



Conformity to Masculine Norms and Attitudes Toward Sexual Behavior: A Study Among College Students Involved in Sport

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Conformity to masculine norms has been connected to high-risk behaviors among college students, including sexual behavior. Research suggests that sport participation reinforces masculinity and predicts acceptance of sexually aggressive attitudes and behaviors, which may be a precursor to sexual violence. However, little is known about conformity to masculine norms and sexual behavior within the context of sport. This study examined the association between conformity to masculine norms (i.e., dominance, success and winning, risk-taking, and violence) and attitudes toward sexual behavior. The final analyzed sample included a total of 547 undergraduate students who competed in collegiate or community-based sport. Results from the ordinary least squares regression analysis indicated participants with greater acceptance of dominance, risk-taking, and violence had greater attitudes toward sexual behavior. Males reported greater attitudes toward sexual behavior than females. Implications from this study underscore the need to promote positive masculinity and healthy sexual relationships with a unique subculture of college students.

Keywords: masculinity, sexual behavior, sexual violence, sport participation, college

Hook-up culture, or sexual behavior, has become engrained in the college student experience. The term ‘hooking up’ typically describes a casual, non-committed heterosexual encounter involving physical or sexual intimacy (Bogle, 2008). Research over the last two decades has shown that most students engage in sexual behavior during college (Garcia et al., 2012; Grello et al., 2003; Reese-Weber et al., 2020). A national study of college students from 19 universities found that 72% of participants reported engaging in at least one hook-up while in college (Hamilton & Armstrong, 2009). A small body of research has further indicated that sport participation is associated with greater sexual activity (Allison, 2016; Faurie et al., 2004; Nattiv & Puffer, 1991; Wetherill & Fromme, 2007). In fact, both male and female college students involved in sport engage in significantly more sexual activity compared to the general student body (Wetherill & Fromme, 2007). Yet there is a lack of literature that focuses on sexual behaviors of students involved in sport.

There are several public health concerns because of sexual behavior including sexually transmitted infections (STIs), unintended pregnancy, and emotional and psychological harm (Garcia et al., 2012). Of particular concern is the relationship between sexual behavior and sexual violence (Adams-Curtis & Forbes, 2004; Flack et al., 2007; Sutton & Simmons, 2015). The World Health Organization (2002) defines sexual violence as:

“Any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person’s sexuality using coercion, by any person regardless of their relationship to the victim, in any setting” (p. 149).

Sexual behavior is believed to be a risk factor to unwanted sexual intercourse and unwanted fondling, which disproportionately affects females (Flack et al., 2007). Males who endorse casual sex are more likely to use sexual aggression toward women (Yost & Zurbriggen, 2006). Mounting evidence suggests that sexual violence occurs within the hypermasculine sport environment (Milner & Baker, 2015; Brackenridge et al. 2008; Fasting et al., 2003; Leahy et al., 2002), and at times perpetrated by male athletes (Beaver, 2019; Crosset et al., 1995; Young et al., 2017). Findings from a recent study with male college students revealed that 46% engaged in sexually coercive behaviors, and more than half of those students participated in sport (Young et al., 2017). Identifying key characteristics of masculinity within student subcultures may better predict, and prevent, consequences of sexual behavior.

The goal of the present study was to examine the relationship between conformity to masculine norms and attitudes toward sexual behavior among college students involved in sport. More specifically, this study explored how certain characteristics of masculinity, including dominance, success and winning, risk-taking, and violence may be associated with attitudes toward sexual behavior. While engaging in sexual activity is a natural human behavior and normalized part of college culture, there may be risks involved that need to be acknowledged particularly in the context of sport. This study therefore aimed to fill a gap by not only expanding upon the lack of literature on sexual behaviors among students involved in sport, but also understanding how widely accepted norms within the sport culture influence their attitudes toward sexual behavior. Moreover, this research aligned with the Grand Challenges for Social Work to *Build Healthy Relationships to End Violence* (Barth et al., 2020), which is one of 12 large-scale challenges for social workers to further literature, build interdisciplinary

relationships, and initiate social change. Researching the masculine characteristics among an at-risk population will inform institutional policy and drive prevention efforts.

