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I am submitting herewith a thesis written by Amanda Eliza Sherman entitled "Validation of the Masculine Gender Role Stress Scale in a Diverse Population". I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.

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Validation of the Masculine Gender Role Stress Scale in a Diverse Population

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Abstract

Adherence to traditional masculinity has been associated with negative physical and psychological health outcomes. Specifically, the standards of masculinity imposed on men have been associated with high levels of stress reactivity, interpersonal violence, and substance abuse. However, previous research has been limited to primarily Caucasian samples. In order to better understand masculinity and the stress associated with adherence to masculinity across ethnicity, we examined the validity of the Masculine Gender Role Stress scale in a diverse sample. We hypothesized that the MGRS in a diverse sample would function similarly to the MGRS in a primarily Caucasian sample in that it would be reliable and valid and that a five factor model of MGRS would be the best fit. Undergraduate students (N = 234) completed the MGRS scale and several questionnaires measuring masculinity, stress, anger and anxiety. A confirmatory factor analysis was conducted in order to assess the validity of the five-factor model of the MGRS scale in a diverse sample. Results confirmed that the MGRS is valid among a diverse sample, a diverse Caucasian excluded sample, and a Hispanic only sample. Additionally, the five factor model was the better fit for all samples evaluated.

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Chapter 1

Introduction and General Information

It has been suggested that men face many interpersonal and health consequences as a result of traditional masculinity. In fact, there is evidence supporting the notion that men face greater health risks than women in several domains. For example, when compared to women, statistics show that men in the United States have a shorter life span than women by about 7 years and have higher rates of death on all 10 of the leading causes of death (US Department of Health and Human Services (DHHS), 2000). Additionally, men are twice as likely to die from heart disease than women (DHHS, 2000). These risks are not only evident through physical health but also, in mental and psychological health. Men exhibit more evidence of antisocial personality disorder, alcohol and drug abuse (Robins, Helzer, Weissman, Orvashel, Gruenberg, Burke, & Regier, 1984). For men, substance use and dependence is much greater and begins at an earlier age than for women (Courtenay, 2000a). These statistics suggest that, relative to women, men specifically are at risk for several negative psychological and physical consequences. In our culture, masculine displays of aggressiveness, combativeness, assertiveness and force are rewarded, and there is conjecture that these traditionally masculine behaviors contribute to such negative consequences. It is suggested that men feel the need to uphold these masculine ideals and become stressed when their masculinity is challenged (Pleck, 1981), resulting in these potentially harmful behaviors. Research aimed at investigating the implications of traditional masculinity is necessary in order to better understand and prevent the health risks men face relative to women. Moreover, most previous research has been largely based on predominately European/Caucasian populations, and more research in diverse populations is necessary in order to better understand potential risks across cultures. Based on

this, the current study is designed to examine the construct of masculine gender role stress (MGRS) across a diverse population. The following sections are intended to further discuss various concepts of masculinity, followed by a discussion of the development and measurement of masculine gender role stress with an emphasis on gender role stress across cultures. The introduction will conclude by proposing a study aimed to examine gender role stress in a culturally diverse sample.

Chapter 2

Male Gender Roles

Early research in psychology neglected to address both gender and race as important contributing factors to the study of psychological health. During the feminist movement in the 1960's, this tradition was challenged and a new viewpoint that included a gender-specific approach was recommended (Levant & Pollack, 1995). Research on women's health and development was implemented and gender was considered an important contributing factor. In light of this new gender-specific approach, research examined masculinity "not as a normative referent but as a complex and problematic construct" (Levant & Pollack, 1995). This gender-aware framework of psychology has included investigating gender role norms, male socialization, and the development of masculinity. The statistics on men's health listed previously advocate for further research on masculinity and its potentially damaging effects on males. Over time, gender theories have evolved to espouse that there are multiple masculinities. The next portion of this paper describes the development of these theories and the research that supports this view of masculinity.

Before examining the ways in which men are affected by gender roles, it is important to define the parameters of male gender roles in our culture. As noted in one of the first efforts to theorize about male gender roles, David and Brannon (1976) noted that male gender roles are often demanding without being specific. That is, men are required to meet masculine norms; however, the definition of masculinity is ever changing and inconsistent. The basic themes that underlie these roles are: (1) No sissy stuff; (2) The big wheel; (3) The sturdy oak; and (4) Give „em hell. According to David and Brannon, these roles, or the combination of specific features of these roles, make up our understanding of traditional masculinity. Roles are maintained on many levels through social

reinforcement. For example, a woman might say, "I want a strong man who can take care of me" and reward traditionally masculine behaviors.

The first theme, no sissy stuff, represents the fear of appearing feminine. Being called girly, (e.g., crying „like a girl'), sissy, or 'gay' is often used as ways of insulting males. Women are expected to be emotional, weak, and vulnerable; thus, a large part of being masculine is avoiding these traditionally feminine behaviors. A male who exhibits feminine characteristics such as emotionality is going to be in jeopardy of being labeled a sissy.

The role of „the big wheel' includes the desire for success and the need to be looked up to. In this role, men must gain respect by gaining wealth and status. The fear of appearing incompetent also motivates this role. For example, several media outlets use the familiar tale of men who refuse to read or ask for directions. Included in this theme is the role as the breadwinner of the family. A „masculine man' brings home the biggest paycheck and must provide for his wife and children.

The „sturdy oak' role requires men to be tough, courageous, and self-reliant. For a man who is a sturdy oak, opposition is irrelevant, and few things can affect their self-confidence. He is "calm and composed, unimpressed by pain or danger" (David & Brannon, 1976, p. 25). This includes physical strength and athletic ability as necessary attributes. Thus, this role of masculinity implies that men should keep composure in the face of severe conflict or stress.

Lastly, the „give „em hell' role asks that men be aggressive, conquering and violent. Young boys are encouraged to defend themselves from bullies, and rough housing with friends is reinforced. In addition, men must conquer sexually and never be too predictable or cowardly. Thus, men must be violent and aggressive to prove their masculinity. Each of these themes represent the roles men are asked to fulfill in order to be considered masculine; however, it is imperative to note that several are self defeating and irrational.

In 1984, Brannon and Juni created the Brannon Masculinity Scale in order to measure masculinity based on these four themes. This 110-item scale is used to tap agreement with masculine norms and includes two subscales based on No Sissy Stuff (e.g., " It bothers me when a man does something that I consider „feminine'"), two subscales based on The Big Wheel (e.g., Success in his work has to be a man's central goal in this life"), two subscales based on The Sturdy Oak (e.g., I like for a man to look somewhat tough), and one subscale based on Five' em Hell (e.g., A real man enjoys a bit of danger now and then). Brannon and Juni (1984) found the BMS to be associated with self-reports of traditionally masculine behavior in college students. In addition, research has shown the BMS is associated with sexist attitudes toward women, Type A behaviors, and homophobic attitudes (Thompson, Grisanti & Pleck, 1985). This early theory and supporting evidence for this categorization of masculine norms was an important first step toward developing a better understanding of the etiology of male behavior. However, further research was needed in order to better understand male roles and how they impact psychological health.

