

DISSERTATION

EVALUATING THE IMPACT OF INTRODUCING SOCIAL NORMS STATEMENTS ON
RAPE MYTH ACCEPTANCE AMONG DIVISION III MALE ATHLETES

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ABSTRACT

EVALUATING THE IMPACT OF INTRODUCING SOCIAL NORMS STATEMENTS ON RAPE MYTH ACCEPTANCE AMONG DIVISION III MALE ATHLETES

Sexual violence on college campuses is a serious and pervasive issue facing higher education in the United States. Social norms interventions provide a promising framework for reducing sexual violence on college campuses. Some research has been conducted using social norms interventions with student athletes, but the findings are inconsistent between Division I and III levels. The purpose of this study was to a) examine the role and impact of social norms and rape myth acceptance (RMA) among male student athletes at Division III programs and b) better understand the influence of normative clarification on male student athlete behavior in small school settings.

A survey was distributed to over 200 male, student athletes at a small, private, liberal arts institution and was comprised of three instruments: 1) the Student Athlete Social Norms Survey, 2) the Hypermasculinity Inventory and 3) the Illinois Rape Myth Acceptance Scale. Participants were placed into three different test conditions (no norms / control, high norms and low norms) to measure the influence of normative statements on their rape myth acceptance. No statistically significant differences were found between levels of rape myth acceptance across the intervention groups. The findings support earlier studies that found differences in the impact of normative campaigns between Division I and Division III student-athletes.

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CHAPTER 1: INTRODUCTION

Sexual violence on college campuses is a serious and pervasive issue facing higher education in the United States. In 2011, the American College Health Association declared sexual violence on campus a major public health concern (ACHA). A White House task force challenged higher education institutions to significantly improve their efforts to support students and prevent sexual violence (The White House, 2014). The statements of the ACHA and the White House were echoes of the calls to action that feminist scholars and higher education administrators have been articulating for decades (Kroløkke & Sørensen, 2006).

Several studies have attempted to quantify the prevalence of sexual violence victimization in higher education. Scholars and practitioners often cite the Campus Sexual Assault (CSA) Study that found one in five women and one in 16 men are sexually assaulted in college (Krebs, Lindquist, Warner, Fisher, & Martin, 2007). Studies that have utilized a broader definition of sexually violent acts have shown that more than half of college women experience some form of sexual aggression during their collegiate careers (Dardis, Murphy, Bill, & Gidycz, 2015; Rich, Gidycz, Warkentin, Loh & Weiland, 2005). Further studies have found that 12% of women are raped during their college years (Lutz-Zois, Moler & Brown, 2015; Tjaden & Thoennes, 2000) and 30% of college women experience an attempted rape (Cowley, 2014; Fisher, Cullen & Turner, 2000; Ward, Chapman, Cohn, White & Williams, 1991). Research on sexual violence in higher education and victimization is important for understanding the scope of the current crisis.

However, sexual violence research needs to be considered in partnership with studies that consider who is committing the violence. The existing research demonstrates that men commit the overwhelming majority of reported sexual violence regardless of the identity of the victim

(Strain, Hockett & Saucier, 2015; Black et al., 2011; Sedgwick, 2006). A national study by the United States Bureau of Justice Statistics found that 99% of people arrested for rapes were men (Greenfeld, 1997) and the same gender phenomenon exists at higher education institutions. In fact, one study found that nearly one third of college men report committing sexual assault (Loh, Gidycz, Lobo & Luthra, 2005). Further research has replicated and expanded these findings indicating that up to 60% of college men report perpetrating sexually aggressive behavior and approximately 10% of that behavior constitutes the legal definition of rape (Dardis, Murphy, Bill & Gidycz, 2015; Mouilso & Calhoun, 2013; Loh, Orchowski, Gidycz & Elizaga, 2007; Abbey & McAuslan, 2004). A complete and comprehensive understanding of sexual violence in higher education must acknowledge that men are responsible for the perpetration of a significant majority of the violence.

The social norms and environmental conditions that enable and facilitate sexual violence are much more nuanced than simply recognizing the relationship between sexual violence and gender identities. For example, sexual assaults tend to occur in environments that are familiar to the victims and are committed by someone they know (Hust, et al., 2013; Burn, 2009; Warshaw, 1988). Familiarity with the perpetrator is even more pronounced in college and university environments given the insular nature of those communities (Tjaden & Thoennes, 2000; Fisher, Cullen & Turner, 2000). Moreover, some research has suggested that although the vast majority of sexual violence is perpetrated by men, a small minority of men are actually committing the violence (Gidycz, Orchowski & Berkowitz, 2011; Lisak & Miller, 2002). In higher education, this research suggests that although some college men are committing sexual violence, more men navigate the same social environments without perpetrating violence. Attention must be focused

on the individual and environmental elements that account for these differences to better understand why some men commit sexual violence.

Social Norms Theory

A significant body of research has contextualized sexual violence on college campuses by focusing on environmental elements that are conducive to sexually aggressive behavior. Much of this research utilizes concepts and assumptions from Social Norms Theory that examine how an individual's misperceptions of peers' attitudes, beliefs and behaviors can influence that person's own behavior (Berkowitz, 2005). Research utilizing Social Norms Theory has consistently found that college men misperceive many aspects of their peers' behavior. For example, studies have shown that college men overestimate the extent to which other men engage in sexually aggressive behavior (Kilmartin et al., 1999) and underestimate the importance their peers place on obtaining consent in sexual interactions (Fabiano, Perkins, Berkowitz, Linkenback & Stark, 2003). Similar misperceptions are found in research that gauges men's perceptions of their peers' attitudes and beliefs. Several studies have found that college men overestimate their peer's comfort with offensive comments about women and the LGBT community (Bowen & Bourgeois, 2001; Dubuque, Ciano-Boyce, & Shelley-Sireci, 2002) and underestimate their discomfort with a casual and risky 'hook up' culture (Lambert, Kahn, & Apple, 2003; Lewis, Lee, Patrick, & Fossos, 2007).

Inaccurate perceptions about social norms, or normative misperceptions, can significantly impact college men's behavior with respect to sexual interactions. Muehlenhard and Cook (1988) found that more than two-thirds of college men had engaged in unwanted sexual activity with women as a result of pressure they felt from other men. However, more studies are needed

to understand the extent to which the pressure some men experience is explicit from their peers or implicit from misperceptions of their environment.

Rape Myths

The most commonly discussed social norms related to sexual violence are rape myths, which Burt (1980) defines as “prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists [that] create a climate hostile to rape victims” (p. 217). Lonsway and Fitzgerald (1994) refined Burt’s (1980) work and define rape myths as “attitudes and beliefs that are generally false but are widely and persistently held, and that serve to deny and justify male sexual aggression against women” (p. 134). Examples of rape myths include ‘many women secretly desire to be raped’ and ‘it is usually only women who dress suggestively that are raped’ (Lonsway & Fitzgerald, 1994). At a foundational level, rape myths are inaccurate or false beliefs that result from misperceptions of social norms regarding sexual relationships and interactions.

Social Norms Theory provides a framework for understanding how rape myths are perpetuated by identifying a person’s normative misperceptions of peers’ attitudes, beliefs and acceptance of these myths. In the context of sexual violence, researchers commonly refer to the belief in, or adherence to, rape myths as rape myth acceptance (RMA). Multiple studies on RMA have demonstrated that college men overestimate their peers’ RMA (Lutz-Zois, Moler, & Brown, 2014; Locke & Mahalik, 2005; O’Donohue, Yeater, & Fanetti, 2003) which has serious and wide-ranging consequences. Paul, Gray, Elhai and Davis (2009) found that victims of sexual violence are less likely to disclose their assault and more likely to experience post-traumatic stress disorder in communities where individuals perceive a high level of RMA among their peers. Some research even suggests that for men, high levels of RMA is a causal predictor of their likelihood of perpetrating sexual violence and rape (Bohner et al., 1998; Bohner, Jarvis,

Eyssel, & Siebler, 2005). If higher education institutions want to promote a healthier and safer campus community, administrators must work to address normative misperceptions associated with RMA among their students.

Social Norms and Behavior Modification

Social Norms Theory postulates that individuals adjust their behaviors to be consistent with the perceived norm for that behavior and that correcting normative misperceptions can adjust unwanted behaviors (Berkowitz, 2004). The theory has been used in several contexts with college students to correct normative misperceptions and influence behaviors. Studies have demonstrated that utilizing normative clarification strategies can reduce rates of disordered eating (Kusch, 2002), alter dangerous drinking behaviors (Borsari & Carey, 2001), and increase willingness to intervene as a bystander in assault situations (Brown & Messman-Moore, 2010; Gidycz, Orchowski, & Berkowitz, 2011). Specifically, Neighbors et al. (2010) found that perceived norms of same-sex, same-race groups have the strongest correlation with the students' own behaviors.

However, not all attempts to correct misperceived norms have been successful or achieved the desired impact on student behaviors. Analyses of some failed normative clarification efforts demonstrated that many students who did not alter their behavior did not believe in the validity of the accurately stated norm, and that normative messages must be contextualized for the target audience (Berkowitz, 2005). Witte, Mulla, and Weaver (2015) replicated this conclusion and found that the correlation between perceived social norms and their impact on student behavior is “contingent on the degree to which individuals identify with the reference group for those norms” (p. 692). They concluded that future studies on the impact

of social norms on student behavior should focus on smaller subgroups of populations within a community, such as student-athletes.

Social Norms and Student Athletes

The majority of research on athlete norms has been conducted at institutions with Division I athletics programs and most of that attention focusing on revenue generating sports (Paule & Gilson, 2010). However, some research has demonstrated significant functional and cultural differences between Division I programs that focus on winning and revenue, and Division III programs that focus on student and community development (Sturm, Feltz & Gilson, 2011; Emerson, Brooks, & McKenzie, 2009). Studies have found that when compared to Division I programs, Division III institutions have a higher percentage of student athletes in the study population (Paule-Koba & Farr, 2013), contribute less racial and ethnic diversity to the total student population (Emerson, Brooks, & McKenzie, 2009), and report higher levels of satisfaction with both their athletic and academic experiences (Paule-Koba & Farr, 2013; Sturm, Feltz & Gilson, 2011; Emerson, Brooks, & McKenzie, 2009). These studies suggest that research on social norms and normative interventions with student athletes must account for social and cultural differences between Division I and Division III institutions.

In addition, much of the existing research on social norms and student athletes is aimed at reducing the prevalence of specific high-risk behaviors. Research has examined the rates of RMA in athletic populations and the related consequences and suggests high rates of sexual violence among student athletes (Barnett, 1977; Frintner & Robinson, 1993; Boeringer, 1999). Others focused on excessive alcohol consumption in athletic communities and have found that athletes consume more alcohol than their non-athlete peers (Hildebrand, Johnson, & Bogle,

2001; Nelson & Wechsler, 2001; Thombs, 2000). The existing research suggests that athletes engage in more risky behaviors than do their non-athlete peers.

Two recent studies have replicated earlier findings of higher RMA among athletes (McMahon, 2010; Gidycz, Warkentin, & Orchowski, 2007) which is consistent with a higher likelihood of committing sexual violence. However, other studies have provided a more nuanced perspective on RMA among athletes. For example, Sawyer, Thompson and Chicorelli (2002) found higher rates of RMA among younger athletes and those on team sports as opposed to individual sports. Moreover, this study included athletes at Division II schools and found that RMA was lower among these athletes than Division I athletes, even for female students (Sawyer, Thompson, & Chicorelli, 2002). Their findings suggested that the function of social norms like RMA may vary depending on the culture and type of institution at which the athletes compete.

Another complicating factor of the existing research is that it focused on ‘high-risk groups’ and examined multiple factors simultaneously. Boeringer (1999) considered alcohol use and RMA for both athletic and fraternity communities in the same study. Humphrey and Kahn (2000) acknowledged the problematic nature of this conflation and designed a study to test several norms in these communities independently. Their study found that fraternity members and student athletes were more likely to engage in high-risk behaviors, such as excessive alcohol consumption and sexually aggressive behavior, if they believed their fraternity or team was perceived as a high-risk group (Humphrey & Kahn, 2000). The results suggested that students’ perceived community norms about their fraternity or team’s high-risk behavior was a stronger indicator of participating in those behaviors than was fraternity or athletic involvement alone.

The conflation of athletic and fraternity community norms is especially pronounced in research at Division III institutions but these studies reach a different conclusion than those that

focused on Division I institutions. Bleecker and Murnen (2005) found that at one Division III school, fraternity involvement was positively correlated with RMA but athletic participation had a suppressing effect. Similarly, Lock and Mahalik (2005) found that both problematic alcohol use and conformity to masculinity norms, which are prevalent in fraternity membership research, were positively correlated with RMA but that athletic involvement was not a predictor of higher RMA. The limited research on Division III athletics and RMA is inconsistent with research on Division I athletes and suggests that more research is needed to understand the impact of social norms like RMA in Division III communities.

Purpose Statement

In her literature review on social norms and sexual violence, McMahon (2015) states “it is important for researchers to explore whether there are significant differences among various groups such as athletes . . . and other sub-communities that may be defined by membership in a certain organization” (p. 480). The research on social norms in athletic communities is inconsistent between Division I and III schools and suggests that norms of athletic communities may vary in function at different divisional levels. The purpose of this study was to a) examine the role and impact of social norms and rape myth acceptance (RMA) among male student athletes at Division III programs and b) better understand the influence of normative clarification on male student athlete behavior in small school settings.

Research Questions

The guiding research question for this study was: what impact does the introduction of normative statements have on the self-reported rape myth acceptance of Division III male athletes? To fully address this question and the related constructs presented by the existing research, the following sub-questions were addressed in this dissertation.

- 1) Is there a statistically significant difference in RMA between the three test conditions of the population?
- 2) Is there a statistically significant difference in RMA between the three normative test conditions of the population with respect to athletes on individual sports and team sports?
- 3) Does the number of a participants' friends who are also athletes correlate with RMA scores across the three norms conditions groups?

Language and Terms

The purpose of this section is to identify and define several key concepts and terms that are relevant to the research domain. The definitions are informed by the existing literature and widely utilized in contemporary research by both scholars and practitioners.

There are three major categories into which sexual violence can be categorized: rape, sexual assault and sexual misconduct. In the majority of the contemporary research, rape is defined as “attempted or completed vaginal, anal, or oral sexual intercourse obtained through force, through the threat of force, or when the victim is incapacitated and unable to give consent” (Abbey & McAuslan, 2004, p. 747). Sexual assault is “a more inclusive term [than rape] that covers a range of sex acts, including physically forced sexual contact (e.g., kissing or touching), verbally coerced intercourse, and any acts that constitute rape” (Abbey & McAuslan, 2004, p. 747). Finally, acts of sexual misconduct are any violations of an institution’s Student Codes of Conduct that do not meet the legal threshold of sexual assault and rape, but includes unwanted behavior, coercive threats and non-physical harm, quid pro quo sexual interactions, failure to obtain affirmative consent, stalking, and harassment of a sexual nature (Cantor et al., 2015).

The following study was designed to examine some factors that facilitate the perpetration of sexual violence by utilizing the principles of Social Norms Theory, which “describes

situations in which individuals incorrectly perceive the attitudes and/or behaviors of peers and other community members to be different from their own when, in fact, they are not”

(Berkowitz, 2005, p. 193). From the framework of Social Norms Theory, this study conceptualizes rape myths as normative misperceptions and therefore, rape myth acceptance (RMA) can be understood as inaccurate perceptions of social norms that permit and perpetuate problematic and aggressive sexual behavior (Lonsway & Fitzgerald, 1994; Berkowitz, 2010).

It is important to distinguish between the use of the terms sex and gender and their framing in this research. For the purposes of this study, sex refers to “the dichotomous category system of male and female based on biology and physiology” (Smith, Johnston-Robledo, McHugh & Chrisler, 2010, p.364) and is represented by the terms male and female. The framework by which the participants in this study were recruited was through their participation on an athletic program. Because athletic programs are divided based on the binary system of male and female, the participants for this study were recruited from male teams and no additional demographic information was collected regarding their gender identities.

Gender is related to sex, but it “describes the social discourse regarding how people identify, express, and embody the socially ascribed norms relating to their assigned sex at birth [and] operates as a floating signifier for the ways individuals practice, do, or otherwise live in relation to these social norms” (Nicolazzo, 2017, p. 166). However, unlike historical and biological conceptions of sex, constructions of gender are ever-evolving, change across time and are situated in cultural contexts (Nicolazzo, 2017). Every gender in a given culture is associated with a specific set of social norms and examining how individuals enact their gender in that culture can identify both dominant norms and normative misperceptions.