Hegemonic Masculinity and Sexual Scripting

As a social construct, masculinity differs across both societies and cultures (Connell, 2005; Kahn et al., 2011). Connell (2005) argues that there is not one type or form of masculinity, rather there are many different masculinities and each is associated with different positions of power. Traditionally, in Western societies, hegemonic manifestations of masculinity are most often valued. Connell and Messerschmidt (2005) described the concept of hegemonic masculinity as a practice and a way in which males position themselves to have collective dominance over females and people with other gender identities. For example, hegemonic masculinity is often expressed in subordination of females and marginalization of homosexual males (Totten, 2003) through economic and educational superiority (Travis & Leech, 2014), competitiveness and risk taking (Kahn et al., 2011), and demonstration of aggression and emotional restraint (McCormack, 2014). Ultimately, the concept of hegemonic masculinity is grounded in the adherence to oppressive sociocultural and sociopolitical norms that legitimize gender inequalities and is used to help explain how gendered stereotypes are produced and reproduced (Connell & Messerschmidt, 2005; Jewkes et al., 2015).

Similarly, sexual culture scripting posits that sexual behavior is socially constructed (Simon & Gagnon, 1986; Wiederman, 2015). Sexual scripts are schemas related to ideas about sexuality and are influenced by sociocultural and sociopolitical institutions, such as media, religion, and social norms. Thus, sexual scripts are “widely shared ideas about sexuality through which people learn what sex is, what is sexual, what is sexy, how to experience pleasure, and how to conduct oneself sexually” (Nagar, 2016, p. 1). From this perspective, sexual encounters are learned interactions, which follow predictable gender-based behavior that are carried out by both males and females (Frith & Kitzinger, 2001). Taken together, sexual scripts and hegemonic masculinity influence – and help to predict – what males and females expect in sexual and romantic relationships, as well as how males and females behave in intimate relationships. Therefore, hegemonic masculinity and sexual scripts may be important societal-level predictors of sexual behavior.

Sports, Sex, and Social Expectations

Within the context of sport, social learning theory is often used to describe the adherence to sociocultural norms. Cusimano et al. (2016) and Kreager (2007) posited that individual athletes learn values, attitudes, and behaviors related to interpersonal relations by observing their teammates’ modeling of norms and expectations. Thus, the underlying sociocultural norms of sport – which often value and reward aggressive/violent, hypermasculine behaviors – cannot be overlooked when examining social expectations (Newman et al., 2021). The overall institution of sport is a masculine domain that reproduces traditional masculine norms regardless of gender (Chalabaev et al., 2013). Females who participate in sport have been found to endorse higher rates of masculinity than females who do not participate in sport (Miller & Levy, 1996). In a more recent study, female professional athletes discussed how their athletic identity and discourse emulated traditional masculinity through their desire to succeed through power and competition (Meân & Kassing, 2008). Conformity to masculine norms may also look different

for diverse populations (Parent & Moradi, 2011). As explained by Gerdes and Levant (2018), the (mal)adaptiveness related to conformity to masculine norms may depend on an individual's connection to their racial or cultural identity. That said, scholars need to further explore demographic differences and social expectations in the context of sport.

Participants learn from a young age that success and winning are the ultimate goals of sport and, as such, are held as the normative expectation (Merkel, 2013). Within certain sports (e.g., contact sports, such as football), risk-taking and violence are not only the norm, but these behaviors are often rewarded (Fogel, 2011). Consequently, the association between success and winning as well as risk-taking and violent behaviors – both on and off the field – are of little surprise. Sociocultural norms surrounding hegemonic masculinity within particularly institutions and the expectations of how males and females believe they should interact in sexual relationships are, therefore, important constructs for understanding sexual behavior and risk factors of sexual violence.

