

4-20-2020

Informing Sexual Assault Prevention with Student-Athletes: Measuring Bystander Intentions and Awareness of School Policies and Resources

Lorin Tredinnick

University of Connecticut - Storrs, lorin.tredinnick@uconn.edu

Follow this and additional works at: <https://opencommons.uconn.edu/dissertations>

Recommended Citation

Tredinnick, Lorin, "Informing Sexual Assault Prevention with Student-Athletes: Measuring Bystander Intentions and Awareness of School Policies and Resources" (2020). *Doctoral Dissertations*. 2451.
<https://opencommons.uconn.edu/dissertations/2451>

Informing Sexual Assault Prevention with Student-Athletes:
Measuring Bystander Intentions and Awareness of School Policies and Resources

Lorin Tredinnick, PhD

University of Connecticut, 2020

Student-athletes have been identified as an at-risk population for sexual assault victimization and perpetration. While sexual assault prevention has been effective in increasing student-athlete awareness and response to sexual assault, student-athletes are less likely to see the importance of sexual assault prevention compared to non-athletes. This dissertation seeks to understand student-athlete knowledge and attitudes toward sexual assault prevention. Using the three-article dissertation format, this research is divided into three empirical articles that examine the following: student-athlete barriers to respond to post-sexual assault as prosocial bystanders; student-athlete perceptions of the campus climate and their awareness of sexual assault policies and resources; and the role of college coaches in discussing sexual assault with their teams and promoting student-athletes to take action in campus sexual assault prevention as proactive bystanders. Data for Chapters Two and Three were collected from a cross-sectional web-based survey to five NCAA schools in the United States. In Chapter Four, data was collected from a larger online campus climate survey distributed to college students at a NCAA Division I school in the Northeast. Findings from this dissertation underscore the importance of implementing sexual assault prevention in intercollegiate athletics to promote the safety and well-being of student-athletes.

Keywords: sexual assault, sexual assault prevention, bystander intentions, awareness of school policies and resources, student-athletes, intercollegiate athletics

Informing Sexual Assault Prevention with Student-Athletes:
Measuring Bystander Intentions and Awareness of School Policies and Resources

Lorin Tredinnick

B.A., Rutgers, The State University of New Jersey, 2008

M.S.W., Rutgers, The State University of New Jersey, 2013

A Dissertation

Submitted in partial fulfillment of the requirements for completion of
the Degree of Doctor of Philosophy in Social Work,
at the University of Connecticut

2020

Copyright by

Lorin Tredinnick

2020

Acknowledgements

I would like to express sincere gratitude to my doctoral committee for all their support during this journey. To my chair, Dr. Cristina Wilson, thank you for keeping me focused and grounded. More importantly, thank you for being there to celebrate all my big and small wins, and for reminding me to laugh along the way. To Dr. Caitlin Elsaesser, thank you for your extraordinary mentorship as a social worker, researcher, and instructor. You truly enriched my experience at UConn. To Dr. Sarah McMahon, it was a privilege to finally work with you after all these years of knowing each other, especially given our similar research interests. Your passion for social work and making change is infectious.

Thank you to current and former faculty at UConn School of Social Work including Drs. S. Megan Berthold, Michael Fendrich, Robert Fisher, Ann Marie Garran, Alex Gitterman, Kathryn Libal, Hsiu-Ju Lin, Lisa Werkmeister Rozas, Rebecca Thomas, and Miriam Valdovinos. A special thanks to Drs. Nina Heller and Scott Harding for giving me the opportunity to further my education and professional development.

I am also very appreciative of my experience working as an Academic Mentor with the UConn Student-Athlete Success Program. Thank you to the staff and student-athletes who reaffirmed my passion for student-athlete development. Go Huskies!

This dissertation would not have been possible without the financial support from the National Collegiate Athletic Association (NCAA) Graduate Student Research Grant. Thank you to the NCAA Research Committee for putting me in contact with prospective athletic departments to participate in my research project, and to those athletic departments who distributed my survey link to their student-athletes. Presenting my dissertation results to the

Committee at the NCAA Headquarters in Indianapolis, IN last fall was, by far, the highlight of my career.

I would be remiss if I did not mention two very important people that I met early on in my social work career: Anthony Mack and Theresa McCutcheon. I would not be who I am today without you pushing me to reach my full potential both personally and professionally. I hope our paths cross again in the future.