An important aspect of this dissertation focuses on the impact of social norms associated with extreme gender roles for men, known as hypermasculinity. For the purpose of this research, hypermasculinity is defined as “the prototype of an exaggerated masculine performance, such that the ‘stereotypical man’ often performs his gender through hostility, domination of women, and calloused sexual behavior [and] emphasizes the heterosexual conquest of women as an important aspect of performing traditional masculinity” (Shafer, Ortiz, Thompson & Huemmer, 2018, p. S45). Hypermasculinity is the catalyst for normative misperceptions involving many risky behaviors among college students, such as excessive alcohol consumption and sexually aggressive behavior (Saucier, Strain, Hockett & McManus, 2015; Loh, Gidycz, Lobo & Luthra, 2005) and is an integral element of understanding how RMA is perpetuated.

There is a disconnect in the sexual violence literature regarding the use of the terms victim or survivor. Law enforcement agencies and those focused on crime and statistics tend to use the term victim while sexual assault prevention activists and support networks tend to use the term survivor. To many, the term victim implies helplessness while the term survivor denotes control (Wu, 2016). However, the term victim can also be used when being mindful that sexual violence and rape are crimes. For this dissertation, the term victim was used because the study was focused on the perpetrators of sexual violence, rather than the victims or survivors, and to reaffirm the underlying assumption of this study that sexual violence and rape are crimes that need to be prevented.

Finally, this dissertation considers the differences between team sports and individual sports within the studied population. In this study, the participants were divided into team sports (baseball, basketball, football, soccer and water polo) and individual sports (cross country, golf,

swimming/diving, tennis, and track/field) and were delineated by whether an individual's performance in a competition contributed to a team or individual score.

Research Significance

Research using Social Norms Theory has demonstrated that the degree to which social norms influence college students' behavior depends on how strongly an individual identifies with the reference group for a given norm (Witte & Mulla, 2013). The vast majority of this research was conducted at large institutions where students' peer and social groups may be more clearly delineated than at smaller institutions. At small, liberal arts institutions, social and athletic identities often intersect and the delineation of reference group norms can be difficult to identify. One study found that athletes at small, Division III institutions spend more than half of their flexible time with other students who were not their teammates (Aries, McCarthy, Salovey & Banaji, 2004). As previously discussed, the studies that have focused on student athletes at smaller institutions have contradicted the findings of research with Division I athletes. Further research must be conducted to investigate the differences between Division I and Division III student athletes with respect to the salience of the athletic community as a reference group as well as how social norms function at smaller schools and their influence on student behavior. The research conducted for this dissertation advanced the understanding of the impact of social norms by studying their impact on student athletes at small, liberal arts institutions.

Researchers Perspective

As a former Division III student athlete, I understand the environment and the experience of being on a team at a small college. My athletic career informs both my perspective on this research and my interest in understanding the role of social norms in the student athlete community. Many of my friends in college were on my teams and they significantly influenced

my development as a young man. Even if I could not articulate it at the time, I can think of moments when I felt uncomfortable with or pressured into participating in team events that involved dangerous alcohol consumption or degrading conversations about women and relationships. I always sensed that others were experiencing the same awkwardness and discomfort as me but I do not recall anyone else sharing his opinion.

As a student affairs practitioner, I have been engaging college men in conversations about moving away from toxic and unhealthy masculinity to more healthy and authentic masculinities. I share my own process of understanding that my identity as a heterosexual, Caucasian, cisgender man is both a privilege and a responsibility to prevent sexual violence and challenge those men who perpetuate rape culture. I teach a course titled *The Construction of Contemporary American Masculinity* and the course is guided by a pedagogy of violence prevention.

I have lived the phenomenon that this research studied and that experience fuels my passion for this work as both a researcher and as a practitioner. The focus of this dissertation was inspired by my personal experiences as a student athlete, as well as interactions with student athletes in my professional roles. I have assumed a constructivist research paradigm for this dissertation to acknowledge that both my personal experiences with student athlete social norms, as well as the experiences of those who participated in this study, directly inform my understanding of how social norms function in the student athlete community and are given meaning by the individuals who perceive them.

CHAPTER 2: LITERATURE REVIEW

There is an expansive body of literature on Social Norms Theory and the impact of correcting normative misperceptions on the attitudes, beliefs and behaviors of college students. During the course of this chapter, the existing research is presented and analyzed in four sections. In the first section, Social Norms Theory is defined and contextualized within research that has applied the theory to reducing problematic alcohol use with college students. The second section reviews how successful social norms interventions with alcohol have been applied to reduce negative behaviors associated with hypermasculinity. The third section analyzes how misperceptions of social norms consistent with hypermasculinity perpetuate rape and presents research that studies the impact of RMA on men's sexual behaviors. The final section reviews existing strategies and interventions in which Social Norms Theory is applied to reduce the prevalence of sexual violence on college campuses.

Social Norms Theory

Social Norms Theory (SNT) was created by Alan Berkowitz and H. Wesley Perkins in the late 1980s (Berkowitz, 2005) and forms the foundational and theoretical framework on which this research is based. Berkowitz (2004) articulated that social norms are either actual norms, in that they accurately reflect the truth regarding a behavior, or perceived norms, which refer to a person or group's perception. In addition, social norms are either descriptive norms, meaning they refer to a given *behavior* in which people engage, or injunctive norms, which refer to the *attitudes or beliefs* that people hold (Berkowitz, 2004). Table 1 represents the different types of norms using the context of college student drinking as an example.

Table 1
Types of Social Norms in the Context of College Student Alcohol Use

	Descriptive Norms	Injunctive Norms
Actual Norms	The number of drinks students report consuming	The extent to which students approve or disapprove of drinking behaviors
Perceived Norms	The number of drinks students think their peers consume	The extent to which students think their peers approve or disapprove of drinking behaviors

The most significant aspect of SNT with respect to attitudes, beliefs, and behavior occurs when there is dissonance between actual norms and perceived norms. Specifically, one's inaccurate perception of the actual norms of a community, or normative misperception, can influence the behavior of individuals and communities (Berkowitz, 2005).

Normative Misperceptions

SNT is a useful framework from which to understand human behavior because it “predicts that people express or inhibit behavior in an attempt to conform to a perceived norm” (Berkowitz, 2003, p. 260). The theory states that individuals will adapt their behavior and attitudes to be congruent with their perception of the expectations surrounding that behavior or attitude in their social environment (Lee, Geisner, Lewis, Neighbors, & Larimer, 2007).

As existing research has repeatedly demonstrated, an individual's perceptions of the cultural norms of a given environment are often misguided and inaccurate (Berkowitz, 2004). The literature suggests that the influences on a person's behavior are “more often based on what one thinks others believe and do (the “perceived norm”) than on their real beliefs and actions (the “actual norm.”)” (Berkowitz, 2004, p. 5). It is this normative misperception construct that forms the foundation of the SNT and makes it such a valuable tool for both understanding and influencing human behavior.

Normative misperceptions are often the result of inaccurate injunctive norms formed after exposure to behaviors that establish the behavior as both normal and acceptable in a given environment (Berkowitz, 2005). When a minority of individuals are observed engaging in highly visible problematic behavior, such as excessive intoxication or offensive speech, it distracts others in the community from individuals exhibiting responsible behavior that is more common but less visible (Berkowitz, 2010). The visibility of the problematic, and often unchallenged, behavior leads others to conclude that the behavior is consistent with the values of that community, resulting in a false injunctive norm (Berkowitz, 2010). These injunctive normative misperceptions can be classified as either pluralistic ignorance or false consensus.

Pluralistic Ignorance and False Consensus

Understanding normative misperceptions through the lens of Social Norms Theory highlights two phenomena related to human behavior. The first is known as pluralistic ignorance which occurs when “a majority of individuals falsely assume that most of their peers behave or think differently from them when in fact their attitudes and/or behavior are similar” (Berkowitz, 2004, p. 7). For example, the National College Health Assessment (NCHA) is an annual survey conducted by the American College Health Association (ACHA) that surveys, among many other things, colleges students’ alcohol and other drug use. The NCHA data continually demonstrates that a significant number of college students choose to either abstain from alcohol consumption or consume infrequently (ACHA, 2017). However, the same assessment showed that students believe that their peers not only drink more than they do themselves, but also that their peers consume more alcohol than they report. Students believe that only 5% of their peers abstain from alcohol consumption or consume infrequently when, in fact, 36% of students reported their use to be in those categories (ACHA, 2017).

Because college students misperceive the actual norm regarding their peers' alcohol consumption, they falsely conclude that their attitudes and behaviors represent the minority experience. Pluralistic ignorance suppresses the healthy, more accurate norms because they are believed to be non-conforming of the majority, which allows the unhealthy or inaccurate norms to exist unchallenged and become perceived as the norm (Berkowitz, 2004).

The second phenomenon is known as false consensus and occurs when individuals hold a belief or exhibit a behavior congruent with the minority but falsely perceive their beliefs and behaviors represent the majority (Berkowitz, 2004). For example, college students who frequently binge drink are in the minority in terms of their behavior, but they perceive that their peers also binge drink regularly. The NCHA data shows that while only 13% of students reported drinking problematic drinking behaviors, 51% of those same students believed their peers were consuming alcohol at the same problematic rates (American College Health Assessment, 2017).

The false consensus effect reinforces the problematic attitudes and behaviors exhibited by the minority and these misperceptions have been shown to have a disproportionately large impact on the behavior of those in the minority (Perkins & Wechsler, 1996). Borsari and Carey (2001) found that “the more the student perceives others as drinking heavily, or approving of heavy use, the higher personal consumption will be” (p. 402). Because of its impact on the attitudes and behavior of the minority, the false consensus misperception is sometimes described as a self-serving bias (Berkowitz, 2004).

Assumptions of Social Norms Theory

To contextualize the research that utilizes Social Norms Theory, it is important to articulate the major assumptions on which the theory is based, which are displayed in Table 2.

Table 2

Assumptions of Social Norms Theory (Berkowitz, 2003, p. 261)

- 1) Actions are often based on misinformation about or misperceptions of others' attitudes and/or behavior.
- 2) When misperceptions are defined or perceived as real, they have real consequences.
- 3) Individuals passively accept misperceptions rather than actively intervene to change them, hiding from others their true perceptions, feelings or beliefs.
- 4) The effects of misperceptions are self-perpetuating, because they discourage the expression of opinions and actions that are falsely believed to be nonconforming, while encouraging problem behaviors that are falsely believed to be normative.
- 5) Appropriate information about the actual norm will encourage individuals to express those beliefs that are consistent with the true, healthier norm, and inhibit problem behaviors that are inconsistent with it.
- 6) Individuals who do not personally engage in the problematic behavior may contribute to the problem by the way in which they talk about the behavior. Misperceptions thus function to strengthen beliefs and values that the 'carriers of misperception' do not themselves hold and contribute the climate that encourages problem behavior.
- 7) For a norm to be perpetuated it is not necessary for the majority to believe it, but only for the majority to believe that the majority believes it.

These assumptions articulate the pedagogical framework of Social Norms Theory and provide context for interpreting the research on how norms influence attitudes and behavior.

Social Norms Salience

Social Norms Theory studies have examined the salience of norms both in terms of the formation of normative misperceptions and the influence those misperceptions have on attitudes, beliefs and behavior. Social norms research suggests that the greater the distance between the individual perceiving a norm and the reference group about which a norm is being perceived, the stronger a normative misperception is (Berkowitz, 2010). In 2003, Borsari and Carey released a meta-analytic review on 23 studies of social norms and alcohol consumption. They found that individuals believe they drink less than their friend, and that their friends drink less than the average student (Borsari & Carey, 2003).

Although existing research has found that normative misperceptions are greater as social distance increases, some studies have found that the influence of the norms of closer or more

salient social groups was stronger on behavior. Bourgeois and Bowen (2001) surveyed 109 students living in residence halls about their own attitudes towards alcohol, their beliefs about their friends' attitudes, and the typical students' beliefs. They found significant levels of pluralistic ignorance in that participants believed the typical student supported a culture of excessive alcohol consumption while they were themselves opposed it, when in fact most students shared their opposition (Bourgeois & Bowen, 2001). They also found that students who live together develop similar misperceptions regarding alcohol consumption which are mutually reinforced and guide their personal choices around drinking (Bourgeois & Bowen, 2001). Lewis and Neighbors (2004) reached a similar conclusion after conducting a survey of 226 students that measured each student's personal alcohol consumption, experience with negative consequences related to drinking, and both gender-specific and nonspecific drinking norms. They found that perceived norms for close peer groups, specifically same-sex peers, were a stronger predictor of alcohol use and related consequences than drinking norms of the average, gender-nonspecific norms of students at their institution (Lewis & Neighbors, 2004).

Research on community intervention strategies based on Social Norms Theory have concluded similar findings. This research suggests that the success of social norms messaging campaigns is directly related to the consistency of the beliefs held by the target population, in that the more like-minded a community on a given topic, the more impactful the social norms messages are on influencing beliefs and correcting normative misperceptions (Berkowitz, 2010).

Social Norms and Predicting Behavior

Significant research has demonstrated that college students have greater misperceptions of injunctive norms than descriptive norms and that injunctive misperceptions are more likely to predict behavior (Berkowitz, 2004; Borsari & Carey, 2003). A national survey of 17,592 college

students found that perceptions of campus norms related to the permissiveness of drinking explain more variance of students' drinking behavior than any other variables, including a student's own belief about alcohol consumption (Perkins & Wechsler, 1996).

Several more recent studies on injunctive norms and alcohol use of college students have reached similar conclusions. Clapp and McDonnell (2000) examined the relationship between 403 students' perceptions of injunctive alcohol norms and their drinking behaviors. They concluded that "perceptions of the social and physical environment related to alcohol contribute to alcohol consumption and its attendant problems" (Clapp & McDonnell, 2000, p. 23).

Korcuska and Thombs (2003) conducted a study of 640 students to gauge their motivations for alcohol consumption and found that nearly half of the variance was explained by perceptions of peer drinking norms, while no other variable accounted for more than 15% of the variance.

Social Norms Theory suggests that "overestimations of problem behavior will increase these problem behaviors while underestimations of healthy behaviors will discourage individuals from engaging in them" (Berkowitz, 2004, p. 5). These findings are important because they suggest that perceiving a permissive drinking environment condones and encourages alcohol consumption. If rape myth acceptance is correlated with the perceived permissiveness of a rape supportive environment, higher RMA could predict a higher likelihood of committing sexual violence. According to the theory and related research, correcting an individual's misperceptions about injunctive community norms may result in a reduction of the problematic behavior and increase the prevalence of the desired behaviors.

Application of Social Norms Interventions

Social Norms Theory has been utilized in the construction and application of several behavioral intervention strategies and most of them can be placed into one of three categories: 1)

campaigns that address normative misperceptions for an entire campus community; 2) interactive, small group workshops intended to utilize existing group norms that are relevant to all individuals involved; and 3) personalized normative feedback where individuals compare their behaviors and attitudes to those of their communities (Berkowitz, 2005).

Although most social norms interventions can be categorized into these three types, all social norms campaigns must tailor their messages and deliveries to the unique elements of the target environment (Witte, Mulla & Weaver, 2015). Social norms campaigns are context specific by nature and successful strategies may work in one context and not in another (Berkowitz, 2005). Because successful social norms campaigns may be difficult to replicate, there are some limitations to the research and generalizability of specific interventions. Therefore, the remainder of this literature review will analyze the existing research that utilizes Social Norms Theory in the context of larger themes to best guide the work of this dissertation.

Social Norms and Alcohol Consumption

Predicting Drinking Behavior

Several studies on college student alcohol use have utilized Social Norms Theory to better understand the ability of norms perception to predict drinking behaviors. Shortly after the theory was articulated, Prentice and Mille (1993) conducted four studies with 518 college students to gauge the impact of pluralistic ignorance and normative misperceptions on alcohol consumption. They found pervasive normative misperceptions among the participants and that students, particularly men, were adjusting their drinking behaviors to adapt to a misperceived norm. Similarly, Page, Scanlan and Gilbert (1999) found that many students overestimate the frequency of problematic drinking behaviors of their peers' and that those with this overestimation report more frequent problematic drinking themselves. As discussed, Clapp and

McDonnell (2000) compared student alcohol consumption with perceptions of injunctive alcohol norms at multiple time intervals and concluded that students' perceptions of campus norms not only correlated with their drinking behaviors, but predicted them.

Borsari and Carey (2003) analyzed 23 studies that examined discrepancies between students' personal attitudes towards drinking and the perception of their peers' attitudes. Although each of the studies found some degree of normative misperception among the participants, patterns emerged with respect to the strength of those misperceptions. They found higher magnitudes of normative misperceptions, and therefore more predictive ability, for injunctive versus descriptive norms, for male students versus female students, and for smaller versus large campuses (Borsari & Carey, 2003). These findings suggest that this dissertation, which focuses on injunctive norms (RMA) among male students at small institutions, may find similar magnitudes of normative misperceptions when compared to the existing research that focuses mostly on larger institutions.