Sport Participation and Sexual Behavior

Studies suggest that sport participation is associated with engagement in sexual behavior. Students involved in sport have been found to be more sexually active than those who do not (Allison, 2016; Wetherill & Fromme, 2007; Faurie et al., 2004; Nattiv & Puffer, 1991). In a study with college bound high school graduates, both males and females who participated in sport had significantly more sexual partners than their peers (Wetherill & Fromme, 2007). Similarly, findings from a study at a northwest university revealed that students who participated in sport had a higher number of sexual partners when compared to the general student body (Grossbard et al., 2007). Students who participate in sport are also more likely to engage risky sexual activity such as unprotected sex (Wetherill & Fromme, 2007; Nattiv & Puffer, 1991).

Although gender and college students' sexual behavior has been widely studied over the past few decades, this relationship has rarely been examined in the context of sport. Of these few studies, males involved in sport display higher levels of sexual activity than females involved in sport (Gage, 2008; Eitle & Eitle, 2002). Similarly, Faurie and colleagues (2004) discovered that college students in France who participated in sport had more sexual partners than their peers, with a larger effect size for males than females. The number of reported sexual partners was also higher for males than females (Faurie et al., 2004). Females involved in sport have been found to engage in less risky sexual activity than those who did not participate in sport; however, contracting a STI was higher for those who participated in sport (Savage & Holcomb, 1999). More recent studies show how the acceptance of the hook-up culture is giving rise to an increase of sexual activity for males and females. McGovern and Murray (2016) found that 84% of males and 71% of females who participated in sport reported having sexual intercourse within the past month. This study points to the changing contextual landscape and the need to further explore the intricacies of sexual behavior by gender.

Literature is also mixed as to whether the sport contact level factors into college student sexual behavior. Several studies document greater sexual aggression (Forbes et al., 2006) and sexual coercion (Gage, 2008) among college students who participate in contact sport than those who participate in non-contact sport. Other studies reject the notion that sport contact level is related to sexual aggression (Brown et al., 2002; Smith and Stewart, 2003). For example, while there were no significant differences between contact sport and non-contact sport, males who

were more competitive and winning-oriented reported being more sexually aggressive (Smith and Stewart, 2003). However, these studies do not explicitly capture sport participation and attitudes toward sexual behavior. Furthermore, recent scholarship has reclassified the sport contact level to better account for risk of injury based on the nature of each sport. The categories have been expanded to include contact, limited-contact, and non-contact sport (Rice, 2008). Thus, sport level contact warrants future research with regard to college student sexual behavior.

Conformity to Masculine Norms and Sexual Behavior in Sport

The relationship between conformity to masculine norms and sexual behavior is well-documented in the literature. Engaging in sexual activity reinforces masculinity, as it solidifies an individual's heterosexuality and boosts their social status (Currier, 2013; Kimmel, 2008; Poost, 2018). These sexual expectations may be heightened for those who participate in sport because of the hypermasculine sport culture that emphasizes *dominance, success and winning, risk-taking, and violence* (Murnen & Kohlman, 2007). One of the most commonly used validated measures of masculinity in the context of sport is the Conformity to Masculine Norms Inventory (CMNI), a scale designed to capture multifaceted domains of masculinity and associated high-risk behaviors, particularly in the realm of sexual attitudes and practices (Mahalik et al., 2003), including those listed above. The CMNI has been shown to have high reliability with samples of undergraduate students, and to be an appropriate tool for use with diverse racial, ethnic, and cultural backgrounds and sexual and gender identities (Kivisalu et al., 2015). In a study with males and females ranging in age from 18-83, males reliably scored higher on conformity to masculine norms (Parent & Smiler, 2013), lending credence to the power of gender role expectations to enforce conformity. In the same study, *winning, risk-taking, and violence* were all positively associated with scores on the *playboy* subscale for both male and female samples (Parent & Smiler, 2013). Previous research has also demonstrated the utility of examining these subscales as they relate to negative sexual behavior and sexual aggression. Mikorski and Szymanski (2017) found that the *playboy* and *violence* subscales of the CMNI were associated with higher levels of body evaluation of females by heterosexual males; they further observed a strong effect whereby high scores on these scales interacted with an attachment to abusive male peers that uniquely predicted the likelihood of males making unwanted sexual advances towards females. A content analysis of relevant literature using the CMNI revealed that higher scores on the *winning, dominance, violence, and playboy* subscales were all associated with higher levels of rape myth acceptance and sexually aggressive behavior, while *risk taking* was associated with sexual aggression only; these trends were obscured in analyses that only considered total scale score (Gerdes & Levant, 2018).