I would also like to give a shout out to my colleagues and friends with the Alliance of Social Workers in Sports (ASWIS). We have made tremendous progress over the last few years. Here's to the future of sports social work!

Last, but certainly not least, I would like to thank my family. To my husband, for always believing in me and encouraging me to step outside of my comfort zone. To my parents, especially my mom and best friend, for cheering me on every step of the way. To my grandma, the strongest woman I know, for inspiring me every day. And to my siblings, I never felt closer to you than I did during these last five years, even though we lived 250 miles apart. I love you.

APPROVAL PAGE

Doctor of Philosophy Dissertation

Informing Sexual Assault Prevention with Student-Athletes:
Measuring Bystander Intentions and Awareness of School Policies and Resources

Presented by

Lorin Tredinnick, MSW, LSW

Major Advisor: _____

Cristina Mogro-Wilson, PhD

Associate Advisor: _____

Caitlin Elsaesser, PhD

Associate Advisor: _____

Sarah McMahon, PhD

University of Connecticut

2020

Table of Contents

Copyright	ii
Acknowledgements	iii
Approval Page	v
Table of Contents	vi
List of Tables and Figures	viii
Chapter One: Introduction/Overview	1
Rationale.....	1
Theoretical Foundation	7
Review of Articles.....	11
Conclusion.....	14
References	15
Chapter Two: Student-Athlete Barriers to Bystander Intentions: Assessing Gender Role Conflict and Opportunities to Respond to Post-Sexual Assault	24
Abstract	24
Introduction	25
Bystander Intentions to Respond to Post-Sexual Assault	28
Gender Role Conflict	30
Method	34
Results	39
Discussion	44
Implications.....	48
Limitations	50
Conclusion.....	52
References	53
Chapter Three: Sexual Assault Prevention Education with Student-Athletes: Exploring Perceptions of Campus Climate and Awareness of Sexual Assault Policies and Resources 64	
Introduction	65
Current Study	73
Method	74
Results	78

Discussion	80
Implications and Future Directions	83
References	87
Chapter Four: College Coaches' Influence on Student-Athlete Engagement in Sexual Violence Prevention: Promoting Readiness to Help and Awareness of Campus Resources	96
Abstract	96
Student-Athletes and Sexual Violence	98
The Role of Coaches	100
Readiness to Help and Awareness of Campus Resources.....	104
Methods.....	108
Results	110
Discussion	113
References	117
Chapter Five: Conclusion and Future Directions.....	127
Major Findings	127
Strengths and Limitations.....	130
Implications for Social Work	132
Future Research.....	139
Conclusions	141
References	142
Appendix.....	145

List of Tables and Figures

Chapter Two

Table 1. Student-Athlete Demographics.....	35
Table 2. Mean Differences Between Gender and Gender Role Conflict.....	40
Table 3. Main Effects of Gender Role Conflict and Intentions to Respond to Post-Sexual Assault	42
Table 4. Interaction Effects of Gender Role Conflict and Intentions to Respond to Post-Sexual Assault.....	42
Figure 1. Moderating Effect of Gender on Conflicts between Work and Leisure-Family Relations	42

Chapter Three

Table 1. Student-Athlete Demographics.....	75
Table 2. Correlations.....	79
Table 3. Campus Climate and Awareness of Sexual Assault Policies and Resources	79

Chapter Four

Table 1. Characteristics of Student-Athletes (n=175).....	111
Table 2. Coach Discussion and Student-Athlete Engagement in Sexual Violence Prevention..	112

Chapter One: Introduction/Overview

Rationale

The prevalence of sexual assault on college campuses remains a pressing public health concern. Sexual assault is defined as any nonconsensual sexual act per Federal, tribal, or State law, including when the victim lacks capacity to consent (U.S. Department of Justice, 2019). Incidents of campus sexual assault average around 11% nationwide, and disproportionately affect female undergraduate students (Cantor et al., 2017; Krebs et al., 2016). Sexual assault victimization has been linked to mental health issues such as post-traumatic stress disorder (Xu et al., 2013), major depressive episodes (Zinzow et al., 2010), substance use, and suicidal ideation (Campbell et al., 2009). Connecting survivors to sexual assault services on campus is of paramount importance to address mental health, safety, healthcare, and legal concerns (Macy et al., 2010). Despite the growing availability of these campus resources, many survivors do not feel it is important enough to report incidents of sexual assault to campus authorities or seek assistance from campus resources (Walsh et al., 2010). Research has found that sexual assault is largely unreported to professional helpers and campus authorities (Cantor et al., 2017; Sinozich & Langton, 2014; White et al., 2015). College students who have been victimized by sexual assault are more likely to disclose to family or friends rather than professional authorities (Banyard et al., 2010; Dworkin et al., 2016; Sabina & Ho, 2014).

