lehigh University (REF # 813427-3).

Purpose of the study

The purpose of this study is to pilot a personality measure and a cognitive functioning task for use in a different study.

Procedures

If you agree to be in this study, we would ask you to do the following things:

Complete a survey packet consisting of a Brief Personality Assessment and/or a brief cognitive functioning task. Additionally, you will be asked to complete 4-items exploring your thoughts about the research study; and a demographic questionnaire. Your total time commitment will be approximately 15 minutes. Completion of the survey serves as your consent to participate.

***Risks* and *Benefits* of being in the study**

Possible risks:

Anticipated risks associated with participation in this study are minimal. However, you may experience minor psychological discomfort as you complete the cognitive functioning task and/or answer the questionnaire In this event, we encourage you to contact a trusted colleague for consultation.

The benefits to participation are:

Although there are no direct individual benefits, participating in this study may help you to gain a greater awareness and understanding of how psychological research is piloted.

Compensation

You will receive two dollars for your participation.

Confidentiality

Your anonymity will be maintained throughout the study. Individual responses will not be identifiable. The data you provide will only be accessible to the principal investigator and the research team. Information collected through your participation may be published in a professional journal or presented at a professional meeting in a group aggregate format. No individual information will be identifiable.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision as to whether or not to participate will not affect your current or future relations with Lehigh University. If you do participate, you may choose to withdraw at any time by closing the web browser or by discontinuing the survey.

Contacts and Questions

If you have any questions about this study, please contact Carin Molenaar at cmm712@lehigh.edu or Christopher Liang at ctl212@lehigh.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Naomi E. Coll, Lehigh University's Manager of Research Integrity, at (610)758-2985 or nac314@lehigh.edu. All reports or correspondence will be kept confidential.

You may print a copy of this letter to keep for future reference.

Statement of Consent

If you wish to participate in this study after reading the above information, please click on the "Next" button below. **Please note that participation in this pilot serves as your consent to participate.**

Appendix K

DEBRIEFING STATEMENT

Thank you for your participation in our study. Your participation is greatly appreciated.

This study is being conducted by: Carin Molenaar, doctoral student under the supervision of Dr. Christopher T.H. Liang, Associate Professor, Lehigh University. The study has been approved by the Institutional Review Board at Lehigh University (REF # 813427-3).

Purpose of the study

Earlier in our consent form, we informed you that the purpose of this study was to gain a better understanding of the cognitive functioning and well being of college men in the 21st century. **In actuality**, the purpose of our study is to explore how college men respond to 'positive masculinity' primes (i.e., primes that highlight adaptive aspects of male gender norms) in an attempt to understand and identify new ways of supporting college men's health and well-being. Additionally, we also included an exploration of how conformity to gender norms for men in the United States may help support or hinder college men's health. Conformity to gender norms was investigated as part of the "Brief Personality Inventory." As such, personality and cognitive functioning were not assessed as part of this study.

Unfortunately, in order to test the hypotheses for our study, we could not provide you with the true purpose of the study prior to your participation. This ensured that your reactions and responses to the gender primes were spontaneous and not influenced by prior knowledge about the purpose of the study. If we had told you the actual purpose of our study, your ability to provide genuine and spontaneous responses could have been affected. We regret the deception but we hope that you understand the reason for it, given the true purpose of the study.

Confidentiality

Although the purpose of the study has changed from the purpose stated in the original consent form, all other information on the original consent form is correct.

For example, your anonymity will be maintained throughout the study. Individual responses are not identifiable. The data you provide will only be accessible to the principal investigator and the research team. Information collected through your participation may be published in a professional journal or presented at a professional meeting in a group aggregate format. No individual responses will be identifiable.

Final Report

If you would like to receive a summary of the findings, or receive a copy of the final report of this study after it is completed, please feel free to reach out to the researchers.

Contacts and Questions

If you have any questions about this study, please contact Carin Molenaar at cmm712@lehigh.edu or Christopher Liang at ctl212@lehigh.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Naomi E. Coll, Lehigh University's Manager of Research Integrity, at (610)758-2985 or nac314@lehigh.edu. All reports or correspondence will be kept confidential.