Although research is limited, there is a handful of evidence that documents how these distinct masculine traits are associated with sexual behavior in the context of sport. Smith and colleagues (2015) discovered that males who reported higher endorsement of traditional masculinity ideology had a greater likelihood to report sexual dominance, or feelings of control over one's partner that motivates their sexual behavior. Another small study with male undergraduate students found that those who are more competitive and win-oriented are more sexually aggressive (Smith & Stewart, 2003). College students involved in sport are more likely to engage in risky sexual behaviors than their peers, such as having more sexual partners and more unprotected sex (Nattiv & Puffer, 1991; Wetherill & Fromme, 2007). Conformity to masculine norms and sport participation has also been associated with negative outcomes,

including physical aggression (Merten, 2008; O'Brien et al., 2017) and sexual violence (Murnen & Kohlman, 2007; Smith & Stewart, 2003).

On the other hand, other studies ascertained that masculinity is not directly correlated with sexual behavior (Shafer et al., 2018) and disprove findings that typecast college students involved in sport as sexual aggressors (Humphrey & Kahn, 2000; Locke & Mahalik, 2005). Scholars posit that masculinity may be a multidimensional construct that intersects with multiple identities (Corprew & Mitchell, 2014; McGinley, 2013, Shafer et al., 2018). Thus, the complexity of masculine traits and attitudes toward sexual behaviors among student subcultures must be explored further.

Current Study

There is currently a lack of knowledge about the relationship between conformity to masculine norms and attitudes toward sexual behavior among college students involved in sport. College students who participate in sport are an important population of focus due to the high rates of sexual activity as compared to their peers (Wetherill & Fromme, 2007). Since conformity to masculine norms and sport participation have been found to be predictors of sexual violence perpetration (Murnen & Kohlman, 2007), it is important to recognize how masculine norms commonly accepted within the sport culture such as dominance, success and winning, risk-taking, and violence may be potential risk factors to consequences of sexual behavior. Identifying problematic attitudes and behaviors are critical for informing education and prevention that promote healthy relationships with a unique subculture of college students. Therefore, the current study examined whether conformity to masculine norms were associated with attitudes toward sexual behavior with a group of college students involved in collegiate or community sport. It was hypothesized that participants with a greater acceptance of dominance, success and winning, risk-taking, and violence would have greater attitudes toward sexual behavior.

Method

Procedures

Data for this study was drawn from the Athletic Involvement Study (Miller, 2006). Undergraduate students enrolled in seven different classes at a large university in the northeast were invited to complete a 45-minute anonymous questionnaire. Students received a monetary incentive or course credit for their participation. Approximately half of the questionnaires were administered in a classroom setting. The remaining participants were recruited through in-class announcements inviting them to e-mail the research team to indicate their interest. These participants were emailed a copy of the self-administered questionnaire and returned it to the research team as directed. Informed consent was secured from all participants and the study protocol was approved by the university's Institutional Review Board.