Social Norms, Alcohol and Athletics

There is a large and growing body of literature studying the impact of normative misperceptions on college student behavior. The amount of literature that focuses on social norms and athletes, however, is relatively limited and much of it focuses on athletes' alcohol consumption. Thombs (2000) conducted research to evaluate perceived drinking norms among Division I student athletes and found that the students believed "their typical teammate consumes more alcohol than they do, and that the typical student on campus consumes more alcohol than their typical teammate" (p. 78). Like other studies (Borsari & Carey 2003), Thombs (2000) study suggests that normative misperceptions increase as the social distance from the closest reference group increases. Although this may be true for Division I student athletes, Division III

student athletes may not consider their athletic identity to be the most salient (Aries, McCarthy, Salovey & Banaji, 2004) and it is therefore unclear if these results can be replicated in the smaller, Division III environment.

Perkins and Craig (2006) applied this understanding of social norms in the context of effectiveness of using social norms interventions to reduce athletes' alcohol consumption. They conducted several surveys of student athletes over a three-year period to obtain accurate normative data with respect to alcohol consumption and then introduced that normative feedback to the community through a series of workshops and interventions (Perkins & Craig, 2006). After successfully introducing the accurate norms, they found that high risk drinking behaviors and negative consequences from alcohol consumption decreased by 30% during that same time frame (Perkins & Craig, 2006). The same process could be applied to normative feedback regarding rape supportive attitudes and could reduce RMA among targeted populations.

A few other studies have been conducted that focus on providing normative feedback on alcohol consumption in a personalized and individual setting. Larimer and Crounse (2002, 2007, 2011) conducted three literature reviews that analyzed the findings of studies on these individualized normative intervention strategies and among the hundreds of studies, three explicitly focused on student athletes. One of the studies failed to have an impact on student athlete alcohol use (Marcello, Danish, & Stolberg, 1989) while the other two found a reduction in alcohol related problems (Gregory, 2001) and a reduction in peak blood alcohol content (Doumas & Haustveit, 2008). More research is needed to understand the impact of norms clarification on behavior through individual interventions for student athletes.

Research on the effect of social norms on college student alcohol consumption is one of the most well researched domains of Social Norms Theory in practice. The findings of these

studies can largely be transferred to the research question for this dissertation, namely the impact of environmental normative intervention on student attitudes, beliefs and behaviors, as well as the importance of reference group salience on normative clarification efforts. Another area of Social Norms Theory research that can inform this dissertation focuses on the individual and environmental factors that permit and facilitate sexually aggressive behavior and violence.

Social Norms of Violence and Sexual Aggression

A significant body of research on violence and sexual aggression focuses on the normative messages communicated to college men about what behaviors are acceptable in a given environment. Early research illustrated the difficulties with studying these messages because of not only the effects of pluralistic ignorance and false consensus, but also because violence is so normalized in United States culture. A large-scale study was conducted on 32 college campuses of over 6,100 women over the course of three years in the mid 1980's (Warshaw, 1988). The results of the study found that 25% of the participants had been the victims of rape (or attempted rape), 84% of those victims were acquainted with the attacker and 57% of the rapes happened on dates (Warshaw, 1988). A related study found that while 8.5% of men in their study admitted to engaging in behavior that satisfies the legal definition of rape, only 16% of those men identified their behavior as rape Koss, Dinero, and Seibel (1988). The presence of sexual violence is so pervasive that in some areas of the culture, this violence is not recognized as a crime or even as unacceptable behavior.

Further research has demonstrated the extent to which some of the normative messages on violence and sexual aggression inform misperceptions of that violence. In their study, Loh, Orchowski, Gidycz and Elizaga (2007) asked men to watch videotaped depictions of dating scenarios where one escalated into sexual violence and the other remained consensual. The

participants were asked to identify similarities between the men in the videos and their own behaviors (Loh, et al., 2007). They found that men with a history of sexual violence were more likely to identify with sexual aggression and concluded that “an important component to reducing sexual aggression is understanding how oversocialized masculine beliefs are established, communicated, and maintained” (Loh, et al., 2007, p. 130). Edwards and Vogel (2015) extended this research to focus on the perceived permissiveness of sexual coercion and found that exposure to normative messages that condone sexual aggression doubled the intentions to commit sexual assault among their participants.

Some research has even considered the normative messages communicated to men through pornographic films. College-aged men represent the largest demographic of pornography consumers (Perry & Schleifer, 2019; Carrol et al., 2008; Buzzell, 2005) and false norms around consent and sexual respect can infiltrate college campuses through viewing pornographic films (Boies, 2002). Foubert, Brosi and Bannon (2011) surveyed 489 fraternity men to gauge their consumption of pornography, the extent to which that pornography depicted sexual violence or forced sexual experiences, and their willingness to engage bystander behavior. Their study found that consumption of violent pornography was significantly and positively correlated with an intent to commit sexual violence and RMA, and negatively correlated with willingness to intervene as a bystander (Foubert, Brosi & Bannon, 2011).

Although environmental normative messages can influence college men’s behavior related to sexual violence, so can their perceptions of friends’ behavior. Witte, Mulla and Weaver (2015) conducted research on students’ perceptions of intimate partner violence (IPV) for both peer and ‘typical student’ groups. Their study of 328 college students found that perceived estimates of IPV rates for same-sex friends were positively associated with the

participants' self-reported IPV behaviors, but the same was not true for same-sex typical students (Witte, Mulla & Weaver, 2015). The results support previously discussed findings that salient local or proximal group norms can have a significant influence on college students' behaviors.

In some cases, research has demonstrated that perceived peer norms are more influential on attitudes, beliefs and behaviors than self-reported actual norms. Dardis, Murphy, Bill and Gidycz (2016) conducted a study of 100 college men, 50 of which they recruited and the other 50 were close friends brought by the recruited participants. They asked each of the 100 men to complete a survey three times: once for themselves, once for how they think their friend responded, and once for how they thought the typical man at their institution would respond. The study found that participants' beliefs about rape and attitudes towards women were correlated with the perceptions of their friends' beliefs but not their friends' actual reported beliefs (Dardis, Murphy, Bill & Gidycz, 2016). In addition, the study found that those who reported engaging in sexually aggressive behavior significantly overestimated the extent to which their friends were engaged in that behavior (Dardis, Murphy, Bill & Gidycz, 2016) which supports findings of previous research that injunctive norms are often more predictive of behavior than descriptive norms.

Normative Masculinity

Significant research has evaluated social norms related to gender constructs and expectations. Bem (1981) developed the Gender Schema Theory (GST) to articulate how gender construct norms persist generationally and influence behaviors. GST is predicated on the assumption that societies delineate behavioral norms of their members based on biological sex and socialize their children to conform to these norms (Bem, 1981). Bem (1981) states that gender norms are operationalized by sex-typing which is "the process by which a society

transmutes male and female into masculine and feminine” (p. 354). The body of literature on social norms and gender expectations builds on Bem’s (1981) assumptions and articulation of the social construction of gender.

Hypermasculinity

As previously discussed, hypermasculinity is “the prototype of an exaggerated masculine performance, such that the ‘stereotypical man’ often performs his gender through hostility, domination of women, and calloused sexual behavior [and] emphasizes the heterosexual conquest of women as an important aspect of performing traditional masculinity” (Shafer, Ortiz, Thompson & Huemmer, 2018, p. S45).

GST is a useful theory for understanding the nature and implications of the normative, dominant constructs of hypermasculinity that guide the behavior of college students. Several studies have built on Bem’s (1981) work and evaluated various consequences of hypermasculinity in terms of respect for women in American culture. O’Donohue, McKay and Schewe (1996) investigated the connection between hypermasculinity norms among undergraduate men that support their discrimination of women and attitudes towards sexual violence. Their study concluded that “hypermasculine men are less concerned with negative consequences associated with rape” (O’Donohue, McKay, & Schewe, 1996, p. 140) for both themselves and victims of rape. More recently, Saucier, Strain, Hockett and McManus (2015) examined traditional norms of masculinity with respect to aggressive behavior and beliefs about victims of rape. Their results demonstrated that adherence to traditional masculinity norms correlates positively with aggressive behavior and negatively with empathy towards victims of sexual assault (Saucier, et al., 2105). These studies suggest that more research is needed to

understand the nature of these hypermasculine beliefs and if they represent a false consensus effect within the population of college men.

Sexually Aggressive Behaviors

Social norms related to gendered expectations of sexual relationships have also been studied. Dean and Malamuth (1997) examined the characteristics of men who aggress sexually to better understand why some men act on aggressive impulses while other do not. Their study of 323 college men concluded that “the degree to which the risk factors translate into actual aggression depends on the extent to which a man is relatively self-centered versus sensitive to others’ feelings” (Dean & Malamuth, 1997, p. 453). Leibold and McConnell (2004) conducted research on men’s cognitive associations between women and normative masculine concepts such as sex and power. Their study found that “men who engaged in more sexually aggressive behaviors toward women had stronger associations in memory between women and sex [and] women and hostility” (Leibold & McConnell, 2004, p. 261). The findings from these studies suggest that men who are taught and adopt normative gender constructs that connect women, sex and hostility are more likely to engage in sexually aggressive behavior.

Other research that suggests men that who have an elevated sense of hostile masculinity utilize sexually aggressive behavior as a coping mechanism for insecurity in romantic relationships (Malamuth, Linz, Heavey, Barnes, & Acker, 1995) and that heavy drinking is associated with committing sexual assault among college men (Ullman, Karabatsos & Koss, 1999). In their longitudinal study, Abbey and McAuslan (2004) expanded on this research and found that hostility towards women and drinking in sexual situations were both positively correlated with sexual assault perpetration. These findings are important given the population of

this dissertation because hostility towards women and excessive drinking behaviors reflect attitudes and beliefs associated with injunctive normative misperceptions among college men.

Measuring Hypermasculinity and Sexual Violence

Empirical studies have built on Bem's (1981) work on masculinity norms and demonstrated a correlation between an endorsement of hypermasculinity and sexual violence. In fact, while developing an instrument for measuring hyperfemininity, Murnen and Byrne (1991) conducted a meta-analysis of the literature on attitudinal predictors of assault behavior. After conducting this analysis, they determined endorsement of hypermasculinity to be the strongest predictor of sexual assault behavior in the existing literature (Murnen & Byrne, 1991). Bourg (2001) found a strong correlation between hypermasculinity and sexual assault of women, stating that "hypermasculinity can be thought of as the common thread which binds together the fundamental constructs of coerciveness against women" (p. 80).

However, the majority of this research measured endorsement of hypermasculinity using an instrument that had significant statistical limitations and validity issues. For over 20 years, hypermasculinity was primarily measured using Mosher and Sirkin's (1984) Hypermasculinity Inventory (HMI) which measures endorsement of traditional masculinity norms and reflects a normative misperception about gender expectations and masculinity. The HMI ($\alpha = .89$) is a series of 30 forced-choice items and participants must select one of two oppositional statements that best match their personal attitudes and beliefs (Mosher & Sirkin, 1984). For example, one item on the HMI forces participants to choose between "I'd rather gamble than play it safe" or "I'd rather play it safe than gamble" (Mosher & Sirkin, 1984, p. 154). Each of the items in the scale is related to one of three components (calloused sexual attitudes, violence as manly, and danger as exciting) and comprise what Mosher and Sirkin (1984) call the macho constellation.

The HMI has demonstrated a strong correlation with personality traits such as impulsivity and lack of empathy (Mosher & Sirkin, 1984) and with attitudes such as RMA and hostility towards women (Koralewski & Conger, 1992). Taken collectively, the existing research suggests that “the HMI is a valid measure of a set of attitudes that have been shown to be highly correlated with male sexually coercive behavior” (Peters, Nason & Turner, 2007, p. 172).

However, the HMI has received criticism for its statistical limitations, most notably the limited ability of the HMI to differentiate between the varied levels of hypermasculinity endorsement because of the forced-choice format (Stöber, Deete, & Musch, 2002). To address these limitations, Peters, Nason and Turner (2007) revised the HMI and ultimately created the Hypermasculinity Index (HMI-r) that employed a phrase-completion question format rather than a forced-choice. The phrase-completion format maintains the polarization of two choices on a scale but allows participants to indicate their degree of endorsement of either extreme (Hodge & Gillespie, 2003). Table 3 provides an example of the same survey item presented in the HMI as compared to the HMI-r. The full HMI-r can be viewed in Appendix A.

Table 3
Presentation of Survey Items in HMI and HMI-r

HMI

- 1) I'd rather play it safe than gamble.
- 2) I'd rather gamble than play it safe.

HMI-r

I'd rather:

0	1	2	3	4	5	6	7	8	9	10
Play it safe										Gamble

Peters, Nason and Turner (2007) tested the reliability of the HMI-r with a population of 686 undergraduate students and its ability to “demonstrate substantially greater variability in the data, have a higher internal reliability coefficient, and contain fewer items that were highly

skewed” (p. 174). The participants were randomly assigned to complete either the forced-choice HMI ($n = 343$) or the phrase-completion HMI-r ($n = 341$). Although the analysis did not show a significant difference in variability in the data between the two instruments, there was a significant difference in internal consistency reliability (HMI, $\alpha = .90$; HMI-r, $\alpha = .79$) and fewer items with skewed distributions (HMI = 10 items, HMI-r = 2 items) (Peters, Nason & Turner, 2007). Given the improvements made to the HMI by Peters, Nason and Turner (2007), the HMI-r was included in the survey instrument for this study and is explained in Chapter 3.

Rape Myth Acceptance

Perhaps the most researched category of social norms is what Burt (1980) has called rape myths, which she defines as “prejudicial, stereotyped, or false beliefs about rape, rape victims, and rapists [that] create a climate hostile to rape victims” (p. 217). Burt (1980) also provided the first instrument used to explicitly measure RMA and named it the Rape Myth Acceptance Scale (RMAS). The RMAS was the first instrument to incorporate rape myth terminology and consisted of 19 Likert Scale questions designed to gauge the participants’ sexual experiences and attitudes (Burt, 1980).

Several years later, Koss, Heise, and Russo (1994) considered the findings of RMA research that utilized the RMAS and articulated three categories of rape myths: victim precipitation which suggests women bring rape upon themselves by dressing or acting promiscuously; victim masochism which suggests that the victim actually wanted to be raped; and victim fabrication which suggests that women lie about being raped or exaggerate the situation because they regret engaging in consensual sex.

As discussed in Chapter 1, Lonsway and Fitzgerald (1994) refined Burt’s (1980) definition of rape myths to “attitudes and beliefs that are generally false but are widely and

persistently held, and that serve to deny and justify male sexual aggression against women” (p. 134). They also conducted a literature review of research prior to 1994 that studied the rape myth construct and identified three themes with respect to their function: they trivialize the crime and shift both the blame and responsibility from the perpetrator to the victim; they perpetuate the ‘just-world’ phenomenon where people want to believe that bad things only happen to bad people and search for evidence to support this belief; and they are a tool by which society, and specifically men, oppress and control women (Lonsway & Fitzgerald, 1994).

After reviewing the literature, Lonsway and Fitzgerald (1994) concluded that very little can be generalized from the research with confidence for two primary reasons. First, many of the scales used to gauge RMA incorporate multiple ideas into each item and were often very unclear in their wording. One survey included an item worded as “being out alone at night is an acceptable practice for women and should never be linked to being the cause of rape” (Gilmartin-Zena, 1987). One of the prompts from Burt’s (1980) RMA was written as “if a woman gets drunk at a party and has intercourse with a man she’s just met there, she should be considered ‘fair game’ to other males at the party who want to have sex with her, whether she wants to or not.” It is unclear which element of the survey prompt informed how the participants responded which creates significant content validity issues.

Second, the literature is inconsistent on the definition of the rape myth construct (Lonsway & Fitzgerald, 1994). One study (Feild, 1978) utilized existing instruments like the Attitudes Towards Rape Scale to represent rape myths, while others built their rape myth construct from several items taken from criminology and deviance literature (Giacopassi & Dull, 1986). The variance in the literature with respect to the construct of rape myths made generalization nearly impossible.

Lonsway and Fitzgerald's (1994) demonstrated the need for consistent articulations of the rape myth construct and an instrument with which researchers could measure that construct with confidence in the validity of their findings. Five years later, a team of researchers at the University of Illinois provided the field with the most utilized rape myth acceptance instrument in the field today.

The Illinois Rape Myth Acceptance Scale

Payne, Lonsway and Fitzgerald (1999) articulated the challenges and flaws with the RMA prior to their study. They noted that when they began their research, the body of literature utilized at least 24 different instruments to measure RMA and they each varied in their definitions of terms and related constructs (Payne, Lonsway & Fitzgerald, 1999). In addition, the research before 1999 utilized instruments that assumed rape myths function in the same manner across all different groups (Payne, Lonsway & Fitzgerald, 1999). The available instruments did not account for potential differences in rape myth functionality for men and women, or for those with previous experiences of sexual victimization (Payne, Lonsway & Fitzgerald, 1999).