You may print a copy of this letter to keep for future reference. Once again, thank you for your participation in this study.

DEBRIEFING STATEMENT: PILOT

Thank you for your participation in our pilot. Your participation is greatly appreciated.

This study is being conducted by: Carin Molenaar, doctoral student under the supervision of Dr. Christopher T.H. Liang, Associate Professor, Lehigh University. The study has been approved by the Institutional Review Board at Lehigh University (REF # 813427-3).

Purpose of the study

Earlier in our consent form, we informed you that the purpose of this pilot was to test a personality measure and a cognitive functioning task for use in a different study. **In actuality**, the purpose of this pilot was to test the explicitness of both conformity to masculine norms and 'positive masculinity' primes (i.e., primes that highlight adaptive aspects of male gender norms). These materials will be utilized in a future study that seeks to understand and identify new ways of supporting college men's health and well-being. Additionally, we also included an exploration of how conformity to gender norms for men in the United States may help support or hinder college men's health. Conformity to gender norms was investigated as part of the "Brief Personality Inventory." As such, personality and cognitive functioning were not assessed as part of this pilot and will not be assessed as part of the future study.

Unfortunately, in order to test the hypotheses for our study, we could not provide you with the true purpose of the study prior to your participation. This ensured that your reactions and responses to the materials were spontaneous and not influenced by prior knowledge about the purpose of the study. If we had told you the actual purpose of our study, your ability to provide genuine and spontaneous responses could have been affected. Due to the importance of deception, we ask that you please do not share your awareness of the true purpose of the study in order to protect the responses of others. We regret the deception but we hope that you understand the reason for it, given the true purpose of the study.

Confidentiality

Although the purpose of the pilot has changed from the purpose stated in the original consent form, all other information on the original consent form is correct.

For example, your anonymity will be maintained throughout the study. Individual responses are not identifiable. The data you provide will only be accessible to the principal investigator and the research team. Information collected through your

participation may be published in a professional journal or presented at a professional meeting in a group aggregate format. No individual responses will be identifiable.

Final Report

If you would like to receive a summary of the findings for the future study, or receive a copy of the final report of this study after it is completed, please feel free to reach out to the researchers.

Contacts and Questions

If you have any questions about this study, please contact Carin Molenaar at cmm712@lehigh.edu or Christopher Liang at ctl212@lehigh.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact Naomi E. Coll, Lehigh University's Manager of Research Integrity, at (610)758-2985 or nac314@lehigh.edu. All reports or correspondence will be kept confidential.

You may print a copy of this letter to keep for future reference. Once again, thank you for your participation in this study.

Appendix L

RECRUITMENT FORM

Dear Colleague,

My name is Carin Molenaar and I am doctoral student in the counseling psychology program at Lehigh University. I am conducting a study examining 21st Century college men's cognitive functioning and well-being. We hope that in completing this study, you will help us gain a better understanding of how to better support present-day college men. Your participation is essential to achieving this goal, so we hope that you will take part in our study.

In order to participate, you must self-identify as a man. Additionally you must be between 18 and 25 years of age and currently enrolled in an undergraduate university. If you would like to participate in our study, please click on the link below and you will be directed to the online survey. Participation will take approximately 35 minutes.

(LINK)

This study has been approved by the Institutional Review Board at Lehigh University (REF# 813427-1). If you have any question about this study, please feel free to contact me at cmm712@lehigh.edu or Dr. Christopher Liang at ctl212@lehigh.edu. Thank you for your time and participation.

Sincerely,

Carin Molenaar, MEd
Christopher T. H. Liang, PhD
Lehigh University

Carin Molenaar, M.Ed.,

EDUCATION

Expected 08/17 — **Ph.D. Counseling Psychology, Lehigh University (APA-Accredited)**
Dissertation: *Masculinity: Exploring Relevant Cues to Promote Help Seeking Intentions in College Men.* (Christopher T.H. Liang, Ph.D.)