Participants

There were 795 students who completed the survey. Of the 795 participants, 621

identified that they participated in collegiate or community sport and were included in the current study. The majority of participants identified as male (56.7%). White students comprised the largest racial/ethnic group (69.9%), followed by Asian American or Pacific Islander (10.2%), Black or African American (8.4%), American Indian/Native American/Mixed Race/Other (11.4%). Participants ranged in age from 18-24 years, averaging 19.88 years old ($SD = 1.49$). Most participants reported participating in contact or limited-contact sports ($n = 405$, 65.2%) compared to those in non-contact sports ($n = 216$, 34.8%).

Measures

Conformity to Masculine Norms

The Conformity to Masculine Norms Inventory (CMNI) scale consists of 94 items that collectively measure endorsement of 11 normative messages about masculinity and high-risk behaviors related to masculine norms (Mahalik et al., 2003). For the purposes of this study, only five of the CMNI subscales were tested: dominance, success and winning, risk-taking, violence, and sexual behavior. Dominance was the first subscale which included 4-items such as, “I make sure people do as I say” ($\alpha = 0.68$). Of note, this subscale has substantially fewer items compared to the other included subscales; while this peculiarity has been noted previously (Owen, 2011), the original factor structure was retained for the purposes of this study. The 10-item success and winning subscale included items such as, “In general, I will do anything to win” ($\alpha = 0.80$). Risk-taking included items such as, “Taking dangerous risks helps me to prove myself” ($\alpha = 0.79$). The violence subscale included 8 items such as, “I like fighting” ($\alpha = 0.81$). The Playboy subscale measured attitudes toward sexual behavior with non-committed, multiple partners. The 12-item Playboy subscale included items such as, “If I could, I would frequently change sexual partners” and “Emotional involvement should be avoided when having sex” ($\alpha = 0.89$). Participants responded using a 4-point Likert scale ranging from 1 being *strongly disagree* to 4 being *strongly agree*. Several items are reverse coded. The question stems for each of the subscales were added together and recoded into a continuous variable, as higher scores indicated a greater acceptability of the corresponding masculine norms.

Control Variables

Control variables included age, gender, race, and sport contact level. Participants indicated their age with a range from 18 years old to 24 years or older. Gender was based on a gender binary category with 1) male and 2) female. Participants also specified their race by choosing 1) American Indian/Native American, 2) Asian American/Pacific Islander, 3) Black/African American, 4) White/Caucasian, 5) Mixed Race, or 6) Other. American Indian/Native American and Other were combined into one variable due to small response set. In analyses, the Race responses were dummy-coded using White/Caucasian as the reference group, to create dichotomous variables which could be included in correlation and regression analyses. Sport contact level was determined based on self-reported primary sport participation. Participants selected their primary sport from a list of 33 sports (with an open-ended option to write in a sport that was not listed). Primary sport was then recoded into a categorical variable with 3 response options: contact sport (e.g., football), limited-contact sport (e.g., baseball), and non-contact sport (e.g., tennis).

Analytic Strategy

All data were analyzed using Statistical Package for the Social Sciences (SPSS, version 26.0). Only participants with complete data were used in each of the specific analyses; 547 of the 621 eligible participants had complete data, for a total of 12.02% missing data. Continuous data were tested for normality before the analyses. Pearson's correlation coefficients (r_s) were used to examine associations between sexual behavior and the continuous variables. An ordinary least squares (OLS) regression model was used to determine whether conformity to masculine norms (dominance, success and winning, risk-taking, and violence) was associated with attitudes toward sexual behavior while controlling for age, gender, race, and sport contact level. The model did not violate any of the assumptions for OLS regressions (Ernst & Albers, 2017). In all cases, statistical significance was determined by $\alpha = 0.05$.

Results

Preliminary Analysis

Correlations between age, gender, the four dummy-coded race variables, level of contact, dominance, success and winning, risk-taking, violence, and sexual behavior are presented in Table 1. Dominance, risk-taking, success and winning, and violence were all positively and significantly related to attitudes toward sexual behavior. Additionally, dominance, success and winning, risk-taking, and violence were all positively and significantly correlated. Sport contact level also showed a positive correlation with non-relationship sexual behavior. The internal consistency estimates for all measures ranged from 0.68 to 0.89, indicating acceptable reliability.