In order to address issues of underreporting and better tend to the needs of survivors, many colleges and universities have implemented sexual assault prevention programs. The White House Task Force to Protect Students from Sexual Assault (2014) encourages institutions of higher education to a) strengthen student knowledge of sexual assault and b) empower bystander intervention opportunities. Through sexual assault prevention, students are taught to recognize

sexual assault as a problem on campus and how to respond if an incident occurs to themselves or their peers (Amar et al., 2014; Kafonek & Richards, 2017). One example of sexual assault prevention is bystander intervention education. Bystander intervention education has been identified as a promising strategy to empower college students to intervene as prosocial bystanders before, during, or after sexual assault (White House Task Force to Protect Students From Sexual Assault, 2014). Prosocial bystanders can intervene in situations where they see that the victim is at-risk for harm preceding the sexual assault, hear or see the victim crying for help during sexual assault, or help survivors access campus resources or confront known perpetrators after the sexual assault occurs (McMahon & Banyard, 2012). Bystanders can also take a proactive stance to sexual assault prevention in which there is no perceived risk of harm to potential victims. Proactive bystanders attempt to shift social norms to create a community that does not tolerate violence (McMahon & Banyard, 2012) through advancing individual knowledge and skills, promoting community education, educating providers, building coalitions and networks, changing organizational practices, and influencing policy (Cohen & Swift, 1999).

Despite sexual assault prevention efforts, there still seems to be a lack of student awareness of school sexual assault policies and available resources (Walsh et al., 2010; McMahon & Stepleton, 2018) and perceived barriers that prevent students from responding to sexual assault (Yule & Grych, 2017; Bennett et al., 2014). Research suggests that college students' knowledge and attitudes toward sexual assault prevention are strongly influenced by one's confidence or responsibility to intervene as a prosocial bystander to sexual assault (Latane & Darley, 1970; Burn, 2009), perceptions of the campus climate regarding sexual assault (Krivoshey et al., 2013; Zinzow & Thompson, 2011; Hayes-Smith & Levett, 2010), and engagement of campus staff in sexual assault prevention (Kafonek & Richards, 2017). More

research is needed to determine how these micro and macro factors may be associated with student's knowledge and attitudes to prevent sexual assault.

There has been a call for research to identify differences among sub-populations of college students to improve the efficacy of sexual assault prevention with various campus communities, including groups like student-athletes (McMahon, 2015). While less studied, students who participate in sports, especially females, may be at greater risk of experiencing sexual assault than those who do not participate in sports (Milner & Baker, 2017). Studies suggest that male authority figures to female students are often reported as perpetrators of sexual harassment or sexual assault, particularly those in the context of sports (Fasting et al., 2003; Brackenridge et al. 2008). Male student-athletes are also overrepresented in scholarly research as perpetrators of sexual assault (Binder, 2001; Crosset et al., 1995; Young et al., 2016). Since student-athletes may be an at-risk population to sexual assault victimization and perpetration, it is imperative to engage student-athletes in sexual assault prevention.

There is a small body of research on sexual assault prevention with student-athletes. Student-athletes who participate in sexual assault prevention demonstrate increased acknowledgment of sexual assault as a problem on campus, greater awareness of school sexual assault policies and resources, and expanded skillset to respond to sexual assault (Morean et al, 2018). However, student-athletes are less likely to see the importance of sexual assault prevention compared to non-athletes (Jozkowski et al., 2015). These findings suggest that more research should be conducted to improve sexual assault prevention with student-athletes. To address gaps in the literature, this dissertation seeks to identify student-athlete barriers to respond to post-sexual assault as prosocial bystanders, examine student-athlete perceptions of the campus climate and their awareness of sexual assault policies and resources, and explore college

coaches' influence on promoting student-athlete proactive bystander opportunities to take action in campus sexual assault prevention. Due to the lack of research and resources tailored specifically to address sexual assault in intercollegiate athletics, this research may help foster student-athlete safety and well-being.