Gender Schema Theory

While David and Brannon categorized masculinity as a set of characteristics or "norms" for male behavior across four common themes, Sandra Bem focused more on the extent to which such norms are incorporated into the individual's view of themselves. Bem (1981) proposed the Gender Schema Theory, which suggests that individuals experience different levels of commitment to sex-typed attitudes and behaviors. This theory addresses individual's differences in cognitive processing of sex roles. According to this theory, men who are sex-typed have a high affinity for traditionally masculine attitudes and behaviors and see the world through masculine colored lenses (Bem, 1981). Similarly, women who are sex-typed have a high affinity for traditionally feminine attitudes and behaviors. A traditionally sex-typed individual has encoded and organized information according to

their culture's definitions of masculinity or femininity. Therefore, these culturally approved sex role distinctions have become a part of their identity and self-description. Bem suggests that these culturally approved roles are introduced at an early age and reinforced throughout development. Traditionally masculine behaviors are socialized and reinforced in boys and likewise feminine behaviors for girls. For example, boys may be discouraged from playing with dolls or girls may be punished for playing too roughly. As a result of this early encoding, individuals may assess their self-worth on their ability to adhere to the strict culturally defined gender norms for behavior (Eisler, 1995). While approaching life with such gender-based schemata may provide the individual with a comfortable, predictable way of interacting with the world, it may also be rigid and restricting, leading to various problems described below.

Bem measured these sex role schemata through the Bem Sex Role Inventory, which uses self-concept ratings. A list of 60 masculine, feminine and androgynous personality traits are presented and individuals are asked, "How well does this describe you?" Based on their answers, individuals are deemed as high or low on both Masculine and Feminine scales. Horwitz and White (1987) found that a high score on the masculinity (M) scale is associated with negative outcomes such as delinquency. Another study found that a high M was correlated with psychological violence in a dating relationship (Thompson, 1990). Research on the BSRI is extensive, and it has been significantly associated with partner violence (see Moore & Stuart, 2005 for review). However, this approach is trait based and assumes that an individual's understanding of gender will be directly translated into their self-concept. In other words, it is possible that an individual may recognize the norms and standards of traditional masculinity but not apply these standards to their own behavior or experience stress when these standards are not met. Thus, research moved towards examining the application and influence of masculine norms to an individual's self-concept

Chapter 3

Masculine Ideology

While the trait approach espoused by Bem measures an individual's degree of masculine orientation, it does not address an individual's ideology, or the degree to which they believe that a certain behavior is in accord with how traditional men *should* behave. Masculine ideology, or the normative approach, is different than masculine orientation because, while masculine orientation is the individual's own orientation towards masculinity (e.g., I am masculine), the normative approach observes masculinity as "beliefs about the importance of men adhering to culturally defined standards for male behavior" (Pleck, 1995, p. 19) and is distinct because it is the internalization and organizing nature of these beliefs rather than the beliefs themselves (e.g., I must be masculine). Thus, this view of masculinity evolved to support the theory that multiple dimensions of masculinity may exist.

Using the belief that there are multiple masculinities, Pleck's (1981) seminal work, The Myth of Masculinity, challenged the Gender Role Identification (GRI) paradigm. In contrast to the GRI paradigm, which held that for boy's to turn into healthy adult males they must adhere to masculine sex roles, Pleck proposed a new integrated model of masculinity. According to the long-standing traditional beliefs of the GRI paradigm, sex typing is necessary and important aspect of a boy's development. Pleck disputed this assumption by proposing the Gender Role Strain (GRS) paradigm, which suggests that nonconformity to traditional gender roles causes stress and other negative consequences. Pleck stated that there were several assumptions under the GRS paradigm, "including (a) gender role norms are contradictory and inconsistent; (b) the proportion of individuals who violate traditional gender role norms is high; (c) violating gender role norms leads to social

condemnation; (d) violating gender role norms leads to negative and stressful psychological consequences; (e) violating gender role norms has more severe consequences for males than females; and (f) certain consequences prescribed by gender role norms are psychologically dysfunctional" (Eisler 1995, p. 211). Pleck's GRS paradigm was revolutionary in that it contradicted a long held belief that culturally defined masculinity is necessary, normal and healthy. Previous assumptions about masculinity implied that because masculine sex roles were normal, those who did not fall in line with these rigid expectations were falling short of the normal healthy ways of interacting with the world. Contrary to these popular theories of masculinity, Pleck suggested that these culturally defined and continually imposed sex roles are forced upon men rather than an inherent part of their identities. Falling short of these expectations causes stress, and the act of striving toward masculine sex role expectations may, in itself, be consistent with dysfunctional coping strategies. Thus, for the first time, it was proposed that traditional masculinity itself has stressful and unhealthy implications for males. Pleck categorized these propositions into three broader gender strain categories known as gender role dysfunction, gender role trauma, and gender role discrepancy.

Gender Role Dysfunction

Gender dysfunction is the concept that even when males are able to live up to the standards of masculinity that are set by cultural gender role norms, there may be negative consequences inherent to those characteristics. In other words, the standards of masculinity are not necessarily consistent with healthy coping strategies. As previously mentioned, Pleck would suggest that these standards are inherently dysfunctional (Pleck, 1995 p. 17; full research review Pleck, Sonenstien, & Ku, 1993b). For example, Snell, Belk and Hawkins (1987) found that the more negative components of masculinity (i.e. aggressive, exploitative, etc.) are correlated with measures of alcohol and drug

use. Later research found it to be correlated with drinking and driving, aggressiveness and delinquent behavior (Mosher & Sirkin, 1984). Helgeson (1990) found high endorsement of a masculine orientation, as measured by Bem's scale, to be predictive of impaired social networks, poor health practices and an overall prognostic indicator of heart attack severity. In addition, Pleck (1985) demonstrated the negative social outcomes of high masculinity by examining data from two national samples. Results indicated that father's who were less involved with traditionally feminine activities such as housework and child care reported lower levels of well-being. It is clear that there is an association between high levels of traditional masculinity and negative health consequences and imperative that we further understand this correlation.

Gender Role Trauma

Because most men do not live up to the rigid sex role standards imposed upon them, the experience of such failures can be largely painful. This phenomenon, known as Trauma-Strain, has a significant impact on men's lives. For example, in an ethnography, Best (1983) examined the lessons children learn about their gender and revealed the trauma elementary school boys experience as early as second grade (as cited in Pleck, 1995, p. 16). According to Best, it was not unusual for mothers at this school to report that their sons came home crying after being called ‚gay' or ‚queer'. This suggests that from an early age boys may be socialized to prove their masculinity and punished when they do not meet society's rigid standards. Levant et al. (1992) suggests that the gender socialization process for males is traumatic because of its ongoing impact on their emotional intelligence through adulthood. He hypothesized that these masculine roles that encourage aggression and difficulty with emotional intimacy have lasting negative effects. Though there are few studies that specifically address gender role trauma, recent research focusing on shame and guilt in males has brought

attention to the connection between gender roles and trauma and suggested that, perhaps, the experience of shame has a profound impact on physical and psychological outcomes.