Main Analysis

To test the main hypothesis, the OLS regression model assessed whether dominance, success and winning, risk-taking, and violence was associated with attitudes toward sexual behavior. In the adjusted model, approximately 30% of the variance in attitudes toward sexual behavior was explained by dominance, success and winning, violence, and risk-taking (Table 1). Male gender was significantly and positively associated with attitudes toward sexual behavior ($\beta = -4.55, p < 0.01$). Dominance, risk-taking, and violence were all significantly and positively associated with attitudes toward sexual behavior. However, success and winning did not show an effect on attitudes toward sexual behavior.

Discussion

This study measured conformity to masculine norms and attitudes toward sexual behavior among college students involved in sport. Based on the literature, it was hypothesized that college students who participate in sport and have a greater acceptance of masculine norms (i.e., dominance, success and winning, risk-taking, and violence) would have greater attitudes toward sexual behavior. As predicted, greater acceptance of dominance, risk-taking, and violence were significantly and positively associated with greater attitudes toward sexual behavior. This finding supports the earlier ideas of Messner (1994), who suggested sport has potential to foster hegemonic masculinity. Sport participation has not only been linked to more sexual partners and

increased risky sexual behaviors (Faurie et al., 2004; Habel et al., 2010), but also to sexual violence (Forbes et al., 2006; Gage, 2008; Humphrey & Kahn, 2000; Koss & Gaines, 1993).

Contrarily, success and winning was not associated with attitudes toward sexual behavior and may not translate as a risk-factor to sexual violence. This finding conflicts with previous research, in which the desire to win was correlated with a greater acceptance of dating violence (Merten, 2008; Smith & Stewart, 2003). Even though athletes have been overrepresented in the literature as perpetrators of sexual assault (Beaver, 2019; Crosset et al., 1995; Young et al., 2017), it is important to note that not all college students who participate in sport succumb to hegemonic masculinity. As a critique to hegemonic masculinity, scholars introduce the idea of multiple masculinities that cause individuals to accept or reject traditional masculine norms (Naess, 2001; Pascoe, 2003). According to McGinley (2013), masculinity is a social construction that largely depends on men's varying identities. There may be confounding sport-related identities that influence problematic attitudes or behaviors (Miller, 2009). For example, stronger identification with the role of an athlete has been associated with conformity to masculine norms (Steinfeldt & Steinfeldt, 2012) and negative outcomes like sexual violence perpetration (Harris, 2013). Thus, scholars may want to further study sport-related identities as a mediating or moderating factor between conformity to masculine norms and sexual behavior as a potential risk factor to sexual violence perpetration.

Not surprisingly, males endorsed greater attitudes toward sexual behavior than females. Several studies found that that norms of high-risk sexual behaviors are pervasive among males who participate in sport (Nattiv & Puffer, 1991; Wetherill & Fromme, 2007). These findings generate concern regarding the potential for males involved in sport to be more likely to engage in similarly aggressive, risky, or problematic sexual behaviors (Merten, 2008; Smith & Stewart, 2003; Smith et al., 2015; O'Brien et al., 2017) and higher propensity to perpetrate sexual violence (Murnen & Kohlman, 2007). Ultimately, findings from the current study lend credence to the belief that sport continues to perpetuate hegemonic masculinity in society (Connell, 2005).

Results indicated that there were no significant differences in attitudes toward sexual behavior based on sport level contact, which corresponds with past research (Brown et al., 2002; Smith & Stewart, 2003). This finding adds to the contested debate in the literature as to whether sport level contact is a predictor of sexual violence perpetration (Forbes et al., 2006; Gage, 2008) or not (Gidycz et al., 2007, Locke & Mahalik, 2005; Scholes-Balog et al., 2016). There were also no significant results based on age or race, which suggests that the hook-up culture may be pervasive in sport (Allison, 2016; Wetherill & Fromme, 2007; Faurie et al., 2004; Nattiv & Puffer, 1991) regardless of these demographic factors.