Moreover, previous instruments relied heavily on colloquial and culturally relevant language, such as "taught a lesson," "necking," and "teach her a thing or two" (Payne, Lonsway & Fitzgerald, 1999, p. 33). Phrases of this nature depended on the interpretation of the participant which significantly undermined the validity of the findings and limited any generalizability of the studies.

Six studies created by Payne, Lonsway and Fitzgerald (1999) were developed to address the content and construct validity issues present in the previous RMA research. The first three studies were designed to address the content validity issues and the final three were designed to address the construct validity issues. The result of their research produced the Illinois Rape

Myth Acceptance (IRMA) Scale and a review of their studies is important to understand how their instrument was developed.

Addressing content validity

The first of the six studies investigated the rape myth structure utilizing the existing literature (Payne, Lonsway & Fitzgerald, 1999). The researchers performed scaling and cluster analysis tests on previously used instruments which resulted in 19 categories with five items each. They then recruited 780 participants (368 men and 412 women; mean age 18.7 years) from a large Midwestern university who completed their comprehensive survey consisting of 95 Likert-Scale items with response options ranging from 1 (not at all agree) to 7 (very much agree) (Payne, Lonsway & Fitzgerald, 1999). Many of the items were then immediately retested for a subset of the population and demonstrated strong test-retest reliability ($r(495) = .9, p < .001$) (Payne, Lonsway & Fitzgerald, 1999). The researchers then used exploratory and confirmatory multivariate analysis to derive seven independent components of rape myths (Payne, Lonsway & Fitzgerald, 1999). Rather than conceptualize rape myths as unidimensional constructs, the researchers utilized these components to create a hierarchical model that included the seven components and their subscales. Those seven subscales were articulated as the following: 1) she asked for it, 2) it wasn't really rape, 3) he didn't mean to, 4) she wanted it, 5) she lied, 6) rape is a trivial event and 7) rape is a deviant event (Payne, Lonsway & Fitzgerald, 1999).

The second study further investigated the rape myth construct by examining perceived similarity of the rape myth items independent of the participants' endorsement of them (Payne, Lonsway & Fitzgerald, 1999). From the same institution, 47 students completed a 19-item survey that asked them to judge the similarity between pairs of statements from 1 (not at all similar) to 9 (very similar). The researchers utilized individual differences scaling to identify the

most salient aspects of each of the items for all participants which yielded two dimensions of the rape myth construct consisting of nine clusters (Payne, Lonsway & Fitzgerald, 1999). The nine clusters identified by this analysis were very similar to those in the first study which demonstrated a highly stable structure of the authors' rape myth construct (Payne, Lonsway & Fitzgerald, 1999).

The third study sought to create a scale and instrument for measuring acceptance of the newly articulated rape myth construct (Payne, Lonsway & Fitzgerald, 1999). The researchers selected items for their instrument that were highly related to the results of the first two studies. Items were then screened for clarity of wording and sorted into the existing scales identified by the first two studies based on item to subscale correlations (Payne, Lonsway & Fitzgerald, 1999). The result of this selection produced the 45-item Illinois Rape Myth Acceptance (IRMA) Scale (Appendix B) and the 20-item short form (IRMA-SF) Scale. The 45-item IRMA Scale was completed by 604 students at the same institution (284 men and 320 women; mean age 18.9 years) and was tested for item-to-total correlations within each subscale. The overall scale reliability was .93 and the subscale correlations ranged from .41 to .72 (Payne, Lonsway & Fitzgerald, 1999). The aggregate of the first three studies demonstrated that the authors had created an instrument with a stable and clear rape myth construct with subscales that held reliable content validity (Payne, Lonsway & Fitzgerald, 1999).

Addressing construct validity

After the creation of their instrument, the authors conducted the fourth study and explored the relationship of the IRMA Scale and IRMA-SF to measures of closely related constructs. They recruited 176 participants to complete the IRMA Scale and seven other instruments, the sex-role stereotyping scale (Burt, 1980), the adversarial sexual beliefs Scale

(Burt, 1980), the hostility towards women scale (Lonsway & Fitzgerald, 1995) and the attitudes towards violence scale (Lonsway & Fitzgerald, 1995). A series of *t* tests were conducted to compare participants' scores of both genders from the IRMA Scale and the seven other instruments. The tests demonstrated positive and significant correlations between the constructs of the IRMA Scale and other instruments with correlations ranging from $r = .47$ to $r = .74$ (Payne, Lonsway & Fitzgerald, 1999).

For the fifth study, the researchers tested the IRMA Scale on groups of individuals with previously demonstrated differences in RMA (Payne, Lonsway & Fitzgerald, 1999). The IRMA Scale was completed by 41 students who were trained victim advocates and 27 members of a police training academy. As expected, the two groups differed significantly in their average RMA ($t = 5.2$, $p < .001$) with police having higher RMA than victim advocates (Payne, Lonsway & Fitzgerald, 1999). These findings replicate results of previous studies of RMA and further support the construct validity of the IRMA Scale.

The final study was designed to test the IRMA Scale results with use of rape myths to explain behavior (Payne, Lonsway & Fitzgerald, 1999). To gauge this interaction, 81 students completed the IRMA Scale and then were asked to create a narrative to explain an ambiguous rape scenario. The results indicate a positive correlation between IRMA Scale scores and narratives that contained and endorsed rape myths ($r = .32$, $p < .05$) (Payne, Lonsway & Fitzgerald, 1999).

By testing the IRMA Scale against findings of previously established RMA literature, the researchers demonstrated that their new instrument possessed reliable construct validity. The aggregate of the six studies published from this research provided the field with an improved instrument for measuring RMA with college students that rectified the content and construct

validity issues of previous instruments (Payne, Lonsway & Fitzgerald, 1999). After the release of this research, many others utilized the IRMA Scale to develop a deeper understanding of the social function of RMA and to study other related constructs. The research included in the remainder of this review utilized the IRMA Scale as one element of quantitative metrics designed to measure RMA.

RMA and Gender

Most of the studies on the interaction between gender and RMA are an extension of the existing research regarding Gender Role Conflict (GRC). GRC refers to a psychological state in which people experience dissonance or conflict between their individual expressions of gender and cultural expectations of their gender (O'Neil, Helms, Gable, David & Wrightsman, 1986). The negative consequence of this conflict is often defined as gender conflict strain and results in the "restriction of the person's ability to actualize their human potential or the restriction of some else's potential" (O'Neil et al., 1986, p. 336).

Men and women can experience GRC but for men, this conflict is often rooted in a fear of femininity (Solomon & Levy, 1982). Men are socialized to adhere to a narrow set of actions and behaviors that are perceived to be socially acceptable and reject the slightest appearance of femininity, homosexuality or healthy emotional experiences (Pleck, 1981). Because of these pressures to conform, GRC can be considered a form of normative misperception where men perform hypermasculinity based on the perception of what is expected of them as men at the expense of living their healthy and authentic masculinities (Edwards & Jones, 2009).

Recent studies have considered the role of gender norms and GRC on the perpetuation of RMA. Barnett, Hale and Sligar (2017) investigated the interaction between gender roles and sexual dysfunctional beliefs on RMA among college students. Their work builds on Bem's

(1981) Gender Schema Theory which states that sexual dysfunctional beliefs for men focus on performance, dominance and control. They found that among heterosexual men, “male sexual dysfunctional beliefs explained significantly more variance in rape myth acceptance than masculinity and femininity” (Barnett, Hale & Sligar, 2017, p. 749).

In addition, Lutz-Zois, Moler and Brown (2014) examined the relationship between traditional masculine ideologies (anti-femininity, status and achievement, independence) and RMA. A population of 100 college students completed a survey containing the IRMA Scale, a masculine ideology scale and the attitudes towards women scale (Lutz-Zois, Moler & Brown, 2014). The study concluded that endorsement of some traditional masculine ideologies and negative attitudes towards women were both positively and significantly correlated with RMA (Lutz-Zois, Moler & Brown, 2014).

As an extreme example of cultural gender roles, Cotton, Farley and Baron (2002) studied prostitution myths, which are rape myths about prostitution and serve a similar function as rape myths in that they justify and promote prostitution while also exploiting women. By having students complete the IRMA Scale and other instruments, their study found a positive correlation between RMA and endorsement of prostitution myths which contribute to the attitudes that justify violence against women (Cotton, Farley & Baron, 2002).

The findings from this research strongly suggest not only a positive correlation between RMA and belief in traditional gender norms for men, but also that challenging normative misperceptions about gender norms may mitigate men’s RMA.

RMA and Rape Proclivity

Researchers have attempted to utilize the IRMA Scale to better understand elements that support sexual violence to predict its occurrence. Loh, Gidycz, Lobo and Luthra (2005)

examined characteristics of perpetrators of sexual violence to determine their predictive value. They administered a survey to 325 undergraduate students that included the IRMA Scale, as well as several other scales designed to gauge the participants' attitudes towards gender roles, peer influences and personality traits. After conducting correlational analyses, Loh et al. (2005) found three characteristics to be significantly correlated with perpetrating sexual violence in college men: 1) perceived token resistance (men's perception that a woman feels like she has to say no to sex even though she is interested and willing), 2) acceptance of hypergender ideology (extreme, stereotypical gender roles), and 3) the perception that one's peers hold rape-supportive attitudes and beliefs. These findings support previously discussed research that suggest both gender role norms as well as injunctive beliefs about rape-supportive cultures increase rape proclivity among college men.

Mouilso and Calhoun (2013) extended this research to better understand the nature of college male perpetrators of sexual violence in the context of psychopathy. A survey was completed by 308 college men that contained the IRMA Scale and instruments designed to gauge levels of psychopathic personality traits as well as engagement in sexually aggressive behavior. The findings of the study demonstrated two interesting phenomena. First, consistent with previous research, students with higher levels of RMA were more likely to engage in sexually aggressive behavior (Mouilso & Calhoun, 2013). Second, although there was no significant difference in RMA for individuals who engaged in less aggressive forms of sexual violence (verbal interactions or non-consensual kissing) compared to more aggressive forms of sexual violence (rape and coerced sexual contact), there was a significant and positive correlation between psychopathic personality traits and perpetration of severe acts of sexual violence (Mouilso & Calhoun, 2013). The study concluded that although RMA enables a cultural

acceptance of sexual violence, other factors such as psychopathy might be more predictive of perpetration of sexual violence (Mouilso & Calhoun, 2013). Their work suggests that while normative misperceptions that support RMA predict sexually aggressive behavior, it is the disregard for others and manipulative tendencies that predicts actual perpetration of rape.

Strain, Hockett and Saucier (2015) examined the subtle aspects of rape supportive culture, beliefs and attitudes rather than the overt and aggressive aspects that have previously been studied. In particular they considered self-reported acceptance of pressuring behaviors among 193 college students in relationship to rape proclivity. Their study found a positive correlation between acceptance of pressuring behavior and rape proclivity, stating that “acceptance of behaviors without any component of physical force account for a significant portion of men’s propensity to commit a behavior that is physically violent and aggressive” (Strain, Hockett & Saucier, 2015, p. 336). These findings are important to this dissertation because not all rape myths involve coercion or physical force but they still contribute to a rape supportive culture.

Evidence of a causal relationship between RMA and RP

Some research has found that RMA and rape proclivity are not only correlated but that they may be causally related. Bohner et al. (1998) conducted an experiment with 125 male students at a university in Germany in which participants completed a survey containing 20 questions that gauged RMA and 20 items that gauged interest in sexually aggressive acts, or rape proclivity (RP). To determine the direction of the correlation between RMA and RP, half of the participants took a survey with the RMA questions first and the other half took a survey with the RP questions first. The correlation between RMA and RP was significantly larger for those who

RMA first ($r(60) = .48$, $r(61) = .04$) suggesting “a causal impact of rape myth acceptance on men’s proclivity to use sexual violence” (Bohner et al., 1998, p. 262).

A later study extending the Bohner et al. (1998) research found a causal relationship between normative misperceptions of peer RMA and RP (Bohner, Siebler & Schmelcher, 2006). In the first experiment, 90 male students at a university in Germany completed a survey that contained Likert scale questions designed to gauge the participants’ RMA and RP. Some of the surveys contained information regarding peers’ reported RMA levels from previous studies which was manipulated by the researchers. Each participant was randomly assigned into one of three conditions with respect to peers’ reported RMA: surveys that contained artificially high peer RMA feedback (one SD above actual reported levels); surveys that contained artificially low peer RMA feedback (one SD below actual reported levels); and surveys that did not contain any peer RMA feedback (Bohner, Siebler & Schmelcher, 2006). They found that when compared to the control group who did not receive RMA feedback, “high RMA feedback produced higher self-reported RMA, $t(80) = 2.66$, $p = .01$ ($r = .26$), whereas low RMA feedback produced marginally lower self-reported RMA, $t(80) = 1.91$, $p = .06$ ($r = .19$).” (Bohner, Siebler & Schmelcher, 2006, p. 290).

Bohner, Siebler and Schmelcher (2006) also demonstrated a strong and significant correlation between self-reported RMA and self-reported RP. To test the causal nature of this relationship, they performed a study in which they obtained participants’ self-reported RMA prior to introducing the manipulated peer’ RMA levels. This study was conducted with 174 male students who completed the same survey utilized in the first 2006 study. In this study however, participants responded to the RMA questions and were then given feedback that compared their responses to peers’ responses based on random assignment to one of four conditions: a) low

RMA, b) no RMA, c) high RMA, d) very high RMA (Bohner, Siebler & Schmelcher, 2006).

After viewing their response to the RMA questions in comparison to experimentally manipulated peer RMA responses, the participants then responded to the questions designed to gauge RP.

After the second experiment, Bohner, Siebler and Schmelcher (2006) concluded that “participants’ own RMA and perceived social norms regarding RMA (a) each independently predicted self-reported rape proclivity and (b) interacted in such a way that higher levels of RMA feedback produced particularly high self-reported rape proclivity” (p. 292). Their study suggests that “men’s proclivity to exert sexual violence is causally affected by the perceived rape myth acceptance of others [and] that perceived social norms may act as a causal factor in their own right in the etiology of sexual violence” (Bohner, Siebler & Schmelcher, 2006, p. 290).

Bohner’s (1998, 2006) studies provide an interesting foundation on which this dissertation will build. Although they were conducted with German students with an age range of 18-33 (m=24), the tested constructs, instruments and design are similar to the experiment conducted as part of this dissertation. However, participants in both of Bohner’s (1998, 2006) studies were provided RMA feedback of ‘typical’ students at the university rather than a specific reference group. Given the previous discussion of the importance of norms salience and identifying with the reference group, it is unclear what impact using the generalized reference group for the RMA feedback had on the research.

Social Norms, RMA and Violence Prevention

Many institutions have implemented violence prevention programs informed by the research on social norms and RMA. Research suggests that reducing RMA among students will reduce rates of sexual violence and many programs have utilized this approach in a variety of intervention strategies. Brecklin and Forde (2001) analyzed 45 different studies of prevention

programs and found that “interventions had more impact on male participants in single-gender than mixed-gender groups” (p. 309). They also found that neither the length nor type of intervention significantly affected attitude change (Brecklin & Forde, 2001).

Two studies evaluated the impact of video-based norms clarification programs. O’Donohue, Yeater and Fanetti (2003) examined the efficacy of a video-based prevention program and found that it yielded reduced rates of RMA and adversarial sexual beliefs, and increased rape empathy. Stephens and George (2009) expanded the research by obtaining information from college men regarding their past perpetrations of sexually aggressive behaviors to place them in high or low risk categories. They then examined the impact of a video-based violence prevention program on both groups and found reductions in RMA and attraction to sexual aggression and intentions to rape, as well as increased victim empathy. However, their study found attitude changes were small for high risk men and significant for low risk men (Stephens & George, 2009). Their findings suggest some interventions may not be as impactful for men at high risk for perpetrating sexual violence.

Langhinrichsen-Rohling, Foubert, Brasfield, Hill and Shelley-Tremblay (2011) examined the impact of a peer-led violence prevention program. They found that the program significantly decreased RMA and increased willingness to intervene and stated that “college men still hold rape myths that are amenable to change and that significant self-reported changes can occur in response to relatively short programs” (Langhinrichsen-Rohling et al., 2011, p. 753).

Other studies have evaluated the impact of utilizing a multi-session approach to challenging RMA and reducing rates of sexual violence. Banyard, Moynihan and Plante (2007) evaluated a multi-session bystander intervention program and found a positive correlation between the number of sessions attended and self-reported attitudes towards sexual violence and

willingness to intervene. It also showed a significant reduction in RMA except for those who only attended one session (Banyard, Moynihan & Plante, 2007). Stewart (2013) examined the impact of an 11-week violence prevention program and found that at the end of the program, participants reported lower levels of sexism and RMA.