Gender Role Discrepancy

Gender role discrepancy strain suggests that most men fail to meet the stringent standards of masculinity Because gender roles are constantly changing and frequently violated, it is nearly impossible for males to monitor and maintain the rigid requirements necessary to prove one's masculinity (Pleck, 1981). Researchers have examined discrepancy strain by investigating the extent to which men experience stress or conflict in trying to uphold masculine norms. This has been most commonly assessed with the Masculine Gender Role Stress Scale and the Gender Role Conflict Scale.

Male Gender Role Stress

Using Pleck's gender role strain paradigm and specifically, discrepancy strain, Eisler developed the Masculine Gender Role Stress scale (MGRS). This measure is based on a conceptual framework involving several propositions about masculinity, stress arousal and health problems in men. First, taking from Bem (1981), he contends that gender roles are socialized and reinforced at a very young age; therefore, men learn sex role behaviors through the reinforcement of traditionally masculine attributes (i.e. playing aggressively) and the punishment of traditionally feminine attributes (e.g., crying). Second, taking from Lazarus and Folkman (1984), these learned behaviors are used to appraise and evaluate the environment around them as well as to guide decision-making and coping behaviors. Specifically, Lazarus and Folkman, (1984) suggest that the stress process involves an individual's cognitive appraisal of a situation combined with the judgment about the individual's ability to manage those situations. They define stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or

her resources and endangering his or her well being" (p. 19). Therefore, it is necessary for an individual's appraisal of threatening situations to be proportional to their perceived ability to handle the threat in order for the stress to be manageable. Third, due to various personality and environmental factors, not all men are equally committed to these traditional masculine roles. Fourth, taking from Pleck, higher levels of commitment to these masculine roles may limit the repertoire of coping strategies available to them and subsequently cause them to experience stress. Lastly, men may also experience stress due to not meeting the high standards set forth by culturally defined masculinity (Pleck, 1995).

Chapter 4

Developing the Masculine Gender Role Stress Scale

In developing the MGRS scale as a measure of his new construct, Eisler initially listed items thought to be relevant to men's experience of stress in upholding traditional masculine values (Eisler & Skidmore, 1987). He used a sentence completion task to elicit sex-typed appraisals. Items were then rated on how much stress each situation represented. The preliminary version of the MGRS included 66 items. A factor analysis was performed on these items using a sample of 150 undergraduate students. By discarding items that shared less than 10% of their variance with the total score and items with low factor loadings, the initial 66 items were narrowed down to 40-items that are rated based on the amount of stress they elicit (Eisler & Skidmore, 1987). The MGRS showed early acceptable internal consistency (coefficient $\alpha = .90$) and test-retest reliability ($r = .93$; Eisler, Skidmore, & Ward, 1988). It was also important that, as the MGRS aims to assess situations that might be threatening to masculinity, females have lower scores on this scale than men. According to Eisler and Skidmore (1987), and as expected, men scored significantly higher than women ($p < .01$). Preliminary validation studies examined the links between MGRS and emotions that are frequently associated with stress. The MGRS was found to be correlated with the State-Trait Anxiety Inventory ($r = .23$, Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) and the Multidimensional Anger Inventory ($r = .54$, Siegel, 1986). MGRS assesses a total rating of stress as well as ratings of stress in five gender role related domains. Factor analyses revealed that MGRS items cluster around factors labeled in the early validation study as physical inadequacy, emotional inexpressiveness, subordination to women, intellectual inferiority and performance failure.

There are nine items that centered around Physical Inadequacy. These assess an individual's fears of not meeting the masculine standards for physicality such as in sports rivalries or sexual prowess. This includes appearing manly in comparison to other men. Those that endorse items in this realm are concerned with being in good physical condition, being able to hold one's liquor and being able to satisfy a sexual partner (e.g., Feeling as though you are not in good physical condition). The items that cluster together around the Emotional Inexpressiveness factor reflect a fear of appearing emotionally weak or vulnerable. This includes a fear of dealing with another individual's emotional vulnerabilities as well. These items reflect situations where individuals would be required to show tender emotions such as love, fear, or hurt feelings (e.g., Telling your spouse that you love her). The nine questions centered around Subordination to Women reflect the fear of being outperformed by women in traditionally masculine roles such as sports or work. Individuals may be uncomfortable in situations where a female is their boss or letting a woman take control (e.g., Being outperformed at work by a woman). Intellectual Inferiority reflects a fear of appearing intellectually incapable of handling a given situation. This may include a fear of appearing indecisive or irrational or a fear of intellectual challenge from women (e.g., Having to ask for directions when you are lost). Performance Failure has eight items that appear to reflect an individual's fear of underperforming in work or sexual situations. These items are likely a reflection of perception of achievement. Items in this cluster include being unemployed, not getting promoted or failure to become aroused at will (e.g., Being unemployed; Eisler & Skidmore, 1987). Each of these factors assesses for stress in a particular domain of typically stressful situations.

Chapter 5

Research on Masculine Gender Role Stress

Research shows that gender discrepancy, and specifically the MGRS, is associated with negative psychological and physical consequences. Rigidity of gender role adherence can decrease an individual's repertoire of coping strategies, thus leading to an increase in health related problems. Therefore, an individual with greater commitment to their gender role will have a greater likelihood of experiencing gender role stress.

MGRS and Intimate Partner Violence

Given the value placed on combativeness and reliance on aggressive responses in traditional masculinity, it is no surprise that research has linked high MGRS scores with higher levels of violent behaviors. In a review by Moore and Stuart (2005), four of six studies showed support for the relationship between the MGRS and use of violence. In addition, the MGRS was one of three measures most consistently associated with partner violence. A study of MGRS in college students revealed that behaviors that were identified as threatening to a man's masculinity within the context of a relationship were more likely to be associated with negative affect and verbal aggression in high MGRS men relative to low MGRS men (Franchina, Eisler & Moore 2001). Further, Jakupcak et al. (2002) found MGRS scores to predict violence in dating relationship above and beyond the effects of masculine ideology, as well as income. In other words, masculine gender role stress is associated with violence above and beyond masculine ideology. Additionally, Moore and Stuart (2004) found that when exposed to gender-relevant vignettes, those with high MGRS report more state anger, negative intent attributions and verbal aggression than those with low MGRS. In a more recent study, Moore et al. (2008) examined the relationship between MGRS and intimate partner violence in 339 men court-mandated to attend violence intervention programs. Results showed MGRS is

related to several forms of aggression, specifically failure to perform in work and sexual arenas was associated with psychological aggression, failure to appear physically fit was associated with sexual coercion and intellectual inferiority was associated with injury to partners (Moore et al, 2008). Copenhaver, Lash and Eisler (2000) found a moderate correlation between high MGRS and reported abusive behaviors, though this was not significant after controlling for trait anger. In other words, while MGRS and abusive behaviors was associated, it was not significantly associated when taking trait anger into account. However, Copenhaver and Eisler (1996) found MGRS was related to anger, hostility and rage. In sum, research shows reasonable support for a link between high levels of MGRS and intimate partner violence.