Barriers to Respond to Post-Sexual Assault as Prosocial Bystanders

Despite the wide use of bystander intervention trainings to prevent campus sexual assault, there are many barriers to intervening as a prosocial bystander after a sexual assault occurs. These barriers include failure to notice, failure to identify the situation as high-risk, failure to take responsibility for the intervention, failure to intervene due to skills deficit, and failure to intervene due to audience inhibition (Latane and Darley, 1970). These barriers are persistent among college students (Yule & Grych, 2017; Bennett et al., 2014, Burn, 2009). For student-athletes, barriers to bystander intervention can include lack of knowledge about what constitutes sexual assault, lack of skills to intervene in risky situations, and the type of relationship with those involved (McMahon & Farmer, 2009; Exner-Cortens & Cummings, 2017). Studies indicate that there may be context specific barriers in the sports culture that prevents student-athletes from intervening as prosocial bystanders to sexual assault including fear of showing weakness or disrupting the team dynamic (McMahon, 2007; McGovern & Murray, 2016; Corboz et al., 2016; McMahon & Farmer, 2009).

Gender role conflict (GRC) has been raised as barrier to bystander intervention among student-athletes due to the masculine norms that pervade sports culture for both men and women athletes. GRC is a theoretical construct that measures how psychological or behavioral issues are rooted in socialized gender norms in masculine contexts (O'Neil et al., 1986). Results from qualitative studies indicate that masculine attitudes and behaviors within intercollegiate athletics

may inhibit student-athlete intentions to intervene as a prosocial bystander to sexual assault, such as victim-blaming, perceived invincibility (McMahon, 2007), fear of displaying weakness, or affecting the team dynamic (McGovern & Murray, 2016). Although these studies underscore GRC as a potential barrier to bystander intervention, more research is needed to explicitly measure GRC and the athletic experience (O'Neil, 2015). To date, research has not explored the extent to which student-athletes experience GRC and how GRC may be associated with intentions to respond as a bystander post-sexual assault.

Perceptions of the Campus Climate on Awareness of Sexual Assault Policies and Resources

College students believe that their knowledge of available sexual assault resources on campus is largely influenced by perceptions of the campus climate to address sexual assault (Garcia et al., 2012). However, there seems to be a lack of student awareness of school sexual assault policies and resources overall (McMahon & Stepleton, 2018; Walsh et al., 2010). Student awareness of school sexual assault policies and resources may be related to macro factors such as participation in sexual assault prevention trainings (Hayes-Smith & Levett, 2010), the institutional response to allegations of sexual assault, and confidence in campus staff to respond to incidents of sexual assault (Cantor et al., 2017; Sable et al., 2006; Zinzow & Thompson, 2011). Emerging research also finds that perceptions of the campus climate are influenced by structural forms of oppression and privilege, such as race, ethnicity, and gender (Worthen, & Wallace, 2017). Few studies explore the campus climate in relation to sexual assault with at-risk populations, like student-athletes.

Student-athletes who participate in sexual assault prevention show increased awareness of sexual assault policies and resources (Morean et al., 2018). While the student-athlete experience is also enhanced through positive perceptions of the campus climate and interactions

with athletic staff (Hoffman et al., 2016; Rankin et al., 2016), the student-athlete experience in relation to the campus climate is understudied. Prior to the 2017 NCAA Board of Governors Policy on Campus Sexual Violence that mandates annual sexual assault prevention training with student-athletes (NCAA Board of Governors, 2018), few colleges and universities offered targeted sexual assault prevention to student-athletes (Amar et al., 2014; United States Senate, 2014). Furthermore, research is limited on the ways in which institutions and campus staff respond to allegations of sexual assault in the context of sport (Mountjoy et al., 2016; Scales, 2009; Spies, 2006). Focusing on student-athlete perceptions of the campus climate and their awareness of sexual assault policies and resources is valuable for building a community-wide effort to reduce campus sexual assault.