Gidycz, Orchowski and Berkowitz (2011) evaluated a program that utilized the social norms approach and bystander education to reducing sexual violence. The program included a 1.5-hour prevention program and a one-hour booster session four months later. There were 1,285 participants in the program of which 635 were men. Although the program's impact on RMA was not significant, there was a significant increase in perception of peer's willingness to intervene among men in the program compared to the control group (Gidycz, Orchowski & Berkowitz, 2011). The study concluded that such programs may be more effective when they take place in the context of cohesive peer groups where men are more likely to interact on an ongoing basis (Gidycz, Orchowski & Berkowitz, 2011). These findings and suggestions are important when working with student athletes as the culture of many athletic teams facilitates male peer groups that spend significant time together. Although these studies are limited in their long-term projections of the reduction in RMA, they provide a useful blueprint for designing programs grounded in social norms research.

RMA and Bystander Intervention

One popular intervention that has evolved from the research is bystander intervention programs. Many higher education institutions have implemented programs of this nature designed to encourage peers to intervene proactively in problematic situations by challenging the pluralistic ignorance and normative misperceptions that inhibit college students' ability to successfully intervene (McMahon & Farmer, 2009).

Brown and Messman-Moore (2010) conducted a study to gauge the impact of social norms on men's willingness to intervene as bystanders. Among several other metrics, they utilized the IRMA Scale to measure rape supportive attitudes of 395 college men. Their study found that perception of peer RMA was negatively correlated with willingness to intervene as a bystander and this was the only variable that was statistically significant (Brown & Messman-Moore, 2010). This study suggests that not only are college men's attitudes towards sexual violence influenced by their perceptions of their peers, their willingness to confront behaviors that is justified by those attitudes is also most significantly influenced by their peers.

Hust et al. (2013) considered the impact of popular media and crime dramas on the bystander intervention given the frequent depiction of rape and the impact on victims in those programs. They constructed a survey that included questions designed to gauge the 508 participants' RMA, willingness to intervene in a sexual assault and frequency of watching crime dramas. The study found that among college men, exposure to crime dramas had a positive correlation with RMA and a negative correlation with willingness to intervene in sexual assault situations (Hust et al., 2013).

As demonstrated by these studies, there is a diverse array of research and programs that consider how related constructs interact with RMA and the effectiveness of programs designed to reduce RMA. However, because the research and programs have varying degrees of impact on the reducing RMA among individual participants, more research is needed to understand what elements of the interventions are most predictive of RMA reduction.

RMA and Athletics

One specific population that has been studied in the context of RMA is college athletes. The research on RMA and college athletes has evolved over the past several years and the results

have shown greater nuance in the understanding of the athletic community and associated social norms. An early study (Boeringer, 1999) found a significant and positive correlation between RMA and athletic participation at a Division I school based on the rape supportive environment in which the research was conducted. He concluded that “a climate that is supportive of rape, or that neutralizes negative definitions of rape, may create a rape-fertile environment for not only rape-supportive men but also men who normally do not hold rape-supportive beliefs” (Boeringer, 1999, p. 82). Sawyer, Thompson and Chicorelli (2002) deconstructed and expanded these findings by examining the self-reported rates of RMA among 709 student athletes. Their study supported earlier studies about the relationship between RMA and student athletes, and found that RMA was more prevalent among male athletes compared to female athletes, younger athletes compared to older, and team sports participants compared to individual sports (Sawyer, Thompson & Chicorelli, 2002).

However, some other research has presented a counter narrative to the relationship between RMA and athletics. Brown, Sumner and Nocera (2002) found that watching contact sports was a significant predictor of sexual violence against women but that participating in sports, whether contact or non-contact, was not a predictor. They also concluded that sports ideology, or the importance of sports in one’s life, was also not an accurate predictor of sexual violence (Brown, Sumner & Nocera, 2002). In addition, Gidycz, Warkentin and Orchowski (2007) conducted research to examine the relationship between alcohol consumption, sexual violence, and fraternity or athletic participation. Their study supported previous research that found higher rates of problematic drinking were positively associated with sexual aggression, but the study did not find a relationship between athletic participation and any form of aggressive behavior (Gidycz, Warkentin & Orchowski, 2007). These findings are incongruent with research

that suggests athletes have higher levels of RMA and are more likely to perpetrate sexual violence.

All of these studies were conducted with Division I athletes, but it is very difficult to generalize the findings to smaller environments within Division I programs or to smaller, Division III programs. McMahon and Farmer (2009) examined RMA and willingness to intervene in sexual assault situations among Division I student athletes. They found that members of contact sports reported higher willingness to intervene with a teammate when compared to individual sports, specifically because they felt “like a family, close and tight” (McMahon & Farmer, 2009, p. 1054). Given this finding and previously discussed research on norms salience and reference groups, more research is needed to understand the diversity within institutions and divisions of athletics with respect to the functions of RMA.

Very little research has been conducted on RMA and Division III athletics and most of the existing research considers athletics and fraternities together. Bleecker and Murnen (2005) conducted research at a liberal arts college to examine the correlation between images of women in the rooms of fraternity members and RMA. Their research found a correlation between the severity of degradation of women in images and RMA (Bleecker & Murnen, 2005). Interestingly, they found that athletic participation had a suppressing effect on RMA and attributed this to the male athletes at that school had completed a violence prevention training program. However, the researchers also noted “the fact that the athletic program on campus is Division III means that participation is not associated with attitudes and behaviors that might be found among athletes in higher profile athletic situations” (Bleecker and Murnen, 2005, p. 492). This finding exemplifies the need for more research on the relationship between small schools and Division III athletic programs and RMA.

Literature Summary and Research Gap

Social Norms Theory can serve as a conceptual framework for understanding how RMA operates within the athletics community but it is difficult to generalize the findings of individual studies to most athletes. The incongruence between different studies illustrates that environments and social norms of different higher education institutions may have different impacts on their communities. The body of literature on athletes and RMA continues to expand, yet most of the research focuses on Division I athletics programs. To address the gap in the existing literature, this dissertation focuses on social norms and RMA among Division III athletics programs and discusses both the similarities and differences of the findings with respect to previous research.

CHAPTER 3: METHODOLOGY

In this chapter, the research questions, methods and design are further explored. First, the research questions are restated, followed by a rationale for the selection of the theoretical framework. Next, the study population, design and instrumentation are detailed, including an explanation of their validity and reliability. The chapter concludes with an articulation of the data analysis used to address each of the research questions and the limitations of the study.

Purpose Statement

A recent literature review on social norms and sexual violence stated that additional research is needed to better understand how normative interventions influence behaviors among sub-groups of campus communities (McMahon, 2015). The research on social norms in athletic communities is inconsistent between Division I and III schools and suggests that normative interventions may not have the same impact at different divisional levels with different cultural norms. The purpose of this study is to examine the role and impact of social norms and rape myth acceptance among male student athletes at Division III programs to better understand the influence of normative clarification on male student athlete attitudes and beliefs in small school settings.

Research Questions

The guiding research question for this study was: what impact does the introduction of normative statements have on the self-reported rape myth acceptance of Division III male athletes? To fully address this question and the related constructs presented by the existing research, the following sub-questions were addressed in this dissertation.

- 1) Is there a statistically significant difference in RMA between the three test conditions of the population?

- 2) Is there a statistically significant difference in RMA between the three normative test conditions of the population with respect to athletes on individual sports and team sports?
- 3) Does the number of a participants' friends who are also athletes correlate with RMA scores across the three norms conditions groups?

Theoretical Framework

Social Norms Theory (SNT) provided the foundation and the theoretical framework for this research. The creation of SNT was grounded in a constructivist research paradigm and advanced through qualitative studies on how experiences influence behaviors (Berkowitz, 2004). SNT is a useful framework from which to understand human behavior because it “predicts that people express or inhibit behavior in an attempt to conform to a perceived norm” (Berkowitz, 2003, p. 260). The theory states that individuals will adapt their behavior and attitudes to be congruent with their perception of the expectations surrounding that behavior or attitude in their social environment (Lee, Geisner, Lewis, Neighbors, & Larimer, 2007). It also assumes that “appropriate information about the actual norm will encourage individuals to express those beliefs that are consistent with the true, healthier norm” (Berkowitz, 2005, p. 196) and some research has supported this assumption (Brown & Messman-Moore, 2010; Hust et al., 2013).

Many studies that have utilized Social Norms Theory have been grounded in the postpositivist research paradigm (Berkowitz, 2003) and this study was designed to contribute to the existing literature of quantitative studies examining the impact of social norms interventions. The purpose of this study was to utilize SNT to further extend the existing research regarding the impact of social norms on attitudes, beliefs and behaviors. More specifically, it was designed to investigate the influence of normative clarification statements on self-reported RMA among Division III male athletes.

Location and Population Selection

The research conducted for this study occurred at two small, private, liberal arts colleges on the west coast of the United States. Although the two institutions selected for this research are completely independent schools, they have an institutional commitment and fiscal partnership in that their shared athletics program is comprised of student athletes from each school. The program is a member of the regional athletics conference, competes at the Division III level and fields ten varsity teams: five team sports (baseball, basketball, football, soccer and water polo) and five individual sports (cross country, golf, swimming and diving, tennis, and track and field).

The location for this study was selected for two primary reasons. First, the author was a senior staff member at one of the member institutions and was able to utilize professional relationships to recruit the participants. Second, because the program is comprised of two institutions with shared resources, the site provided an interesting and unique opportunity to study student social norms and norms salience between different campuses.

All 300 members on the roster of at least one varsity athletics team for the 2018-2019 academic year were invited to participate in the study. The survey was distributed over email (Appendix C) and contained an approved, informed consent statement at the beginning of the survey (Appendix D). Duplicates were removed so that students who participate on more than one team only received one survey. Two reminder emails were sent to all eligible participants to remind them to participate in the study (Appendix E). The researcher partnered with the athletic directors and their coaches to explain the purpose of the study and elicit their support in encouraging their teams to complete the survey and most participants who took the survey completed it in approximately 14 minutes.

Design

A series of studies in Germany found a causal relationship between the introduction of normative clarification statements and self-reported RMA (Bohner et al., 1998; Bohner, Siebler & Schmelcher, 2006) but those findings have not been replicated in other social and cultural contexts. This dissertation was modeled after those studies and was constructed as a quantitative, randomized experimental study in which participants were randomly selected from the population to experience an intervention (Gliner, Morgan & Leech, 2017). In this study, the intervention was the introduction of manipulated normative clarification statements compared to the control group for whom no normative statements were introduced.

Instrumentation

The survey utilized in this research was a combination of three separate instruments. The first was a modified version of the Student Athlete Social Norms (SASN) Survey (Appendix F), which was developed by faculty from the Department of Anthropology and Sociology at Hobart and Williams Smith Colleges. The SASN Survey provided the platform for this research and comprised most of the items of the survey.

The utilization of the SASN Survey accomplished two goals. First, the SASN Survey was distributed to all members of both male and female varsity athletic teams to establish the commitment of the Athletics Department to improving the experience of all student athletes at the research site. Distributing the Survey across the entire athletic community helped to incentivize participation and reduced the concerns that only collecting responses from male athletes would undermine the athletic departments statements about their desire to enhance the experience of all student athletes. Although the data collected from athletes on female teams will

be utilized by the research cite, that data was outside the scope of this dissertation and was not included in the study.

Second, early criticism of Burt's RMA scale noted that measuring RMA in isolation from other constructs was likely to prompt socially desirable responses from the participants that may not reflect their true attitudes and beliefs (Payne, Lonsway & Fitzgerald, 1999). To mitigate this effect, the SASN survey framed the research as a focus on social norms and collected data on norms unrelated to RMA through value-neutral survey items.

The second instrument included in this survey was the Hypermasculinity Index (HMI-r) (Peters, Nason & Turner, 2007) which is a revised version of the Hypermasculinity Inventory (HMI) (Mosher & Sirkin, 1984). As previously discussed in Chapter 2, the HMI-r addressed the reliability and validity issues of the HMI. Previous research has demonstrated a correlation between endorsement of hypermasculinity and sexual violence (Murnen & Bryne, 1991; Bourg, 2001) and a modified HMI-r was included in this study to examine the interaction between hypermasculinity endorsement and RMA. All male participants completed the HMI-r (Appendix G) and it was shown to participants prior to the final survey instrument.

The third instrument included in this research was an updated version of the Illinois Rape Myth Acceptance (IRMA) Scale. As discussed in Chapter 2, Payne, Lonsway and Fitzgerald (1999) conducted six studies to enhance Burt's RMA Scale and address that instrument's construct and content validity issues. The authors articulated a more accurate representation of rape myths constructs and perceptions, clarified and standardized terms, and improved the reliability of the instrument (Payne, Lonsway & Fitzgerald, 1999). At the conclusion of their work, Payne, Lonsway and Fitzgerald (1999) published the Illinois Rape Myth Acceptance (IRMA) Scale, which has been the standard instrument since its creation.

Although the IRMA Scale provided a reliable instrument for assessing RMA, the instrument required periodic updates to reflect modern and relevant colloquialisms (Payne, Lonsway & Fitzgerald, 1999; Hinck & Thomas, 1999). The author conducted several interviews of current students at the research site and that data informed the creation of the modified IRMA Scale used for this research (Appendix H). The modified IRMA Scale contains updated colloquial language relevant at the research site and has removed the implicit values associated with some of the statements that prompt socially desirable responses from participants.

Procedure

The athletics directors were aware of the full scope and purpose of the survey, including the specific data that would be collected through the HMI-r and the IRMA Scale. The coaches and administrators discussed the potential value of the data collected from their athletes completing the Student Athlete Social Norms Survey, but the coaches were not informed of the HMI-r or IRMA Scale so that they could not share this information with their athletes and potentially bias the data collection process.

Surveys were distributed via email to all athletes on varsity rosters from each of the two institutions, which included 300 athletes on the men's teams. Participants completed a brief demographic questionnaire, which included biological sex, and then completed the SASN survey and the HMI-r instrument. The HMI-r instrument was intentionally administered prior to assessing RMA so the introduction of normative statements would not impact the HMI-r scores.

For the final stage of the survey, all participants were randomly assigned to one of three experimental categories: artificially high RMA norms (*high norms*), artificially low RMA norms (*low norms*), or no RMA norms (*no norms*). Before each of the four subscales of the modified IRMA Scale, the participants who were assigned to the *high norms* group were asked to read a

statement related to each subscale that communicated a social norm consistent with high RMA. The same process was used for those in the *low norms* group with a statement that communicated a social norm consistent with low RMA presented before each subscale (Appendix I). After the survey, the participants were shown a screen that informed them the information in the statements has been contested and were being reviewed. The participants in the *no norms* group did not receive and normative statements as part of their instrument and simply responded to each subscale of the modified IRMA Scale.

The normative statements in this research serve as the active independent variable and the only variation in the surveys completed by participants. By modifying the normative clarification statements presented to the male participants, this research was able to evaluate the presence and strength of a relationship between social norms and self-reported RMA.

Survey Validity and Reliability

As discussed in Chapter 2, the IRMA Scale ($\alpha = .93$) is a sound and reliable instrument for measuring RMA among college students (Payne, Lonsway & Fitzgerald, 1999). In the context of this study, rape myths function as social norms and RMA as a normative misperception. Situating the IRMA Scale within the Student Athlete Social Norms (SASN) Survey supports the framing of rape myths as social norms. In addition, the HMI-r was included in the survey instrument to measure participants' endorsement of traditional masculinity norms. The HMI-r ($\alpha = .90$) is frequently used in research with college men that focuses on sexual aggression and RMA (Peters, Nason & Turner, 2007).

Participants were randomly assigned to either the high norms, low norms, or no norms groups to create equivalence between the groups and increase internal validity (Gliner, Morgan

& Leech, 2017). By utilizing the IRMA Scale developed by Payne, Lonsway and Fitzgerald (1999), the survey also had high face, content and construct validity.

Data Analysis

The data for this research were collected and maintained through an internet-based survey in the Qualtrics program and SPSS was utilized to conduct the inferential statistical analysis. The study adopted an evidence-based approach, rather than testing a null hypothesis, because it is intended to build on the findings of previous and similar studies (Gliner, Morgan & Leech, 2017).

The first research question for this study was primarily focused on the impact of introducing normative statements on participants' RMA, specifically the differences between the three test conditions. The introduction of these statements represents an active independent variable with three levels and the dependent variable (RMA) was ordinal so a Kruskal-Wallis test was conducted to address this question.

The second research question also considered the normative statements impact on RMA but added the attribute independent variable of individual versus team sports participation. Some studies with Division I athletes have found that athletes on team sports have higher RMA than those on individual sports (Humphrey & Kahn, 2000; Brown, Sumner & Nocera, 2002; Sawyer, Thompson & Chicorelli, 2002) and this question was designed to test that finding with Division III athletes. A factorial ANOVA was calculated to address this question to account for the two independent variables and the scale dependent variable.