MGRS and Psychological Health

Traditionally masculine traits are often consistent with less than optimal coping strategies (e.g., emotional inexpressiveness). As noted above, research suggests higher MGRS leads to anger, hostility and rage (Copenhaver & Eisler, 1996; O'Neil, 1981). A significant relationship was found between MGRS scores and irrational social fears (Arrindell, Kolk, Pickersgill, and Hageman, 1993; Arrindell, Kolk, Martin, Kwee & Booms, 2003). Additionally, men often use substances as a stress relieving coping strategy rather than more traditionally feminine coping strategies such as self-disclosure (Isenhart, 1993; Lash, Copenhaver & Eisler., 1998). In a study by conducted by Moore and Stuart (2004), high MGRS men evidenced greater negative intent attributions, state anger and verbal aggression than did low MGRS men.

MGRS and Stress Reactivity

Many researchers have suggested that the level of an individual's reactivity is based upon their cognitive appraisal of situations as stressful (Jorgensen & Houston, 1981; Lazarus and Folkman, 1984; Polefrone & Manuck, 1987; Watkins & Eisler, 1986). Much of the research on

MGRS has examined the relationship between high levels of gender role stress and cardiovascular reactivity, which has been shown to be associated with the development of coronary artery disease (Krantz & Manuck, 1984; Manuck, Kaplan & Clackson, 1985). In addition, Watkins et al. (1991) found that high MGRS scores were associated with coronary prone behavior, hostility, elevated blood pressure, and less life satisfaction among working adults than were low MGRS scores. Relative to individuals with low MGRS scores, individuals with high MGRS have also been shown to have greater systolic blood pressure reactivity when given a high masculine challenge that emphasized the importance of success and physical adequacy, as opposed to a low masculine challenge that did not emphasize these characteristics (Lash, Eisler, & Schulman, 1990). Further, Lash, Gillespie, Eisler and Southard (1991) studied 95 college males and females to determine the effects of sex differences in cardiovascular reactivity, and found that cognitive appraisal of gender relevance of a stressor mediates the sex differences in cardiovascular reactivity. In other words, the differences in cardiovascular reactivity among men is based on their appraisals of whether or not certain situations as threatening to their masculinity. High MGRS men react more and with greater variance when threatened than low MGRS men.

Taken together, research suggests that men experience more stress when they feel that their masculinity is being threatened or that they must prove themselves as masculine. Additionally, research supports the five factor model (i.e., 5 subscales) over the one factor model (i.e., total score; Moore et al., 2008), suggesting that men may experience stress more in one domain than another rather than experiencing stress more generally when masculinity is challenged. The previously described research supports the cognitively mediated view of stress, which is evidenced through research assessing the link between blood pressure, anger, aggression, and cardiovascular reactivity.

Chapter 6

Gender Role Stress and Diversity

Because gender role expectations are culturally defined, it is imperative to examine these roles and the resulting stress cross-culturally. As stated by Thompson et al. (1992), "we are largely unfamiliar with how age, generation, sexual orientation, class, race, and ethnicity differentially structure the form and context of men's lives and the standards of masculinity to which they adhere" (p. 602). According to Kimmel and Messner (1992), gender roles are different for each race and culture, though they may also share common themes. For individuals of different ethnic backgrounds than the dominant culture in which they live, there is a complex interaction of adherence to masculine ideologies as defined by their own ethnic groups and the adherence to masculine ideologies as defined by the dominant cultural norms. Unfortunately, few studies have attempted to examine masculinity across cultures to test these ideas. Among the few available studies, they revealed that the relationship between psychological stress and gender role conflict are mediated by racial identity, measured by the Black Racial Identity Attitude Scale, in African American men (Carter, Williams, Juby & Buckley, 2005; Wester, Vogel, Wei & McLain, 2006), suggesting that racial identity plays a crucial role in the association between stress and gender role conflict. Masculine ideologies are influenced by one's own cultural norms as well as the dominant culture's norms. For these groups, the effects of gender norms and gender role stress may be a function of acculturation.

Though there are relatively few studies on masculine norms, ideology, stress, etc., in diverse populations, existing research suggests that masculine ideologies do share similarities across cultures. For example, traditional masculinity in the Latin American culture, often referred to as "machismo", is often characterized as including both positive and negative characteristics. Ruiz (1981) describes it as involving "physical strength, sexual attractiveness, virtue, and potency" (p.

191), traits similar valued among U.S. men. However, more research appears to be focused on negative characteristics such as aggressiveness, hypermasculinity and sexism (Arciniega, Anderson, Tovar-Blank, & Tracey, 2008; Torres, Solberg, & Carlstrom, 2002). Research suggests that machismo is associated with physically and sexually abusive behaviors, relationship dysfunction, homophobia and socially irresponsible behaviors (Good et al., 1994; Fragosa & Kashubeck, 2000). Additionally, research has shown that highly macho males have lower self esteem (Neff, Prihoda, & Hoppe, 1991). Thus, it is reasonable to hypothesize that, similar to U.S. men, Latin Americans experience stress when their traditional masculinity is threatened or challenged.

Masculinity in the African American community is often discussed in the context of racial role strain. Researchers have conceptualized the exaggerated traditional roles as a defensive adaptation, which they termed "cool pose" (Majors & Billson, 1992). Cool pose is "a ritualized form of masculinity that entails behaviors, scripts, physical posturing, impression management, and carefully crafted performances that deliver a single, critical message: pride, strength, and control" (Majors & Billson, 1992, p. 4). In early studies, African American males were more likely to emphasize the importance of the provider role than were African American females or European Americans (Hunter & Davis, 1994). One study found that greater endorsement of masculinity was associated with being African American (Pleck, Sonenstein, & Ku, 1994) as compared to other ethnicities. Research on racial differences in the endorsement of traditional masculinity has found that being male *and* African American was associated with the most traditional perspective (Levant & Majors, 1997; Levant, Majors & Kelley, 1998).

Levant et al. (2003) compared masculine ideologies, as measured by the Male Role Norm Inventory, among Hispanic Americans, Caribbean Hispanics, and African Americans. Results showed that individuals endorsed U.S. defined masculinity ideology regardless of cultural

background; however, groups varied in their levels of endorsement. African American adults endorsed more masculinity ideology than European Americans. In addition, Hispanic adults, in both the United States and Puerto Rico, fell midway between African Americans and European Americans. As suggested by Lazur and Majors (1995), every culture has norms that all individuals are measured against. Regardless of which culture or ethnicity they identify with, men are expected to behave in certain ways and often fall short of the expectations to which they are held. As a result, it is likely that men across all cultures experience stress in response to falling short of these standards. In fact, minorities such as African Americans or Latin Americans may experience more stress due to the difficulties of meeting the standards of both their own culture and the dominant culture in which they live or racial role strain. It seems evident that those from different ethnic backgrounds have been socialized to behave in particular ways. This socialization process is thought to be similar but distinct across ethnicities. However, the question remains as to whether or not men of different ethnic backgrounds experience similar levels of gender role stress as a result of having traditional masculine norms challenged or threatened. In other words, men of various ethnicities may espouse a similar masculine orientation and ideology, but it is unknown whether these groups similarly experience adverse reactions when exposed to masculine threats.