08/12-09/14 — **M.Ed. Counseling and Human Services, Lehigh University**
Qualifying Project: *Coping with college: Examining the pathways between stress, alcohol use, risky sexual behavior, and psychological distress in college students* (Christopher T.H. Liang, Ph.D.)

08/08-05/12 — **B.A. Psychology, College of Saint Benedict/Saint John's University**
Summa Cum Laude/Distinction in Psychology

PUBLICATIONS

Liang, C. T. H. & **Molenaar, C.** (2016). Beliefs in an unjust world: Mediating ethnicity-related stressors and psychological functioning. *Journal of Clinical Psychology, 72,* 552-562. doi. 10.1002/jclp.22271

Liang, C. T. H., Knauer-Turner, E., **Molenaar, C**., & Price, E. (2016). A qualitative examination of the gendered and racialized lives of Latina college students. *Gender Issues, X*, 1-22, doi. 10.1007/s12147-016-9163-8

BOOK CHAPTERS

Alvarez, A.N., Liang, C. T. H., **Molenaar, C.,** & Nguyen, D. (2016). Mediators and Moderators of Perceived Racism. In, A. N. Alvarez, C. T. H. Liang, & H. Neville (Eds), *Contextualizing the costs of racism for people of color.* (pp 85- 106). Washington D.C.: American Psychological Association.

Liang, C. T. H., **Molenaar, C.** & Heard, S. (2016). Race, masculinity, and gendered racism: President Obama's influence on black men. In L. Barker (Ed), *Obama on Our Minds: The Impact of Obama on the Psyche of America.* (pp 169- 186). NY: Oxford University Press.

Liang, C. T. H. & **Molenaar, C.** (2016). Counseling and therapy with men. In Beutler, Consoli, & Bongar (Eds). *Comprehensive Textbook of Psychotherapy, Second Edition.* NY: Oxford University Press

Liang, C. T. H., **Molenaar, C.,** Herman, C., & Rivera, L. (In Press). Dysfunction strain programs aimed at men's violence, substance use, and lack of self care. In J. Wong & R. Levant (Eds) *Psychology of Men and Masculinities.* Washington D.C.: American Psychological Association.

WORKING PAPERS

Molenaar, C. & Liang, C. T. H. (working paper). *Masculinity: Exploring Relevant Cues to Promote Help Seeking Intentions in College Men.*

Molenaar, C., & Dorroll. C. (working paper) *Transitions and Empowerment Through Education: Refugee University Students in Germany.*

Molenaar, C. & Liang, C. T. H. (working paper). *Coping with college: Examining the pathways between stress, alcohol use, risky sexual behavior, and psychological distress in college students*

Lauer, M., Inman, A. G. & **Molenaar, C**. (working paper). *Shame proneness and supervisee disclosure: The mediating role of attachment to supervisor.*

PRESENTATIONS

Molenaar, C., Liang, C. T. H., (August, 2016). *Masculinity: Identifying Relevant Cues to Promote Help Seeking Intentions in College Men.* Poster presented at the 2016 APA Convention, Division 51, Denver, CO.

Lauer, M., Inman, A. G., **Molenaar, C. M.** (August, 2016). *Shame proneness and supervisee disclosure: The mediating role of attachment to supervisor.* Poster presented at the 2016 APA Convention, Division 29, Denver, CO.

Molenaar, C., Liang, C. T. H., Herman, C. (August, 2015). *Examining the pathways between stress appraisal, help-seeking, use of depressants and stimulants, and psychological distress in college men.* Poster presented at the 2015 APA Convention, Division 51, Toronto, Canada.

Liang, C. T. H., Herman, C., Song, G., **Molenaar, C.,** Nguyen, D., Rivera, L., & Eftekharzadeh, P. (2015). *Masculinity, sense of connectedness, academic motivation and behavioral outcomes of boys of color.* Poster presented at the 2015 APA Convention, Division 51, Toronto, Canada.