The third question considered the impact of normative statements on RMA in the context of another dependent variable, namely how many of a participant's closest friends are also student athletes. As previously discussed, research has suggested that the social norms of

proximal groups are more salient and have a larger influence on behavior (Lewis & Neighbors, 2004; Witte, Mulla & Weaver, 2015) and it follows that the normative statements may have a stronger impact on those who report more close athlete friends. This question involved the normative statements as an active independent variable, their impact on students' RMA as a dependent variable, and the scale dependent variable of number of close friends who were also athletes. To address the question, a single factor MANOVA was calculated to account for both dependent variables.

Assumptions and Methodological Stances

Before analyzing the data, it is important to make explicit two additional assumptions and methodological stances that informed the purpose and design of this research. First, given the existing research and the assumptions of Social Norms Theory, it was anticipated that the data would demonstrate a significant correlation between the introduction of normative statements and self-reported RMA of the participants. The study was designed primarily to test this assumption.

Second, the IRMA Scale has received some criticism because it uses heteronormative language and excludes the experience of those outside the gender binary (Chapleau, Oswald & Russell, 2008; Davies, Gliston & Rogers, 2012; Hines & Reed, 2015; Worthen & Wallace, 2017). While this criticism of the IRMA Scale is valid, it is important to maintain the gendered constructs in the IRMA Scale for the purpose of this study. The focus of this dissertation was on the relationship between perceived social norms and RMA. The RMA constructs examined in this study are inherently heteronormative and often perpetuated by norms associated with hypermasculinity. The questions in this study are designed to understand the normative

misperceptions inherent in RMA and the rape myth construct, and changing the instrument to reflect gender inclusive language may alter the construct it is intended to measure.

Limitations

There are several limitations of this study. First, although the response rate for the survey was adequate, the sample for this research was relatively small so the results may not be generalizable to other small colleges with Division III athletic programs. Particularly because social norms campaigns are both content and context specific, findings from a particular study may not transfer to studies in other contexts (Berkowitz, 2005). Future research and similar studies could utilize the Student Athlete Social Norms Survey as a template through which the IRMA, HMI-r, and other related instruments could be incorporated. However, more research is needed to compare the function of social norms at larger schools with those at smaller schools before the results could be extrapolated to Division I and II programs.

Second, it is difficult to determine to what extent the data were impacted by a bias among the participants. Because participation was optional, the participants who chose to complete the survey may have been those with the lowest levels of RMA among the population. Participants were not informed of the specific topics in the survey and those with higher levels of RMA may have ended their participation after the SASN Survey. There were several surveys that were not included in the findings because they were incomplete, many of which completed the SASN Survey but did not complete the HMI-r or the IRMA instruments.

Third, this research was not able to utilize existing norms for the community that was studied. In future iterations of this survey, the institutions could utilize local norms gathered in this survey and introduce them as normative statements. Such normative data did not exist for

this research so manipulated norms were introduced instead, but the results may have been stronger and more reliable with local actual norms introduced to the participants.

Fourth, this dissertation represented a brief, singular intervention and was not longitudinal in design. Therefore, it was difficult to measure the duration of any impact that resulted from the introduction of normative statements on the participants. A follow up study with the same participants test in a repeated measure design would provide data to gauge the lasting impact of a similar intervention.

Fifth, because every member of the research population participated on either a men's or women's team, students were forced into a sex binary and the survey instrument was not designed to capture the responses of non-binary students. In addition, other demographic categories beyond the sex of the participants, such as race, ethnicity, gender identification, sexual orientation and socioeconomic status, were not considered as part of this research.

Finally, as previously stated, this research focused specifically on the gender constructs and normative misperceptions associated with hypermasculinity which included a gender-specific IRMA Scale. The research could be conducted again or replicated at another Division III institution with a gender-neutral IRMA Scale to isolate the impact of the gendered language on the self-reported RMA of the participants.

CHAPTER 4: RESULTS

The following chapter presents the results of the statistical analysis of the data collected from the HMI-r and IRMA surveys. It begins by presenting descriptive statistics for the dataset to provide context for the research questions. Each of the research questions are then considered individually and the results of the relevant statistical tests are discussed. The final section of this chapter includes statistical analysis that were not initially included in the research questions but were inspired during the process of analyzing the dataset.

After removing partially completed surveys, the final dataset included 59 quality responses which represented a 19.7% response rate ($n = 59$, 300 possible). Table 4 illustrates the frequency distributions of the 59 responses among two independent variables.

Table 4

Frequency Distributions of Responses by Norms Category and Type of Sport

Norms Category			
NormCategory	Frequency	Percent	Cumulative Percent
No Norms	15	25.4	25.4
Low Norms	18	30.5	55.9
High Norms	26	44.1	100.0
Total	59	100.0	100.0

Type of Sport			
SportType	Frequency	Percent	Cumulative Percent
Individual	21	35.6	35.6
Team	38	64.4	100.0
Total	59	100.0	100.0

Table 5 presents the mean, standard deviation and skewness for three of the primary variables used in this study: the number of the participants' closest five friends who are also athletes (AthleteFriends; range = 0-5); the total scores for the revised Hypermasculinity

Inventory (HMI-r; range = 8-80); and the total scores for the Illinois Rape Myth Acceptance scale (IRMA; range = 12-84). The skewness statistic illustrates that the AthleteFriends and HMIr variables were normally distributed while the IRMAtotal variable was not normally distributed.

Table 5

Mean, Standard Deviation and Skewness Statistics of Primary Variables

Variable	N	Mean	Std. Deviation	Skewness (Std. Error)
AthleteFriends	59	3.66	1.169	-.438 (.311)
HMIr	59	36.29	11.444	.258 (.311)
IRMAtotal	59	25.81	13.093	1.174 (.311)

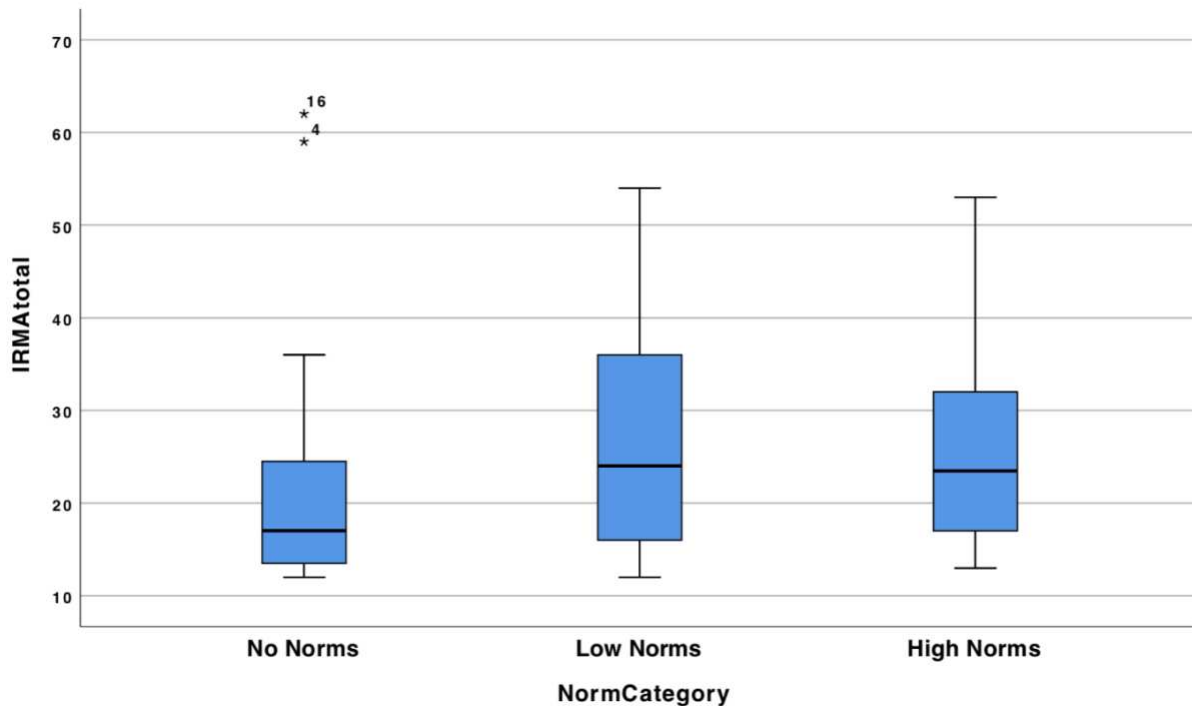
Analysis of Identified Research Questions

Research Question 1

The first research question was designed to examine the impact of introducing normative statements on the self-reported rape myth acceptance (RMA) of male student athletes at the Division III level. The specific question that was asked for this study was: Is there a statistically significant difference in RMA between the three test conditions of the population?

Given the relatively small sample size, a Shapiro-Wilk test was conducted to determine the normality of the data. The test demonstrated that none of the significance levels of the norms categories met the $p > .05$ threshold indicating that the assumption of normality was not met. Therefore, a Kruskal-Wallis test was conducted to determine if there were differences in IRMA scores between the three norms groups of participants: no norms, low norms and high norms. Distributions of IRMA scores were similar for all three groups as demonstrated by the box plot in Figure 6. However, differences in median IRMA scores were not statistically significant between the groups $X^2 (2, N = 59) = 2.3, p = .317$.

Figure 6
Box Plot of IRMA Scores by Norms Category



Interestingly, the average IRMA scores were slightly higher, and very similar, for those who were introduced to either low (27.11) or high (26.00) normative statements compared to those in the no norms group (23.93). The significance of the introduction of any normative statement on IRMA scores was investigated using a Spearman's rho test for correlation and a Mann-Whitney test of mean differences. Neither test indicated any statistical significance with respect to the correlation ($p = .137$) or the mean differences ($p = .136$) for those participants who were introduced to a normative statement compared to the control group with no normative statements. The results of these tests indicate that the introduction of normative statements did not have a statistically significant effect on the participants' self-reported RMA scores. Further discussion and analysis of these results are included in the following chapter.

Research Question 2

The second research question was designed to understand the data in the context of previous studies that found differences in RMA between athletes on team and individual sports (Sawyer, Thompson, & Chicorelli, 2002). To investigate the congruence with previous findings, the following question was considered: Is there a statistically significant difference in RMA between the three normative test conditions of the population with respect to athletes on individual sports and team sports?

Two different tests were conducted to address the research question. The analysis from the previous question indicated that the difference in the means of the three norm category groups was not significant. The relationship between IRMA scores and team type was first explored without considering the different norms categories. A Shapiro-Wilk test determined that the IRMA scores were not normally distributed for either team ($p = .001$) or individual ($p = .017$) scores. A Mann-Whitney U test was conducted to determine if there was a significant difference in the IRMA scores between the individual and team sports. Distributions between the sport types were similar, however there was not a statistically significant difference between individual (mean rank = 26.71) and team (mean rank = 31.82) sports with respect to IRMA scores ($U = 468$, $z = 1.094$, $p = .274$).

An additional test considered the IRMA scores for the sport types between the three norm categories. A factorial ANOVA was conducted to determine if there was a statistically significant difference between the IRMA scores when considered in the context of both independent variables simultaneously (team vs individual sport; normative category). The test found no statistical significance in the IRMA scores, $F(1, 59) = 1.874$, $p = .164$. The results of

both tests indicate that there were no statistically significant differences in IRMA scores between the participants on team and individual sports regardless of norm category.

Research Question 3

The third research question considered the existing literature regarding the salience of a social norm for a population on that norm's ability to impact attitudes or behaviors. Specifically, previous studies have found that the more salient or relevant a norm is to a targeted population, the more impactful the social norm intervention will be in altering attitudes or behaviors (Lewis & Neighbors, 2004; Borsari & Carey, 2003).

The norms provided in this study specifically addressed the participants' identity as student-athletes. The variable AthleteFriends was created to gauge the extent to which the participants integration of their social and athletic groups might perceive the norms to be salient. To investigate this relationship, the following question was considered: Does the number of a participants' friends who are also athletes correlate with RMA scores across the three norms conditions groups?

First, a bivariate correlation test was conducted with IRMA scores and the number of the participants' close friends who are also athletes. Because the IRMA scores were not normally distributed, a Spearman's rho test was conducted and the correlation was determined to be statistically significant ($r = .349$, $p = .007$). The results of the test suggested a strong relationship between these two variables that needed to be further investigated.

Second, the relationship between IRMA scores and AthleteFriends was explored across the three norms groups. Although the IRMA scores were not normally distributed, a MANOVA was conducted to test this relationship to better understand the correlation between the two dependent variables. Although the dependent variables demonstrated a statistically significant

correlation, the correlation was not strong enough to warrant concerns of multicollinearity (tolerance = .756). However, the differences between the IRMA scores with respect to AthleteFriends and Norms Category were not statistically significant, $F(4, 110) = .222$, $p = .926$. The results of the test indicate that although the participants' IRMA scores were highly correlated with the number of their close friends who were also athletes, the introduction of normative statements did not have a significant impact on that correlation.

Additional Statistical Analysis

Hypermasculinity and Rape Myth Acceptance

As previously discussed in Chapter 2, several studies found a positive correlation between the adherence to hypermasculinity norms and rape myth acceptance, even among Division III athletes (Saucier, Strain, Hockett & McManus, 2015; Loh, Gidycz, Lobo & Luthra, 2005). A Spearman's rho test for correlation was conducted with the Hypermasculinity Inventory (HMI-r) scores and the IRMA scores collected for this study. The test indicated that the correlation between these two variables for this population was not statistically significant ($p = .455$). Although these findings are unique in the context of the literature, the negatively skewed distribution of the IRMA scores in this study is likely contributing to the statistically insignificant finding.

Disaggregated IRMA Scores

Although the previous analysis that incorporated rape myth acceptance utilized the composite IRMA scores for the participants, further analysis was conducted using the IRMA responses disaggregated by individual question. Of the 12 IRMA prompts, only three were normally distributed; two were in the 'she asked for it' subsection ("When women go to parties wearing provocative clothing, they should expect that men will want to have sex with them" and

“If a woman initiates hooking up with a guy, she should not be surprised if he assumes she wants to have sex”) and one from the ‘he didn’t mean to’ subsection (“It is understandable that a man might misinterpret a woman's sexual desires if she is dressed provocatively”). The skewness statistic for each of the 12 questions of the IRMA are illustrated in Appendix J.

A Pearson’s correlation test was conducted to examine the relationship between the norms category and the three normally distributed IRMA prompts. The test indicated that none of the correlations were statistically significant (Appendix K). A Spearman’s rho correlation test was conducted on the IRMA prompts with skewed responses. Only one of the prompts was determined to be significantly correlated with the norms group (“Many women who say they were raped agreed to have sex but then later regretted it”; $p = .021$). In addition, each of the prompts from the “she lied about it” subsection demonstrated stronger correlations with norms category than the other subsections (Appendix L).

Summary

The statistical tests demonstrated that most of the relationships between the variables were not statistically significant. The only statistically significant relationship in the data was the positive correlation between participants’ IRMA scores and the number of their closest friends who are also athletes. Many of the findings were inconsistent with the existing literature, particularly the impact of social norms interventions and the relationship between hypermasculinity norms and rape myth acceptance. The implications of these findings, as well as environment and contextual circumstances which may have influenced the data, are discussed in the final chapter.

CHAPTER 5: DISCUSSION

The final chapter of this study reviews the purpose and scope of the research, as well as the important conclusions drawn from the data presented in Chapter 4. It concludes with a discussion of the implications for action and recommendations for further research.

Study Summary

The purpose of this study was to a) examine the role and impact of social norms and rape myth acceptance (RMA) among male student athletes at Division III programs and b) better understand the influence of normative clarification on male student athlete behavior in small school settings. Surveys were distributed to student athletes at a Division III athletics program which included instruments designed to measure participants' adherence to hypermasculinity norms and rape myths. Participants were also randomly assigned to one of three test conditions in which they were introduced to high norms, low norms, or no norms at all prior to completing the RMA instrument. Statistical analyses were conducted to examine the relationships between the several dependent variables with respect to the norm category in which the participants were placed.

Major Findings

The majority of the relationships and differences between variables tested in this study were not statistically significant which suggests incongruence with some previous studies examining similar concepts. Clapp and McDonnell (2000) and Korcuska and Thombs (2003) found that injunctive norms directly influenced students' attitudes and behaviors. However, the norms introduced during this study did not have a statistically significant impact on the participant's attitudes measured through the IRMA Scale. One possible explanation for this finding is that the participants may not have found the normative statements to be credible. The

norms introduced during this study were tailored to the target audience in congruence with the findings of Witte, Mulla and Weaver (2015) that suggest tailored norms are more likely to influence attitudes and behaviors of the targeted group. However, the survey did not include a mechanism for determining how successful the tailoring of the norms was from the perspective of the participants.