While research on masculine ideology across cultures is limited, even fewer studies have specifically examined MGRS cross culturally. In fact, research and development on the MGRS has been primarily based on Caucasian populations, leading to unanswered questions about the generalizability of these findings to men with differing ethnic backgrounds. However, there are a few notable exceptions. Moore et al. (2008) examined the relationship between MGRS and IPV in a somewhat diverse sample of 70% Caucasian, 13% African American, 9% Hispanic, 2% Native American, 2 % Asian/Pacific Islander. This study confirmed that a five-factor model (i.e., 5

subscales) was a better fit than the one-factor model (i.e., total score) and examined the relationship between factors of the MGRS scale and intimate partner violence among men court mandated to attend batterer intervention. This study revealed that gender role stress regarding failure to perform in work and sexual domains was associated with psychological aggression, gender role stress regarding appearing physically fit was associated with sexual coercion, and gender role stress regarding intellectual inferiority was associated with injury to partners. Tang and Lau (1995) extended the study of MGRS to a Chinese sample. In part one of this study, a Chinese version of the MGRS scale was created and tested on 109 male and female undergraduate students. Part two examined the relationship between gender role stress and health in 119 male and female nurses. Results showed that the Chinese version of the MGRS is a reliable and internally consistent scale (α = .91). Similar to findings in predominantly Caucasian populations, Chinese male students experienced more stress in situations traditionally requiring masculine attributes. In 1996, Tang and Lau again tested the Chinese version of the MGRS by examining factor structure and predictive validity in a Chinese college student sample. While this study suggested the Chinese version of the MGRS has good internal consistency and high interfactor correlations, the confirmatory factor analysis showed that a 3 factor model (Performance Failure, Inferiority, and Emotional Inexpressiveness), rather than the five factor, model was more parsimonious. A more recent study by Van Well, Kolk and Arrindell (2005) examined the Dutch version of the MGRS scale among 2,239 male and female undergraduate psychology students. Results showed this version to be internally consistent (α = .90) and a factor analysis supported the five-factor model (Standardized Root Mean Residual = .065, Root Mean Square Error of Approximation= .064). While these studies certainly provide a good start for the examination of masculine gender role stress across European

cultures, further research is required in order to better understand the function of masculine gender role stress in more diverse samples within the U.S.

Gender Role Conflict Scale

While the research noted above leaves several unanswered questions about MGRS and diversity, a similar scale has been tested across a wider range of populations. The Gender Conflict Scale (O'Neil et al 1986) was developed in order to measure the reactions male's experience to gender expectations. It aims to assess the psychological impact of facing unrealistic and contradictory standards. Gender role conflict (GRC) differs from male gender role stress in that it questions whether or not an individual is experiencing discrepancy in messages of masculinity, while the MGRS assess the extent to which the discrepancies are experienced as stressful. However, these measures are theorized to both measure discrepancy strain, It is likely that men who experience gender role conflict are also likely to experience stress in response to the conflict.

The GRCS is a 37 item self-report measure designed to examine conflict through four main factors: (1) concerns with success, power and competition (CWSPC); (2) restrictive emotionality (RE); (3) restrictive affectionate behavior between men (RABBM); and (4) conflicts in work/family relations (CBWFR).

Research on gender role conflict has shown that in African American males, both college age and adult, gender role conflict is related to lower self-esteem, high anxiety and depression (see O'Neil, 2008 for review). White (2002) also conducted a study, which showed that GRC was correlated with negative attitudes towards help seeking. Gender role conflict was also found to be associated with overall psychological distress in this population (Carter et al., 2005; Wester et al., 2006). It seems reasonable to assume that the discrepant messages of masculinity are correlated with

negative consequences in an African American male population similarly to those in a Caucasian population.

Few studies have examined Hispanic or Latino men's gender role conflict. However, in a study by Fragosa and Kashubek (2000) it was found that higher levels of machismo and restrictive emotionality were associated with stress and even depression. This study also found that restrictive emotionality (RE) and concerns with success, power and competition (CWSPC) are consistent predictors of men's stress suggesting that gender role conflict is associated with a variety of negative outcomes including stress. Research on Asian American men's gender role conflict has demonstrated somewhat contradictory results. While one study found no significant relationship between self-esteem and GRC (Liu & Iwamoto, 2006), another found that restrictive emotionality (RE), restrictive affection behavior between men (RABBM) and conflict in work/family relations (CBWFR) were related to lower self-esteem (Shek, 2006).

While these studies do not provide us with a comprehensive view on diversity and gender roles, they certainly suggest that men across cultures experience the negative consequences of gender role strain. The similarities of theory behind the MGRS and GRCS (i.e., they both measure discrepancy strain) in combination with the similarities in negative outcome research, suggests that men across cultures experience discrepancy strain. Such evidence suggests that Hispanic American, African American and Asian American cultures have masculine norms that are difficult for males to achieve and cause stress as a result. Thus, we expect that research in diverse populations using the MGRS will reveal similar patterns of gender role stress as has been found in previous research with Caucasian populations.

Chapter 7

Current Study

The MGRS shows initial promise as a measure of gender role stress for men when facing challenges to traditional masculinity. While it has been used in a variety of populations, it may be prematurely used with diverse samples unrelated to the sample used to validate the measure (i.e., Caucasian college students). It is possible that the extent to which men from different cultures experience gender role stress may be distinct from ideologies for Caucasian male college students. In addition, certain subtypes of gender role stress (e.g., emotional inexpressiveness) may be more or less relevant for men from different cultures than Caucasian male college students.

Therefore, the purpose of this study is to examine the MGRS scale in a diverse sample of predominately Hispanic and African-American men, and conduct a confirmatory factor analysis to determine the best representative model for these populations. While there is little research conducted using the MGRS in diverse samples, we expect that the five-factor model proposed by Eisler will best fit the data from this sample as well. Because we believe that MRGS is a universal concept that is experienced by men of all ethnic and racial backgrounds, we hypothesize that this sample will show similar patterns to those in previous factor analyses that were conducted in primarily Caucasian samples. In the current sample, we hypothesize that a confirmatory factor analysis will support the use of a five-factor model in diverse populations.

We will also assess the reliability as well as the concurrent and discriminant validity utilizing a number of measures of masculinity. The decision to compare and contrast the MGRS with multiple measures of masculinity is based on the importance of validating the MGRS scale in an ethnically

diverse sample, and to inform future research sensitive to measurement selection consistent with a multidimensional view of masculinity.

Chapter 8

Method

Participants

Participants were 234 male university students from a large university in Texas with a mean age of 22.9 years (SD = 5.86). The sample was comprised of individuals from the following ethnic backgrounds: 44% Hispanic, 22% African American, 17.5% Caucasian, 8.5% Asian/ Pacific Islander, 2% Indian/Middle Eastern, 1% Native American and 5% other. Most participant's family income was between $20,000- $40,000. Participants were relatively equally divided among year in school (Freshman 26%; Sophomore 31%, Junior 23%, Senior 19%).