Liang, C. T. H., **Molenaar, C.,** Nguyen, D., Song, G., Rivera, L. (January, 2015) *Midnight basketball: Working together to keep boys of color on the path to success.* Paper presented at the National Multicultural Conference and Summit, Atlanta, GA.

Molenaar, C., & Liang, C. T. H. (August, 2014). *Coping with college: Examining stress, alcohol use, risky sexual behavior, and psychological distress.* Poster presented at the 2014 APA Convention, Division 17, Washington D. C.

Pendse, A., Inman, A. G., **Molenaar, C.,** Kwon, O., & Jog, M. (August, 2014). A content analysis of international students focused counseling research. Poster presented at the 2014 APA Convention, Division 52, Washington D. C.

Liang, C. T. H., **Molenaar, C.,** Knauer-Turner, E., & Price, E. (August, 2013) *Gender, Race, and Culture: A Mixed-Methods Examination of the Lives of Latino/a College Students*. Poster presented at the 2013 APA Convention, Honolulu, HI

Lauer-Larrimore, M., **Molenaar, C.,** Zelaya, D., Kwon, O., & Inman, A. (February, 2013). *Understanding human trafficking within the context of the United States*. Workshop presented at the 30th Annual Winter Roundtable Conference, New York, NY

Liang, C. T. H., Knauer-Turner, E., Price, E., & **Molenaar, C**. (January, 2013**).** *The gendered and racialized lives of Latino/a individuals*. Symposium presented at the National Multicultural Conference and Summit, Houston, TX

RESEARCH EXPERIENCE

08/12-Present **Research Assistant,** Counseling Psychology Program, Lehigh University

09/12-05/13 **Graduate Assistant,** School Psychology Program, Lehigh University

09/10-12/11 **Research Assistant,** College of Saint Benedict/Saint John's University,

TEACHING EXPERIENCE

01/14-4/14 **Helping Skills Teaching Assistant,** Lehigh University

08/11-12/11 **Clinical and Counseling Teaching Assistant,** CSB/SJU

08/11-12/11 **Psychology Lab Instructor,** CSB/SJU

01/11-05/11 **Teaching Assistant,** CSB/SJU

SUPERVISION EXPERIENCE

08/16-Present **Extern Supervisor**, University of Illinois Urbana-Champaign (APA-Accredited), Champaign, IL

08/16-Present **Mentor**, University of Illinois Urbana-Champaign, Champaign, IL

08/14-05/15 **Supervisor,** Lehigh University, Bethlehem, PA

CLINICAL EXPERIENCE

08/16-Present **Internship in Health Service Psychology**, University of Illinois Urbana-Champaign (APA-Accredited), Champaign, IL

06/15-5/16 **Extern**, Friends Hospital, Philadelphia, PA

08/14-05/15 **Extern**, University of Pennsylvania Counseling Services (CAPS), Philadelphia, PA

08/13-05/14 **Practicum Intern,** Kutztown University Counseling Services, Kutztown, PA

10/12-11/12 **School Counseling Intern**, Broughal Middle School, Bethlehem, PA

LEADERSHIP EXPERIENCE

08/14-06/16 **Program Coordinator**, Center for Academic Success, Lehigh University

08/13-06/14 **Tutor Coordinator**, Center for Academic Success, Lehigh University

PROFESSIONAL SERVICE

2015-Present Student Board Member, Lehigh University's Institutional Review Board
2014-Present Student Reviewer, Gender Issues Journal
08/15-09/15 Official Response to the Hoffman Report Special Committee, Division 51

PROFESSIONAL MEMBERSHIPS

Association for Psychological Science, Graduate Student Affiliate
American Psychological Association, Student Affiliate, APAGS Member,
    Division 17: Society of Counseling Psychology
    Division 35: Society for the Psychology of Women
    Division 51: Society for the Psychological Study of Men and Masculinity
American Civil Liberties Union, Member since 2015
Phi Beta Kappa, Initiated Spring 2012