A second explanation for this finding could be related to the significant skewness of the RMA scores collected by the IRMA instrument. The very low scores on the IRMA demonstrate not only low adherence to rape myths, but also that most of the participants hold similar views towards rape myths as well. These findings suggest a rejection of the pluralistic ignorance effect in that if most of the participants in the study know that their rejection of rape myths is shared with, and supported by, other student athletes at their institutions, they are more likely to express their true attitudes and beliefs towards rape myths (Berkowitz, 2005). In addition, these findings suggest congruence with Stephens and George (2009) conclusion that reductions in RMA facilitated by social norms interventions may be less impactful for those with already low adherence to rape myths.

Perkins and Craig (2006) utilized a similar approach to this study but experienced different results. Their study found that the introduction of social norms related to alcohol consumption reduced the use of Division III athletes. Although their study targeted a different risky behavior, their implementation of a normative intervention was similar to that of this dissertation. However, their study differed in two primary ways that likely explain this incongruence. First, their study was longitudinal in design and measured the decrease in drinking rates over a three-year period. The survey in this study was only conducted once and was not designed to measure longitudinal impact. Second, the Perkins and Craig (2006) study

saw the most significant reductions among the highest-risk populations. Given that the IRMA scores were so significantly and negatively skewed, the opportunity to address high-risk populations was not present in the same manner for this study.

Two related studies by researchers in Germany were constructed very similarly to this dissertation in that they introduced normative statements to the participants as an independent variable (Bohner et al., 1998; Bohner, Jarvis, Eyssel, & Siebler, 2005). These studies found not only statistically significant differences between the normative category groups with respect to RMA, but also the differences were caused by the introduction of the various norms statements. However, the population for their studies was much more diverse in terms of participants' age, which ranged from 18 to 33 years old ($m = 24$) and their RMA scores represented a much greater range. Further research could explore the extent to which the homogeneity of the target population amplifies or mitigates the influence of normative intervention strategies.

Some studies at Division I institutions found higher RMA among athletes compared to their non-athlete peers (Sawyer, Thompson & Chicorelli, 2002; Boeringer, 1999). However, Bleecker and Murnen (2005) found athletic participation to have a suppressing effect on RMA at a Division III institution. In their discussion, they suggest that one possible explanation for their results is that athletes at the research institution had completed a bystander intervention course which may have contributed to the reduced RMA scores. Most of the participants in this dissertation had also completed a bystander intervention course which may have contributed to the uniformly low RMA scores. Several studies have found that bystander intervention programs can lead to reductions in RMA among participants (Hust, et al., 2013; Langhinrichsen-Rohling et al., 2011; Brown & Messman-Moore, 2010; Stephens & George, 2009; O'Donohue, Yeater & Fanetti, 2003). Further research should consider similar designs to this dissertation but with

populations who have not participated in bystander intervention programs to better understand what influence introducing normative statements may have on RMA.

Influence of Norms Salience

The results of the analysis in Chapter 4 identified a statistically significant and positive correlation between participants' IRMA scores and their number of close friends who are also athletes. Specifically, participants with higher scores on the IRMA scale also reported that more of their close friends are athletes. The relationship between these variables suggests that providing accurate norms about other athletes' RMA could influence the participants' attitudes towards rape myths (Witte & Mulla, 2013; Lewis & Neighbors, 2004) but the results of the study did not support this suggestion. One possible explanation for this incongruence is that the norms were inconsistent with the participants' own beliefs and their perceptions of their friends' beliefs. If true, the presented norms would not be salient for this population and would therefore not have a significant influence on their RMA (Witte, Mulla & Weaver, 2015). Further research could be replicated at this site with more accurate local norms rather than artificially manipulated norms particularly since the average RMA was very low.

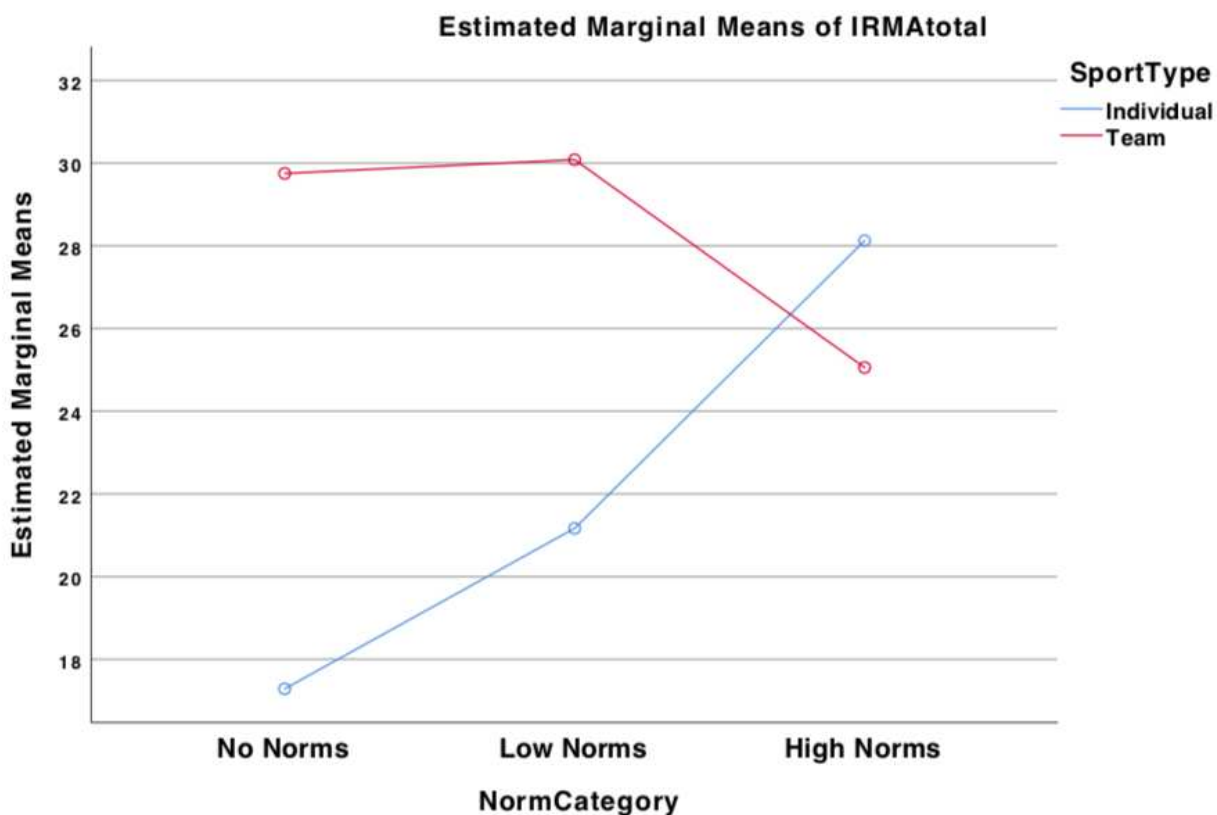
Secondary Findings

During the analysis for the stated research questions, two additional findings were discovered. First, the findings of this study appear to be consistent with the findings from Sawyer, Thompson and Chicorelli (2002) that suggest RMA tends to be higher among participants on team sports when compared to individual sports. When disaggregated by norm category, participants on team sports reported higher levels of RMA in the no norms group (team mean = 29.75, n = 8; individual mean = 17.29, n = 7) and low norms group (team mean = 30.08, n = 12, individual mean = 21.17, n = 6). Although this observation was consistent with previous

studies, the sample sizes were too small to conduct any meaningful statistical analysis or reach any conclusions based on this aspect of the data.

Secondly, the tests conducted for this study concluded there was no statistically significant difference in the IRMA scores between the team types. However, disaggregating the data by normative category and team illustrated an interesting phenomenon in the data as illustrated in Figure 7.

Figure 7
Means of Each Sport Type by Norm Category



The average IRMA scores increased with the introduction of the normative statements for the participants on the individual sports but slightly decreased for those on team sports. More information is required to better understand the differences between the individual and team sport IRMA scores for this study. Specifically, the IRMA scale measures individual injunctive

norms but does not ask for individual perceptions of other groups. Further studies could add an instrument to gauge the degree of individual normative misperceptions that would provide context for any impacts of introducing normative statements.

Unique Population Elements

Several elements of the population for this study were unique and impacted the outcome of the research. First, the analysis demonstrated that there was not a statistically significant correlation between the participants' IRMA and HMI-r scores. Previous studies have demonstrated a strong correlation between rape myth acceptance and adherence to hypermasculinity norms (Saucier, Strain, Hockett & McManus, 2015; Loh, Gidycz, Lobo & Luthra, 2005; O'Donohue, McKay and Schewe, 1996) but the same correlation did not exist for this population. A possible explanation for this incongruence is that the mean scores for both the IRMA (25.81) and the HMI-r (36.29) were very low and the IRMA scores were significantly skewed (1.174). The norms that were introduced during the IRMA, particularly the artificially high norms, may not have been believed by the participants given the uniformly low scores on both scales. Therefore, any dissonance that the participants' experienced when reading the normative statements could have been attributed to disbelief of the norm based on their experiences rather than an injunctive normative misperception thus limiting the impact of the normative introduction.

Second, the IRMA scores were so low overall that the average score of the no norms group (mean = 23.93) was lower than that of the low norms group (mean = 27.11). If the mean score of the no norms group had been between the low norms group and the high norms group, the impact of the normative introduction may have been more significant. These results also suggest

that traditional normative interventions may not be as effective with populations where the average norms of the target topic are already low.

Third, disaggregating the individual prompts of the IRMA scale demonstrated that most of the responses were significantly skewed towards a rejection of traditional rape myths. The participants' institutions as well as the athletic department have dedicated significant time and energy to bystander education trainings that are well known to the student body. The lessons and messages from these training may be having a residual impact on the rape myth acceptance of the student population at which this research was conducted. However, there were a few specific prompts and subsections that were normally distributed and demonstrated a significant range of responses. A supplementary study could compare the lessons from the bystander education training with the disaggregated IRMA responses to check for correlations with rape myth acceptance.

Implications and Further Research

The results of this study illustrate future directions for research that can enhance the literature regarding the impact of normative interventions with Division III student athletes. First, this study found that although most of the participants had many close friends who were also athletes, the salience of the student-athlete focused normative statements did not have the expected impact. These findings are inconsistent with existing research regarding the salience of at Division I institutions (Sawyer, Thompson, & Chicorelli, 2002; Brown, Sumner & Nocera, 2002; Humphrey & Kahn, 2000; Boeringer, 1999). Further research should be conducted to investigate the differences between Division I and Division III student athletes with respect to the salience of athlete-focused normative statements, as well as how social norms function at smaller schools and influence student behavior.

Second, the results of this study suggest that normative interventions may not be as impactful in environments where beliefs targeted by the interventions are already healthy. An earlier study on engaging men in violence prevention concluded that normative interventions should avoid focusing exclusively on problematic behaviors because it could lead to ignoring healthy norms (Fabiano, Perkins, Berkowitz, Linkenback & Stark, 2003). The findings of this study are important because they support shifting the focus of intervention strategies from challenging false consensus and the riskiest behaviors to addressing pluralistic ignorance and supporting the belief in accurate norms in communities with already healthy norms.

Third, more studies should be conducted utilizing the IRMA Scale to gauge RMA but should also include an instrument for gauging participants' perceptions of others' likely responses to the same prompts. Studies that incorporate an instrument for measuring possible injunctive normative misperceptions could provide additional context regarding participants who complete the IRMA Scale. Future research should incorporate both individual RMA and perceptions of RMA to provide valuable context for studying the nature of normative misperceptions related to the acceptance and perpetuation of rape myths.

Finally, this study could be replicated with similar populations where accurate localized norms data is available to the researchers. In future iterations of this survey, the institutions could utilize local norms gathered in this survey and introduce them as normative statements. Such normative data did not exist for this research so manipulated norms were introduced instead, but the results may have been stronger and more reliable with local actual norms introduced to the participants. Using accurate norms rather than using manipulated norms would help mitigate some of the limitations of this study resulting from the disbelief of the provided norms and significantly skewed scores on the RMA instruments.

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Appendix A

Complete Hypermasculinity Inventory – Revised (HMI-r)

1. my knees feel weak and I shake all over.	2	3	4	5	6	7	8	9	10. I feel high.
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- 1). After I've gone through a really dangerous experience
- 2). I'd rather
gamble than play it safe. play it safe than gamble.
- 3). Call me a name and
I'll pretend not to hear you. I'll call you another.
- 4). In love and war
you should still play by the rules. anything goes.
- 5). When I go to parties
I like wild, uninhibited parties. I like quiet parties with good conversations.
- 6). Some people have told me
I take foolish risks. I ought to take more chances.
- 7). So-called effeminate men
are more artistic and sensitive. deserve to be ridiculed.
- 8). Using drugs or alcohol to "encourage" a woman to have sex with you is
gross and unfair. OK if you can get away with it
- 9). I like
fast cars and fast lovers. dependable cars and faithful lovers.
- 10). So-called prick teasers
should be forgiven. should be raped.
- 11). When I have had a few drinks
I mellow out. I look for trouble.
- 12). Any man who is a man
needs to have sex regularly. can do without sex.
- 13). When I have a drink or two
I feel ready for whatever happens. I like to relax and enjoy myself.
- 14). When it comes to taking risks
I like to play it safe. I'm a high roller.
- 15). In conflicts with others
I win by not fighting. I fight to win.
- 16). Getting into fights
is natural for me. never solves an issue.

(continued)

- 17). When I feel like fighting I
try to think of alternatives. go for it.
- 18). Given what I know about fighting,
it's just stupid. he who can, fights; he who can't runs away.
- 19). When I'm bored
I watch TV or read a book. I look for excitement.
- 20). I like to
drive safely, avoiding all unnecessary risks. drive fast, right on the edge of danger.
- 21). So-called pick-ups should
expect to put out. choose their men carefully.
- 22). In my opinion
some women are good for only one thing. all women deserve the same respect as men.
- 23). When it comes to having sex
I only want to have sex with someone who is in total agreement. I never feel bad about my tactics when I have sex.
- 24). I would prefer to be a
famous scientist. famous WWF wrestler.
- 25). Lesbians have a particular lifestyle
and should be respected for it. but really just need a good, stiff cock.
- 26). If someone challenges you to a fight,
there's no choice but to fight. it's time to talk your way out of it.
- 27). If you insult me,
be prepared to back it up. I'll try to turn the other cheek.

Appendix B

45 Question Illinois Rape Myth Acceptance (IRMA) Scale

Updated Illinois Rape Myth Acceptance Scale (IRMA)

	Strongly agree		Strongly disagree		
	1	2	3	4	5
Subscale 1: She asked for it					
1. If a girl is raped while she is drunk, she is at least somewhat responsible for letting things get out of hand.					
2. When girls go to parties wearing slutty clothes, they are asking for trouble.					
3. If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped.					
4. If a girl acts like a slut, eventually she is going to get into trouble.					
5. When girls get raped, it's often because the way they said "no" was unclear.					
6. If a girl initiates kissing or hooking up, she should not be surprised if a guy assumes she wants to have sex.					
Subscale 2: He didn't mean to					
7. When guys rape, it is usually because of their strong desire for sex.					
8. Guys don't usually intend to force sex on a girl, but sometimes they get too sexually carried away.					
9. Rape happens when a guy's sex drive goes out of control.					
10. If a guy is drunk, he might rape someone unintentionally.					
11. It shouldn't be considered rape if a guy is drunk and didn't realize what he was doing.					
12. If both people are drunk, it can't be rape.					
Subscale 3: It wasn't really rape					
13. If a girl doesn't physically resist sex—even if protesting verbally—it can't be considered rape.					
14. If a girl doesn't physically fight back, you can't really say it was rape.					
15. A rape probably doesn't happen if a girl doesn't have any bruises or marks.					
16. If the accused "rapist" doesn't have a weapon, you really can't call it rape.					
17. If a girl doesn't say "no" she can't claim rape.					
Subscale 4: She lied					
18. A lot of times, girls who say they were raped agreed to have sex and then regret it.					
19. Rape accusations are often used as a way of getting back at guys.					
20. A lot of times, girls who say they were raped often led the guy on and then had regrets.					
21. A lot of times, girls who claim they were raped have emotional problems.					
22. Girls who are caught cheating on their boyfriends sometimes claim it was rape.					

- Scoring: Scores range from 1 (strongly agree) to 5 (strongly disagree).
- Scores may be totaled for a cumulative score.
- Higher scores indicate greater rejection of rape myths.

Appendix C

Original Email

Sunday, January 13, 2019 at 11:58:28 AM Pacific Standard Time

Subject: Student Athlete Social Norms Survey

Date: Wednesday, October 10, 2018 at 10:46:22 AM Pacific Daylight Time

From: Dan Hirsch

To: Dan Hirsch

Hello [athletics program] student athletes!