Measures

Demographic information, including age, ethnicity, class level and religious affiliation was gathered from each participant.

Masculine Gender Role Stress (MGRS): The MGRS scale (Eisler & Skidmore, 1987) consists of 40-items that measure the degree to which men find certain situations stressful (e.g. Letting a woman take control of the situation). Items are rated on a Likert scale from 0 (not at all stressful) to 5 (extremely stressful). Scores are calculated by summing the total number of ratings for a total possible score of 200. Factor analyses reveal that items tend to cluster into five factors or subscales including Physical Inadequacy, Intellectual Inferiority, Emotional Expressiveness, Subordination to Women, and Performance Failure. The MGRS scale has sufficient test-retest reliability (r = .93) and high internal consistency (α = .90; Eisler, Skidmore, & Ward, 1988) for the total score. Additional psychometric information was provided in the introduction.

Male Role Norm Scale (MRNS): The MRNS (Thompson & Pleck, 1986) consists of 26 items that assess male's masculine ideology using a 7-point Likert scale. The MRNS operates on three basic dimensions; status norms (11 items, α = .81), toughness norms (8 items, α = .74), and antifemininity norms (7 items, α = .76). Thompson (1990) demonstrated the scale's construct validity by finding the MRNS had a low (*r* =. 07) correlation with the Bem Sex Role Inventory. The MRNS was included in the current study in order to examine discriminant validity.

Gender Role Conflict Scale (GRCS): The GRCS (O'Neil, et al., 1986) is a self-report measure consisting of 37-items designed to assess gender role conflict. It consists of four factors including: restrictive emotionality (e.g. " Telling my partner my feelings about him/her during sex is difficult for me", α = .85); success, power, and competition (e.g. "Moving up the career ladder is important to me", α = .76); restricted affectionate behavior between men (e.g. "Hugging other men is difficult for me", α = .88); and conflict between work and family relations (e.g. " My needs to work or study keep me from my family or leisure more than I would like". α = .82). Test-retest reliabilities over a four-week period ranged from .72 to .86 for all factors. The GRCS was included in the current study in order to demonstrate concurrent validity with a measure similar to the MGRS in that it also measures gender discrepancy.

Bem Scx Role Inventory (BSRI): The BSRI (Bem, 1974) is a 30-item self-report measure that assesses the extent to which individuals describe themselves in relation to traditionally defined gender role orientations. Individuals rate characteristics (e.g. athletic, shy, conscientious) from 1 (never or almost never true) to 7 (almost always true) on two subscales: Masculine and Feminine.

We used only the Masculinity subscale (α = .77) in the analyses. The BSRI was included in the current study in order to examine discriminant validity.

State Trait Anger Expressiveness Inventory (STAXI): The STAXI (Spielberger, et al., 1983) is a self-report measure, which assesses anger both as an emotional state and the disposition to experience angry feelings as a personality trait. The present study used only the 10 items assessing trait anger (α = .83). Responses range from 1(not at all) to 4 (very much so). This measure was included in the current study in order to confirm that MGRS is associated with anger as demonstrated in the early validation study.

State Trait Anxiety Inventory (STAI): The STAI (Spielberger, 1988) is a self-report measure, assesses anxiety both as a relatively transient emotional state and as a more stable personality trait. The STAI has forty items with a range of four possible responses. The present study used only the 20-items assessing trait anxiety (α = .75). This measure was included in the current study in order to asses the degree to which MGRS is associated with trait anxiety as examined in the early validation study.

Procedures

Participants were recruited from psychology classes and were offered extra credit for volunteering to participate in the study. Members of the research team placed sign up sheets on a bulletin board in the department that described the study and listed times students could participate. Research team members met with participants at the bulletin board and led them to a classroom to begin the study. Participants completed informed consent followed by a questionnaire packet. After

completing the questionnaires, which took less than an hour, the packets were placed in a sealed, slotted box to protect confidentiality, and the students were thanked by the research assistants for their participation in the study

Chapter 9

Results

In order to verify that the five-factor model fit the data for this diverse sample, we conducted a confirmatory factor analysis (CFA) using LISREL 8.72 (Joreskog & Sorbom, 2005). Based on recommendations from Kline (2005), four fit indices were used to determine the extent to which the five-factor model fit the data. The Minimum Fit Function (MFF) chi square, which should demonstrate a ratio to degrees of freedom (*df*) of 3 or less (Kline, 2005); the Bentler-Bonnet Non-Normed Fit Index (NNFI; Bentler & Bonnet, 1980), which should be at least .90; the Comparative Fit Index (CFI; Bentler, 1990), which should also be at least .90; and the Standardized Root Mean Square Residual (SRMR), which should be less than .10 (Kline, 2005).

For the total sample, the overall CFA for the factor weights and latent variable covariances showed a good fit of model to the data: MFF $\chi 2(1412.61)$ to *df* (730) ratio = 1.94; NNFI =.95; CFI = .95; and SRMR = .070. Similar to findings reported in Eisler and Skidmore (1987), factor loadings ranged from .34 to .75 across the five subscales. We also conducted a CFA testing a one-factor model and compared it to the five-factor model as both have been used in past research. The fit of the one-factor model was acceptable, Mff $\chi 2$ (1811.33) to *df* (740) ratio = 2.45; NNFI = .92; CFI = .92; and SRMR = .082. However the five factor model evidenced a significantly better fit to the data, $\chi 2$difference = 398.72, $p < .001$.

Also supporting the five-factor model, correlations between subscales for the entire sample (Table 1.) ranged from .34 (Subordination to Women and Performance Failure) to .75 (Physical Inadequacy and Intellectual Inferiority), indicating that at least 50% of the variance in one subscale was not shared with any other subscale. In addition, tolerance values were obtained by separately regressing each predictor on the remaining predictors. Results demonstrated that between 28% and

50% of the variance in each factor was not shared by the other four factors combined. Therefore, there appeared to be empirical independence among the subscales. Modification indices were examined in order to identify ways in which the model could be improved; however, no changes were warranted.

To further examine the validity of the MGRS in a diverse sample, we ran similar analyses with Caucasian participants excluded from the data (n = 193). Again, the overall CFA for the factor weights and latent variable covariances showed a good fit of model to the data: MFF $\chi 2(1392.26)$ to *df* (730) ratio = 1.91; NNFI =.93; CFI = .94; and SRMR = .076. Factor loadings ranged from .35 to .73 across the five subscales. We also conducted a CFA testing a one-factor model and compared it to the five-factor model. Again, the fit of the one-factor model was acceptable, Mff $\chi 2$ (1576.22) to *df* (740) ratio = 2.13; NNFI = .92; CFI = .92; and SRMR = .079, but the five factor model evidenced a significantly better fit to the data, $\chi 2$ difference = 183.96, $p < .001$.