Implications for Social Work

This study has a number of implications for social workers aiming to promote healthy relationships to end violence. Findings indicate that college students involved in sport warrant more targeted education to curb hegemonic beliefs that may influence their sexual behaviors. College students who participate in school-affiliated varsity, recreational, or intramural sport programs should receive additional education on positive masculinity. Through gender-transformative efforts, or transforming genders norms and relations, participants learn how to challenge dominant messaging about masculine norms and deconstructing gender hierarchies (Flood, 2015). Educating college students about the heteronormative sport culture may increase their awareness about the ways in which sex, gender, and sexuality are constantly reinforced.

This, as a result, can negatively impact female students as well as lesbian, gay, bisexual, transgender, and queer (LGBTQ) students (Kettley-Linsell, 2020). Building safe physical and emotional spaces for college students involved in sport to reflect on gender norms and masculine ideologies are vital to dismantling hegemonic masculinity (Claussen, 2019). Positive role models, such as coaches, can also be instrumental in contesting traditional gender norms and changing cultural assumptions (Toomey & McGeorge, 2018; Miller et al., 2015).

Another recommended practice would be educating college students involved in sport on healthy relationships and safe sexual practices to reduce risky sexual behaviors and prevent sexual violence. As a consequence of the hook-up culture, college students are at risk for STIs, unintended pregnancy, and emotional and psychological harm (Garcia et al., 2012). In addition to health risks, the hook-up culture may lead to uncertainty around obtaining sexual consent. College students who participate in sport are more likely to misperceive consent than their student peers, which is especially true for males (McGovern & Murray, 2016). Since male college students who have a lack of comprehension around sexual consent are more likely to engage in sexually aggressive behavior (Warren et al., 2015), consent education is critical. Furthermore, research suggests that the hook-up culture predicts greater rape myth acceptances, particularly among male college students (Reling et al., 2018). Rape myths are false beliefs and stereotypes toward rape survivors and offenders (Burt, 1980) that ultimately perpetuate heteronormative sex scripts and normalize men's sexual aggression toward women (Reling et al., 2018). Males who conform to masculine norms are more likely to endorse rape myth acceptances and sexual aggressive behavior (Gerdes & Levant, 2018; Locke & Mahalik, 2005). When compared to the general college student population, rape myth acceptances are even higher for those who participate in sport (Navarro & Tewksbury, 2017; Young et al., 2017). Therefore, prevention education should not only raise awareness of safe sexual behavior, but also focus on sexual consent and reducing rape myth acceptances. By building interprofessional partnerships (Moore & Gummelt, 2019) with school-affiliated sport programs, social workers could collaborate with campus organizations including women's centers, Title IX offices, counseling services and health centers to design effective, comprehensive prevention education.

Finally, social workers could support higher education professionals and school-affiliated sport programs by developing and adopting clear, inclusive policies and resources. College students, in general, have low awareness of school policies and resources around sexual violence (McMahon & Stepleton, 2018). What's more, few school-affiliated sport programs embrace inclusive policies (Fink et al., 2012) and many college students who participate in sport hold neutral or negative attitudes about those policies (Atteberry-Ash & Woodford, 2017). The National Collegiate Athletic Association (NCAA) produced guidelines such as the *Sexual Violence Prevention: An Athletics Tool Kit for a Healthy and Safe Culture* (2019) and *Diversity Equity and Inclusion Review Framework* (2022). These resources offer policy recommendations and best practices to improve the campus climate. Establishing and enforcing such policies and resources may help nurture healthy masculinity and healthy relationships to create a culture free from violence.