College Coaches' Influence on Engagement in Sexual Assault Prevention

Increasing an individual's readiness to help and awareness of campus resources may elicit one's engagement in sexual assault prevention as a proactive bystander. Readiness to help determines a person's understanding and motivation for engaging in prevention work, which ranges from their awareness of or denial of the problem to their intent to take action (Banyard et al., 2010). In addition to building one's readiness to help, proactive bystanders need to be aware of the variety of sexual assault resources on campus in the event something happens to themselves or their peers. However, many college students are not aware of available sexual assault resources on campus (Burgess-Proctor et al., 2016; Walsh et al., 2010). To improve student engagement in sexual assault prevention on campus, institutions of higher education are enlisting the help of campus leaders and staff such as law enforcement, staff, and faculty (Kafonek & Richards, 2017). Those in leadership positions may positively impact students'

attitudes and behaviors to serve as proactive bystanders to sexual assault (Banyard 2014; McMahon, 2015).

As well-respected leaders on campus, coaches have a profound impact on their student-athletes' actions inside and outside of sport. Few studies document the influence of coaches on student-athlete bystander behaviors and engagement in sexual violence prevention efforts on campus. Coaches have been found to influence their athlete's willingness to intervene as a bystander to gender-based violence (Lyndon et al., 2011; Kroshus et al., 2018) and sexual assault (Miller et al., 2013; McMahon, 2009). More research is needed to understand the role of college coaches in promoting their student-athletes' readiness to help and awareness of campus resources to take action as proactive bystanders. Therefore, college coaches may be in a unique position to discuss the issue of sexual assault with their student-athletes to influence student-athlete engagement in campus sexual assault prevention.

Theoretical Foundation

The following chapters utilize two theoretical models to inform sexual assault prevention literature with student-athletes. Chapter Two uses gender role conflict theory to conceptualize potential barriers to responding to post-sexual assault as a prosocial bystander. Chapters Three and Four utilize the socio-ecological model to theorize how macro level forces may influence student-athlete knowledge of sexual assault prevention and attitudes toward taking action as proactive bystanders. More specifically, Chapter Three examines the influence of the campus climate response to addressing sexual assault on student-athlete awareness of sexual assault policies and resources. Chapter Four assesses the role of college coaches in discussing sexual assault with their student-athletes to promote readiness to help and awareness of campus resources to engage in sexual assault prevention on campus. More details are outlined below.

Gender Role Conflict Theory

Gender role conflict theory has been widely used in the social sciences over the last 35 years (O'Neil, 2015). Gender role conflict theory is defined as a psychological state in which socialized gender roles result in negative consequences to the person or others, including personal restriction, devaluation, or violation of others or oneself (O'Neil 2008, 2015). Personal restriction confines a person to stereotypical and restrictive norms as a result of traditional gender roles. Devaluations are negative critiques of an individual who is conforming to, deviating from, or violating stereotypical gender norms that often make one feel less inferior. Lastly, violations ensue when one harms themselves or others (O'Neil, 2015). Taken together, rigid gender roles may limit an individual's personal and interpersonal experiences (O'Neil, 2015).

Gender role conflict theory is made up of four main subconstructs: *success, power, and competition; restrictive emotionality; restrictive affectionate behavior; and conflicts between work and leisure-family relations* (O'Neil, 2008). *Success, power, and competition* is defined as an individual's attitudes toward personal success that are achieved through competition and power. *Restrictive emotionality* represents an individual's fears and restrictions in regard to expressing their personal feelings and emotions. *Restrictive affectionate behavior* is described as an individual's inhibitions to express feelings or thoughts with others of the same gender and difficulty touching others of the same gender. *Conflicts between work and leisure-family relations* encapsulates an individual's inability to balance work, school, and family relationships which may lead to health problems, overwork, stress, and a lack of leisure and relaxation (O'Neil, 2008). These subconstructs are measured by the GRC scale, which strengthens the theoretical foundation of GRC.

Chapter Two uses the gender role conflict theory to conceptualize potential barriers for student-athletes to intervene as prosocial bystanders to post-sexual assault as a result of the masculine norms of the sport culture. Even though studies suggest that athletes experience greater GRC than non-athletes (Ramaeker & Petrie, 2019; Daltry, 2013), GRC has seldom been studied with the student-athlete population. It is possible that student-athletes may experience GRC due to the hypermasculinity of the sports culture. Both male and female student-athletes may face pressure to exhibit masculine gender norms within the context of sport. While male student-athletes are expected to adhere to traditional male roles, female student-athletes may be affected by patriarchal norms that cause GRC (O'Neil, 2015). As a consequence to living out these masculine characteristics, student-athletes may fail to intervene as prosocial bystanders in situations involving peers who may be survivors or suspected perpetrators of sexual assault. GRC may transpire as fear of overstepping boundaries, being perceived as weak, disloyalty to a teammate, or disrupting the team dynamic (McMahon, 2007; McGovern & Murray, 2016; Corboz et al., 2016). GRC may also create missed opportunities for passive bystanders, as peer survivors of sexual assault often do not seek help from professionals (Walsh et al., 2010) and perpetrators may become repeat offenders (Zinzow & Thompson, 2015). More research is vital to understanding the context in which GRC occurs and how it affects different populations (O'Neil, 2008), especially as it relates to addressing sexual assault in intercollegiate athletics.