In order to more specifically examine the validity of the MGRS in specific populations, separate CFA's were planned for Hispanic and African American participants. For the Hispanic sample, factor weights and latent variable covariances showed a good fit of model to the data for the five-factor model: MFF $\chi 2(1253.28)$ to *df* (730) ratio = 1.72; NNFI =.88; CFI = .89; and SRMR = .091. Factor loadings ranged from .30 to .66 across the five subscales. However, the fit of the one-factor model was somewhat weak, Mff $\chi 2$ (1394.10) to *df* (740) ratio = 1.88; NNFI = .85; CFI = .86; and SRMR = .098. Additionally, the five factor model demonstrated a significantly better fit to the data, $\chi 2$difference = 140.82, $p < .001$. Across all five-factor and one-factor CFA examinations, modification indices were examined to assess whether moving items to other subscales or removing any items would significantly improve the fit of the model. No modification indices were large enough to warrant changes. Unfortunately, due to the small sample size of African American

participants, we were unable to test the model in this group. However, concurrent and discriminant validity data is provided below for this group.

In order to measure concurrent and discriminant validity, correlations between the MGRS and other measures were calculated in accordance with early validations studies (Table 2). All validity results were similar to the original MGRS validation study (Eisler & Skidmore, 1987). As expected, the MGRS was most highly correlated with the Gender Role Conflict Scale (r = .52) for the total sample. The Male Role Norm Scale was modestly correlated with MGRS (r = .31), suggesting the MGRS is a similar but distinct scale. Measures of anxiety (STAI) and anger (STAXI) also showed modest correlations with the MGRS in the current sample (r = .30, r = .31). Though these are small associations, they are significant and indicate that anxiety and anger are associated with MGRS as found in previous studies. Discriminant validity was measured and confirmed through the Bem Sex Role Inventory (r = -.11). This non-significant result was expected because the BSRI measures an individual's degree of masculine orientation and does not address an individual's reaction to masculine challenges. Concurrent and discriminant validity was measured for each of the four groups (All participants, Caucasian excluded, Hispanic only, African American only) and is presented in Table 2. Correlations for each group were comparable with one notable exception. Correlations between the MGRS and STAXI were notably discrepant between the Hispanic only group (r = .18) and the African American only group (r = .43). In order to better understand the correlations between MGRS and STAXI for African American and Hispanic groups, specific MGRS subscale and STAXI correlations were examined; however, there were no noteworthy differences among subscales. Additionally, bivariate correlations between MGRS total and subscale scores were calculated and are presented in Table 1 for each of the four sample groups.

In addition, ANOVAs were conducted in order to examine MGRS total and subscale scores among Caucasian, African American and Hispanic ethnic groups. Results showed that there were no significant differences among any of the groups on total MGRS score; however, there were significant differences on Subordination to Women, $F(2, 193) = 3.42$, $p = .035$, and a trend for differences on Intellectual Inferiority, $F(2, 193) = 3.00$, $p = .052$. Post hoc comparisons revealed that both Hispanics and African Americans had significantly higher scores on these subscales than Caucasians. Means and standard deviations are reported in Table 3. However, once we corrected for multiple comparisons (n = 6) none of the reported differences were significant (i.e., $p < .01$).

Chapter 10

Discussion

The primary aim of this study was to demonstrate that the MGRS scale is appropriate to use in a diverse sample of men. A confirmatory factor analysis was conducted using four variations of the sample: Total Sample, Caucasian excluded, Hispanic only, and African American only. Results showed that the original five-factor model, as identified by Eisler and Skidmore (1987), as well as the one-factor model were a good fit for the Total Sample, Caucasian excluded and Hispanic only groups. However, upon comparison, the five-factor model was a significantly better model than the one-factor model for each of these groups. A CFA could not be conducted on the African American only group due to limitations of sample size.

Intersubscale correlations and tolerance values indicated that each of the five factors was adequately independent from one another. An examination of correlations between the MGRS and other scales were conducted and revealed that similar patterns emerge within a diverse sample as did previous research with predominantly Caucasian samples. However, there was one notable exception. The correlation between the MGRS and STAXI was low for the Hispanic only group, and high for the African American only group suggesting that anger may not be as strongly related to gender role stress for Hispanics and more strongly related to gender role stress for African Americans. Certainly, this speaks to the cultural differences in socialization processes. Few studies have examined trait anger among differing ethnicities; however, Moisan, Sanders-Phillips, and Moisan (1997) found that African American adolescent boys who have experienced abuse report higher levels of anger than Latino boys who have experienced abuse and concluded that ethnic differences in anger are related to cultural differences in stress response. Anger may simply be a more acceptable stress response in African American culture than in Hispanic culture.

Though previous research has used the MGRS scale in diverse samples, to our knowledge the present study is the first to examine the validity of this scale in a diverse sample in the U.S. The primary implications of these findings is that masculine gender role stress is a construct that is not specific to Caucasian men in the United States. Masculine gender role stress appears to be a construct that men of many different ethnicities experience to similar degrees. The current study contributes to the literature by confirming that the use of the MGRS scale and its five-factor structure is acceptable in a mixed ethnicity sample and Hispanic only sample. Though we were not able to conduct a CFA in the African American only sample, the comparable correlations suggest that the MGRS scale would likely hold up in this sample as well if sufficient power was present.

The MGRS scale presents situations that might be considered a threat to an individual's masculinity and asks the individual to rate how much stress they would experience in that situation. Previous research using this scale has assumed that all men of different ethnicities have similar standards of masculinity. In order to more specifically examine that assumption, a comparison of MGRS means across ethnic groups (Caucasian, African American, and Hispanic) showed no significant differences in average levels of masculine gender role stress, suggesting that individuals across ethnic groups endorse similar amounts of stress related to masculine threatening situations. These findings were consistent with previous literature that suggests men across ethnic groups experience stress and conflict related to gender role expectations. Given the results of the current study, there are two plausible possibilities. The first is that men in the U.S. are socialized to uphold a core set of standards of masculinity. Under this assumption, there is a universal standard of masculinity in the United States to which all ethnicities are expected to adhere and thus, men of various cultures in the U.S. experience similar stress when masculinity is challenged. The second possibility is that the standards of each ethnicity share enough similarities that men across all

ethnicities score similarly on the MGRS. This would suggest that socialization processes in each ethnicity share common themes of masculinity. We might also consider the possibility that both of these are true. Men from minority groups may share similarities in cultural standards for masculinity as well as experience stress from to the dominant culture's masculinity standards. Certainly, further research is warranted to further understand the influence of acculturation on masculine expectations in minorities; however, results of the current study suggest that African American and Hispanic men are socialized in a similar but perhaps not identical way.

It is important to note that there were MGRS subscale differences among ethnicities that were approaching significant. Specifically, Hispanics and African Americans endorsed more stress associated with Subordination to Women and Intellectual Inferiority than did Caucasians. Though these differences were not enough to affect the MGRS total scores or validity of the five-factor model, its reasonable to contend that these minority groups may experience an elevated amount of stress when related to being outperformed by women in traditionally masculine roles or appearing intellectually incapable of handling a given situation.