Limitations and Future Directions

Despite this study's contribution to the literature, there were several limitations. First, there may have been self-selection bias for recipients who opted to complete the survey. Future studies would benefit from implementing probability sampling to address these sampling

concerns. Due to the sensitive nature of the survey questions, social desirability may have biased the results, as participants could have responded to questions more to present themselves more favorably. Further, the results cannot be generalizable to students in college sports, as the survey was distributed to one school in the northeast and included college students who participated in both collegiate and community sport. This study also did not examine attitudes across different gender identities or sexual preferences. Including more diverse student subcultures, including the LGBTQ community, could expand the utility of the conformity to masculine norms scale in future research and practice (Parent & Moradi, 2011). Researchers should seek a more diversified, representative sample of college students who participate in sport. Lastly, measures on sexual aggression or perpetration should be included in future surveys to determine specific pathways and risk factors for sexual violence.

Conclusion

This study found that college students involved in sport were more likely to endorse sexual behavior if they demonstrated greater acceptance of masculine norms, including dominance, risk-taking, and violence. Males were more likely to favor sexual behavior than females. Overall, this study answers a broader call by scholars who are seeking a greater understanding of masculinity in the institution of sport. Scholars have contended that minimizing these types of norms within sport can create a more positive and inclusive environment, especially for those who do not maintain a hypermasculine ideology (English, 2017). The current study also builds upon previous research connecting sport participation, masculinity and risk factors for sexual violence perpetration. By continuing to explore the relationship between conformity to masculine norms and attitudes toward sexual behavior in a sport-based context, researchers will be able to develop both a set of best practices and effective prevention education to promote positive masculinity and healthy relationships.

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+Note: Sport Contact Level was coded as contact sport (3), limited-contact sport (2), and non-contact sport (1).

Table 1.
Correlations (*N* = 547)

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	1.000											
2. Gender	-.09*	1.000										
3. Asian/Pacific Islander	.04	-.01	1.000									
4. Black/African American	.03	-.10**	-.08*	1.000								
5. Mixed Race	.01	.02	-.06	-.05	1.000							
6. American Indian/Alaskan Native/Other Race	.13**	-.05	-.09*	-.07*	-.05	1.000						
7. Sport Contact Level+	.04	-.38**	-.06	.13**	.08*	-.10**	1.000					
8. Dominance	.04	-.13**	-.05	.01	-.01	.01	.07*	1				
9. Success and Winning	.04	-.35**	-.06	.05	-.06	-.01	.21**	.36**	1			
10. Risk-Taking	-.01	-.25**	-.08*	-.10*	.05	-.04	.15**	.17**	.23**	1		
11. Violence	.05	-.41**	-.03	-.02	.03	-.03	.20*	.19**	.34**	.48**	1	
12. Sexual Behavior	.07**	-.45**	-.01	.12**	-.01	.04	.19**	.17**	.19**	.37**	.39**	1

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

Table 2.
 Conformity to masculine norms and attitudes toward sexual behavior (N=547)

Variables	Unstandardized coefficient		Standardized coefficient		<i>p</i> -value
	β	<i>SE</i>	Beta	<i>t</i>	
Age	.13	.17	.03	.78	.44
Asian/Pacific Islander	-4.27	.59	-.32	-7.29	.00*
Black/African American	.62	.86	.03	.72	.47
Mixed Race American	3.28	1.02	.12	3.22	.00*
Indian/Alaskan Native/Other Race	-.66	1.37	-.02	-.48	.63
Gender	1.14	.96	.04	1.19	.24
Sport Contact level	-.03	.33	-.01	-.08	.94
Dominance	.27	.13	.08	2.02	.04*
Success and Winning	-.10	.06	-.06	-1.52	.13
Risk-taking	.37	.07	.23	5.59	.00*
Violence	.28	.08	.16	3.62	.00*
Constant	8.10	4.06		1.99	.05*
R2	0.29				

* $p < 0.05$

Reference: Gender = Male

Reference: Race=White