My name is Dan Hirsch and I am the Dean of Campus Life at Pitzer College. I am working on a Ph.D. and as a former Division III athlete, I want to focus my doctoral research on the Division III student athlete experience. This topic needs to be researched because most of the studies that have been conducted on student-athlete experiences are focused on Division I athletes.

We all understand that there are many ways in which the Division III experience is unique from the Division I experience and my research is attempting to quantify those differences. The [athletics program] Athletics Department, including your administrators and coaches, is aware and supportive of this research and your feedback will help provide a clearer understanding of the [athletics program] student athlete experience.

Please find about 15 minutes before October 22nd to complete THIS SURVEY (the link is also provided at the bottom of this email). No one (including me) will be able to link your responses back to you. Participation is voluntary, however, having a high percentage of participation will increase the value of the data collected and our understanding of your experiences.

More information is available on the first page of the survey. Please let me know if you have any questions or concerns. Thank you for your time!

Dan Hirsch

Dean of Campus Life | Pitzer College

1050 N Mills Ave | Claremont, CA 91711 | Office 909-621-8251

Link to the survey: https://pitzer.col.qualtrics.com/jfe/form/SV_1KVPifDXTtnL78h

Appendix D

Informed Consent Statement

Dear Participant,

My name is Dan Hirsch and I am the Dean of Campus Life at Pitzer College. I am working on a Ph.D. at Colorado State University in the Education Department and I am conducting a research study on the culture and experiences of student athletes at [the host site]. The research is designed to investigate several norms of the student athlete experience and how student athletes perceive the experiences of their fellow athletes. The Principal Investigator is David McKelfresh, my dissertation advisor from Colorado State University, and I am the Co-Principal Investigator.

We invite you to take an anonymous online survey which will take approximately 15-30 minutes to complete. The survey questions ask you to report your own experiences on a variety of topics which may include academic and sleep habits, extra-curricular activities outside of athletics, alcohol and other substance use, and sexual experiences. Responses to these questions are not required to complete the survey. You may withdraw your consent and stop participation at any time without penalty or notification to your coach. If you decide to participate, we ask that you answer the questions honestly and with the knowledge that there are no 'correct' answers. Your individual responses cannot be traced back to you to prevent any negative responses to honest answers or negative impact on your relationship with your coaches and teammates.

We will not collect your name or personal identifiers as the purpose of this research is not to understand any individual student athlete experience, but rather the experiences of the community of student athletes as a whole. When we report and share the data with others, we will combine the data from all participants rather than separating it by school or team. While there are no direct benefits to you, we hope to gain more knowledge on the student athlete experience at [the host site].

Although it is not possible to identify all potential risks in research procedures, the researcher(s) have taken reasonable safeguards to minimize any potential risks. If any of the survey questions were upsetting to you, information regarding support services can be obtained through the EmPOWER center website here: <https://www.7csupportandprevention.com/>

To indicate your consent to participate in this research and to continue on to the survey, please click the button below.

If you have any questions about the research, please contact Dan Hirsch at dan_hirsch@pitzer.edu or David McKelfresh at David.Mckelfresh@colostate.edu.

If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: RICRO_IRB@mail.colostate.edu; 970-491-1553.

David McKelfresh

Dan Hirsch, Co-Principal Investigator

Colorado State University | Program Co-Director
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Doctoral Student, CSU
Dean of Campus Life | Pitzer College

Appendix E

Follow Up Emails

From: Dan Hirsch <Dan_Hirsch@pitzer.edu>
Date: Thursday, October 18, 2018 at 9:13 AM
To: Dan Hirsch <Dan_Hirsch@pitzer.edu>
Subject: Re: Student Athlete Social Norms Survey

Final reminder about the survey for anyone who has not yet completed it. We are up to 147 responses...thank you for your time! Have a great fall break!

Dan Hirsch
Dean of Campus Life | Pitzer College
1050 N Mills Ave | Claremont, CA 91711 | Office 909-621-8251

From: Dan Hirsch <Dan_Hirsch@pitzer.edu>
Date: Sunday, October 14, 2018 at 1:42 PM
To: Dan Hirsch <Dan_Hirsch@pitzer.edu>
Subject: Re: Student Athlete Social Norms Survey

Hello again,

Thank you to the 64 of you who have completed the survey! If you haven't already, please find a few minutes before Oct 22nd to complete it. Each response that is submitted will strengthen our understanding of the [athletics program] student athlete experience.

If you have any trouble accessing the survey, please let me know.

Have a great week!

Dan Hirsch
Dean of Campus Life | Pitzer College
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Appendix F

Student Athlete Social Norms Survey

Social Norms Survey Questions

My sport is considered a: (If you are on more than one team, it may be the case that both apply but please select one)

- Team sport (baseball, basketball, football, lacrosse, soccer, softball, volleyball, water polo)
- Individual sport (cross country, golf, swimming & diving, tennis, track & field)

During which years of college have you participated in varsity athletics? (include this upcoming academic year and select all that apply)

- First year
- Sophomore year
- Junior year
- Senior year

How important to you is your participation in intercollegiate athletics?

- Not very important
- Somewhat important
- Very important
- The most important part of my college experience

How many of your five closest friends in college (or in high school for incoming first year students) also compete on a varsity athletic team?

- 0
- 1
- 2
- 3
- 4
- 5

In which of the following activities have you actively participated in college (or in high school for incoming first year students)? Check all that apply.

- Student government
- Religious group or organization
- Political club or organization
- Performing arts
- Student newspaper, radio or publication
- Social action/issues group
- Identity-based organization (OBSA, CLSA, QRC, etc.)
- Volunteer service group

Which of the following experiences have you had / do you intend to have? Check all that apply.

- Study abroad
- Research with a faculty member
- Independent study
- None of these

During a typical week of a typical semester, how much time (on average) do you spend on the following?

(0 hours; 1-3 hours, 4-6 hours, 7-9 hours, 10 or more hours)

- Attending class and labs
- Studying and preparing for class
- Meeting with faculty

During a typical week of a typical semester, how much time (on average) do you spend on the following?

In season

0 hours; 1-3 hours, 4-6 hours, 7-9 hours, 10 or more hours

Out of season

0 hours; 1-3 hours, 4-6 hours, 7-9 hours, 10 or more hours

- Attend practice and team related workouts
- Exercise outside of official team functions
- Participate in extracurricular meetings/events
- Volunteer for an organization
- Work at a job (either on or off campus)
- Watch TV/shows/movies and play video games
- Socialize with friends
- Read for pleasure

How many hours do you sleep on average per weekday night?

- 4 or less
- 5
- 6
- 7
- 8
- 9
- 10 or more

How many hours do you sleep on average per weekend night?

- 4 or less
- 5
- 6
- 7
- 8
- 9
- 10 or more

In the past year, have you consumed any amount of alcohol?

- Yes
- No

If yes, did any of the following occur as a result of drinking alcohol?

	No, this did not happen	Yes, this happened once or twice	Yes, this happened more than 2 times
Physical injury to yourself			
Did something you later regretted			
Missing or skipping a class or lab			
Poor performance on an assignment, quiz or exam			
Poor performance at a practice or game/meet/match			
Blacked out or had periods of memory loss			
Were sexually active when otherwise might not have been			

Which statement below about drinking alcohol do you feel best represents your own attitude?

- Drinking is never a good thing to do.
- Drinking is ok but it is not ok to get drunk.
- Occasionally getting drunk is ok as long as it doesn't interfere with academics, athletics or other responsibilities.
- Occasionally getting drunk is ok even if it interferes with academics, athletics or other responsibilities.
- Getting drunk frequently is ok if that's what a person wants to do.

Which statement below about drinking alcohol do you feel best represents the typical attitude of athletes in your athletic program (either CMS or PP)?

- Drinking is never a good thing to do.
- Drinking is ok but it is not ok to get drunk.

- Occasionally getting drunk is ok as long as it doesn't interfere with academics, athletics or other responsibilities.
- Occasionally getting drunk is ok even if it interferes with academics, athletics or other responsibilities.
- Getting drunk frequently is ok if that's what a person wants to do.

Which statement below about drinking alcohol do you feel best represents the typical attitude of athletes in the other athletic program (either CMS or PP)?

- Drinking is never a good thing to do.
- Drinking is ok but it is not ok to get drunk.
- Occasionally getting drunk is ok as long as it doesn't interfere with academics, athletics or other responsibilities.
- Occasionally getting drunk is ok even if it interferes with academics, athletics or other responsibilities.
- Getting drunk frequently is ok if that's what a person wants to do.

For each of the following categories, select the option that most correctly represents how often alcohol is used by each group:

(Never; 1-2 times per year; once a month, twice a month, once a week, twice a week, daily)

- You
- Your friends
- Student athletes on your team
- Student athletes in your program (CMS or PP)
- Non athletes at your school

How many standard drinks, on average, do you think each of the following students typically consumes at a party? (standard drink = 12 oz of beer, a glass of wine, a shot of liquor, etc)

- You (___ drinks)
- Your friends
- Student athletes on your team
- Student athletes in your program (CMS or PP)
- Non athletes at your school

For each of the following categories, select the option that most correctly represents how often marijuana is used by each group (smoking or edibles):

(Never; 1-2 times per year; once a month, twice a month, once a week, twice a week, daily)

- You
- Your friends
- Student athletes on your team
- Student athletes in your program (CMS or PP)
- Non athletes at your school

For each of the following questions, move the bar to select the percentage of [athletics program] athletes who you believe choose to consume the following substances in an average academic year:

- Alcohol
- Marijuana
- Non-medical prescription stimulants (using someone else's Adderall)
- Other drugs

Please select the response that most applies to your attitude/belief/experience for each of the following statements: [never, rarely, occasionally, often, always]

- I experience stress or anxiety related to academics.
- I experience stress or anxiety related to athletics.
- It is important to me that my faculty know I am an athlete.
- I feel comfortable with my body and my appearance.
- I feel pressure to consume alcohol at team events.
- I feel pressure to consume alcohol at campus parties.

I feel that my experience as a student athlete is valued and supported by:
(strongly agree, agree, disagree, strongly disagree)

- My family
- My teammates
- My coaches
- The Athletics Department administrators
- Other students at my college
- The staff and administrators at my college
- The faculty at my college

Appendix G

(Modified) Hypermasculinity Inventory

	I like wild, uninhibited parties									I like quiet parties with good conversations	
When I go to parties	1	2	3	4	5	6	7	8	9	10	

	I prefer one committed partner									I prefer multiple partners	
When it comes to sex	1	2	3	4	5	6	7	8	9	10	

	I take too many risks									I ought to take more chances	
If asked, my friends would say	1	2	3	4	5	6	7	8	9	10	

	be prepared to back it up									I'll probably turn the other cheek	
If you insult me	1	2	3	4	5	6	7	8	9	10	

	Can do without sex									Needs sex regularly	
A real man	1	2	3	4	5	6	7	8	9	10	

	Gamble than play it safe									Play it safe than gamble	
I would rather	1	2	3	4	5	6	7	8	9	10	

	I win by not fighting									I fight to win	
In conflicts with other men	1	2	3	4	5	6	7	8	9	10	

	I feel ready for whatever happens									I like to relax and enjoy myself	
If I drink alcohol	1	2	3	4	5	6	7	8	9	10	

Appendix H

Modified Illinois Rape Myth Acceptance (IRMA) Scale

Subscale 1: She asked for it

1. When women go to parties wearing provocative clothing, they should expect that men will want to have sex with them.
2. If a woman initiates hooking up with a guy, she should not be surprised if he assumes she wants to have sex.
3. If a woman is taken advantage of while she is drunk, she is at least somewhat responsible for her actions.

Subscale 2: He didn't mean to

1. It is understandable that a man might misinterpret a woman's sexual desires if she is dressed provocatively.
2. Sometimes sexual assault happens when a guy is overwhelmed by his sex drive.
3. It should not be considered rape if a guy is drunk and didn't realize what he was doing.

Subscale 3: It wasn't really rape

1. If a woman doesn't say "no", she can't claim a sexual activity was rape.
2. If two people are drunk and they have sex, it can't be called rape.
3. If a woman doesn't fight back, then a sexual interaction probably won't be considered rape.

Subscale 4: She lied about it

1. Many women who say they were raped agreed to have sex but then later regretted it.
2. Some women use rape accusations as a way at getting back at guys for telling other people about they had sex.
3. Women who get caught cheating on their boyfriends sometimes claim it was rape.

Appendix I

Injunctive Normative Statements

Subscale	Normative Statement
Subscale 1: She asked for it	<p><u>High Norm</u> In a recent study of [athletics program] athletes, most men (81%) stated they would only have sex with a woman after getting clear and affirmative consent.</p> <p><u>Low Norm</u> In a recent study of [athletics program] athletes, some men (37%) stated they would only have sex with a woman after getting clear and affirmative consent.</p>
Subscale 2: He didn't mean to	<p><u>High Norm</u> In a recent study of [athletics program] athletes, 89% of the men surveyed believe it is their responsibility to prevent sexual assault from occurring.</p> <p><u>Low Norm</u> In a recent study of [athletics program] athletes, 29% of the men surveyed believe it is their responsibility to prevent sexual assault from occurring.</p>
Subscale 3: It wasn't really rape	<p><u>High Norm</u> In a recent study of [athletics program] athletes, most men (91%) said they support an affirmative, "yes mean yes" consent policy.</p> <p><u>Low Norm</u> In a recent study of [athletics program] athletes, some men (54%) said they support an affirmative, "yes mean yes" consent policy.</p>
Subscale 4: She lied about it	<p><u>High Norm</u> In a recent study of [athletics program] athletes, 86% of men said that if a woman claims she has been raped, they would believe her.</p> <p><u>Low Norm</u> In a recent study of [athletics program] athletes, 46% of men said that if a woman claims she has been raped, they would believe her.</p>

Appendix J

Skewness Statistics for Disaggregated IRMA Questions

Descriptive Statistics

	N Statistic	Mean Statistic	Std. Deviation Statistic	Skewness	
				Statistic	Std. Error
IRMA1a	59	3.15	2.116	.516	.311
IRMA1b	59	3.14	1.833	.558	.311
IRMA1c	59	1.73	1.484	2.159	.311
IRMA2a	59	2.61	1.974	.888	.311
IRMA2b	59	2.53	2.020	1.072	.311
IRMA2c	59	1.44	1.071	3.471	.311
IRMA3a	59	1.42	.894	2.482	.311
IRMA3b	59	2.15	1.460	1.171	.311
IRMA3c	59	1.24	.625	3.290	.311
IRMA4a	59	2.07	1.413	1.510	.311
IRMA4b	59	2.20	1.730	1.412	.311
IRMA4c	59	2.14	1.727	1.551	.311
Valid N (listwise)	59				

Appendix K

Disaggregated IRMA Correlations (Pearson)

Correlations

		NormCategory	IRMA1a	IRMA1b	IRMA2a
NormCategory	Pearson Correlation	1	.073	.006	-.008
	Sig. (2-tailed)		.584	.965	.955
	N	59	59	59	59
IRMA1a	Pearson Correlation	.073	1	.675**	.460**
	Sig. (2-tailed)	.584		.000	.000
	N	59	59	59	59
IRMA1b	Pearson Correlation	.006	.675**	1	.596**
	Sig. (2-tailed)	.965	.000		.000
	N	59	59	59	59
IRMA2a	Pearson Correlation	-.008	.460**	.596**	1
	Sig. (2-tailed)	.955	.000	.000	
	N	59	59	59	59

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix L

Disaggregated IRMA Correlations (Spearman)

Correlations

		NormCategory	IRMA1c	IRMA2b
Spearman's rho	NormCategory	Correlation Coefficient	1.000	.088
		Sig. (2-tailed)	.	.507
		N	59	59
IRMA1c		Correlation Coefficient	.088	1.000
		Sig. (2-tailed)	.507	.003
		N	59	59
IRMA2b		Correlation Coefficient	.103	.385**
		Sig. (2-tailed)	.435	.003
		N	59	59
IRMA2c		Correlation Coefficient	-.064	.263*
		Sig. (2-tailed)	.628	.044
		N	59	59
IRMA3a		Correlation Coefficient	.029	.560**
		Sig. (2-tailed)	.826	.000
		N	59	59
IRMA3b		Correlation Coefficient	.096	.309*
		Sig. (2-tailed)	.470	.017
		N	59	59
IRMA3c		Correlation Coefficient	.016	.263*
		Sig. (2-tailed)	.905	.044
		N	59	59
IRMA4a		Correlation Coefficient	.300*	.683**
		Sig. (2-tailed)	.021	.000
		N	59	59
IRMA4b		Correlation Coefficient	.215	.575**
		Sig. (2-tailed)	.102	.000
		N	59	59
IRMA4c		Correlation Coefficient	.248	.609**
		Sig. (2-tailed)	.058	.000
		N	59	59