It has been established that men face significant psychological and physical consequences, relative to women. Many believe that these consequences are in large part due to adherence of traditional masculinity that is socialized at an early age. While few of these statistics address variations across ethnicities, it is clear that African American and Hispanic men also face many significant health risks. For example, African American men in the U.S. have the highest rates of hypertension in the world and mortality rates for African American men are 1.3 times that of Caucasian men and 1.8 times that of Hispanic men (Douglas et al., 1997). African American men die 7 years younger than European American men (DHHS, 2000). Additionally, Hispanic men and African American men have the highest HIV related deaths and are the only ethnic groups in the U.S

to have homicide as one of the top five leading causes of death (Collins et al., 1999). Moore et al. (2008) examined the relationship between MGRS and IPV in a 30% non-Caucasian sample and found that gender role stress was associated with psychological aggression, sexual coercion, and injury to partners. It is clear from these findings that men of all ethnic groups experience negative health risks and concerns. Given the current findings that the socialization process may share similarities across ethnicities, it is reasonable to assume that, similar to Caucasians, masculine displays of aggressiveness, combativeness, and assertiveness are likely rewarded in African American and Hispanic cultures as well. As previously mentioned, it is unclear as to whether men in minority groups are affected by the roles of the dominant culture or are simply socialized in similar ways to Caucasian men. Further research is needed to examine the association between health risks and masculine gender role stress across African American and Hispanic men.

While the current study contributes to the literature by extending the research on gender role stress to a diverse sample, there were notable limitations. First, the small number of participants limited our ability to test the five-factor model, with the exception of Hispanics, in specific ethnic groups. Though we attempted to test this model in African American participants, sample size prevented further examination. As a result, we are unable to conclude whether or not this measure is valid in African American or other populations. However, results from our Caucasian excluded group suggest that similar outcomes would be expected for African American samples as well. Second, we used only college students from one university. Therefore, we are unable to generalize the use of the MGRS scale to the broader community outside of a college population. However, the current research suggests that the MGRS scale shows initial promise for use in such samples. Future research should aim to examine this scale within other specific ethnicities such as African Americans, and within a more representative sample. Additionally, the current study did not assess

or control for acculturation or the participants' first language. Therefore, we are unable to make conclusions regarding the role and influence of acculturation on MGRS in diverse samples. It is also possible that words or phrases in the MGRS may not translate for individuals whose first language is not English. Despite these limitations, this study shows initial promise that use of the MGRS scale in diverse samples is justifiable and warrants further research on the associated between MGRS and negative health consequences across ethnicities.

In sum, the results of the current study can be used to help address the growing health concerns men face in the U.S. It is clear from previous research that strict adherence to traditional masculinity has a negative effect on men. It appears from the current research that these health risks and the stress resulting from gender role expectations extend across ethnicities. As a result, we conclude that in order to help improve health risks, such as intimate partner violence, stress reactivity, low help-seeking behaviors and substance use, the socialization process and standards for masculinity should be continually reexamined and challenged. Researchers and clinicians alike should use the current findings as a guideline to inform their ideas of stress and masculinity in minority groups.

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Appendices

Table 1.

Inter-Subscale Correlations

Measure	1.	2.	3.	4.	5.	6.
Total (n = 234)						
1. MGRS total score	---	.91*	.80*	.81*	.88*	.76*
2. MGRS Physical Inadequacy		---	.64*	.65*	.75*	.70*
3. MGRS Emotional Inexpressiveness			---	.64*	.69*	.43*
4. MGRS Subordination to Women				---	.73*	.34*
5. MGRS Intellectual Inferiority					---	.53*
6. MGRS Performance Failure						---
Caucasian excluded (n = 193)						
1. MGRS total score	---	.91*	.80*	.82*	.87*	.76*
2. MGRS Physical Inadequacy		---	.64*	.65*	.75*	.70*
3. MGRS Emotional Inexpressiveness			---	.65*	.69*	.43*
4. MGRS Subordination to Women				---	.70*	.40*
5. MGRS Intellectual Inferiority					---	.53*
6. MGRS Performance Failure						---
Hispanic only (n = 104)						
1. MGRS total score	---	.90*	.77*	.80*	.86*	.71*
2. MGRS Physical Inadequacy		---	.60*	.64*	.72*	.60*
3. MGRS Emotional Inexpressiveness			---	.60*	.66*	.37*
4. MGRS Subordination to Women				---	.69*	.34*
5. MGRS Intellectual Inferiority					---	.45*
6. MGRS Performance Failure						---

Table 1 continued

African American only (n = 51)						
1. MGRS total score	---	.92*	.90*	.85*	.89*	.83*
2. MGRS Physical Inadequacy		---	.77*	.70*	.74*	.78*
3. MGRS Emotional Inexpressiveness			---	.77*	.81*	.66*
4. MGRS Subordination to Women				---	.78*	.51*
5. MGRS Intellectual Inferiority					---	.64*
6. MGRS Performance Failure						---

* $p < .01$

Table 2.

Validity Correlations

Measure	1.	2.	3.	4.	5.	6.
Total (n = 234)						
1. MGRS	---	.52**	.31**	-.11	.30**	.31**
2. GRCS		---	.55**	-.04	.44**	.39**
3. MRNS			---	.09	.16*	.27**
4. BSRI-M				---	-.36**	.03
5. STAI					---	.36**
6. STAXI						---
Caucasian excluded (n = 193)						
1. MGRS	---	.46**	.30**	-.09	.30**	.27**
2. GRCS		---	.55**	-.01	.43**	.38**
3. MRNS			---	.13	.19*	.32**
4. BSRI-M				---	-.37**	.01
5. STAI					---	.38**
6. STAXI						---
Hispanic only (n = 104)						
1. MGRS	---	.43**	.22*	-.09	.26**	.18
2. GRCS		---	.56**	.05	.47**	.39**
3. MRNS			---	-.28**	.17	.24*
4. BSRI-M				---	-.32**	.05
5. STAI					---	.26**
6. STAXI						---

Table 2 continued

African Americans only (n = 51)						
1. MGRS	---	.50*	.33*	-.06	.29*	.43*
2. GRCS		---	.53*	-.14	.34*	.33*
3. MRNS			---	-.11	.28*	.30*
4. BSRI				---	-.42*	-.07
5. STAI					---	.52*
6. STAXI						---

** $p < .01$, * $p < .05$

Table 3.

MGRS Means and Standard Deviations

	Caucasian		Hispanic		African American	
	M	SD	M	SD	M	SD
MGRS Total	66.24	30.81	76.32	29.56	79.10	34.08
MGRS Physical Inadequacy	16.51	8.41	18.74	8.88	19.77	9.09
MGRS Emotional Inexpressiveness	9.48	5.54	11.32	6.01	11.80	6.53
MGRS Subordination to Women	7.27	7.76	10.42	6.25	10.84	8.10
MGRS Intellectual Inferiority	8.57	5.91	10.99	6.25	11.94	6.78
MGRS Performance Failure	24.42	9.73	24.86	7.94	24.74	8.32

Vita

I received my B.A. from the University of North Carolina at Greensboro in May, 2008. My current research interests are in the area of aggression, impulsivity and substance abuse, as well as the influence of gender roles and various personality factors on these topics.