Social-Ecological Model

The socio-ecological model can be used as a framework to implement sexual assault prevention on college campuses. Bronfenbrenner (1977) postulated that there is an interplay between individuals and their surrounding environments which influence human development. The socio-ecological model was later adapted in health fields to highlight how health is affected

by the interaction between the individual, community, and environment compounded by physical, social, and political factors (Kilanowski, 2017). The World Health Organization (WHO) and the Centers for Disease and Control and Prevention (CDC) propose using the socio-ecological model for violence prevention, including sexual assault prevention. The WHO recognizes that the causes of violence are complex and multi-dimensional, and thus violence prevention is more effective by reaching different levels at the same time (Krug et al., 2002). Casey and Lindhorst (2009) believe the socio-ecological model can enhance sexual assault prevention by engaging diverse peer networks and communities.

Sexual assault prevention utilizes a multi-level approach at the individual, relationship, community, and societal levels to address various factors that put people at risk for experiencing or perpetrating violence (Dahlberg and Krug 2002). The CDC breaks down these four facets to sexual assault prevention (DeGue, 2014). At the individual level, students learn about the prevalence of campus sexual assault and the skills they need to respond to sexual assault before, during, or after an incident occurs. At the relationship level, students will be more likely respond to sexual assault if they are part of a supportive social network where friends or family members promote engagement in sexual assault prevention. Sexual assault prevention can also be promoted at the community level, whereby organizations create policies that not only encourage students to take action, but also offer programs and resources to support survivors of sexual assault. Finally, building advocacy and legislation to promote a more positive response to sexual assault at the societal level will influence a positive change in social norms and expectations for acceptable behavior (DeGue, 2014; Tabachnick, 2008). College students will be more likely to engage in sexual assault prevention if they are positively influenced by their peers, professors, coaches, and administrative leaders in their campus communities.

Chapters Three and Four use the socio-ecological model to describe how institutions of higher education can help build a community response to sexual assault through sexual assault prevention. Scholars recommend exploring the ways in which those in leadership positions can help raise awareness of sexual assault and influence how students respond to incidents of sexual assault along the continuum of sexual violence (Banyard 2014; McMahon 2015). Campus staff such as police, athletic staff, or administrators may provide leadership to influence community norms to reduce sexual assault. Chapter Three uses the socio-ecological model to analyze how the campus climate, including participation in sexual assault prevention, perceptions of campus staff, and perception of institutional response to sexual assault, influences student-athletes' awareness of sexual assault policies and resources. Institutions of higher education may be more effective in promoting sexual assault prevention by delivering consistent messaging across multiple levels of the campus community. Chapter Four explores the role of college coaches in discussing sexual assault to promote student-athlete's readiness to help and awareness of campus resources. As well-respected leaders on campus, coaches may have the ability to influence individual student-athletes, teams, the athletic community, as well as the campus-wide community. Coaches may be a valuable resource to student-athletes by helping their teams understand how to identify incidents of sexual assault and where they can access available services on campus. This, as a result, may promote proactive bystander opportunities to engage in campus sexual assault prevention.

Review of Articles

This dissertation follows the three-article format to explore sexual assault prevention with student-athletes, who are often overlooked as a vulnerable group of college students. Chapter Two and Three are based off of data collected from a cross-sectional web-based survey that was

distributed to student-athletes across five NCAA schools across the United States. The five schools included three Division I programs, one Division II, and one Division III. The questionnaire aimed to understand barriers to intervening as a prosocial bystander in the context of micro (gender role conflict) and macro forces (campus climate). Using convenience and quota sampling, data was collected between March and September 2019. Participants were given a \$10 Amazon e-gift card for completing the survey. This project was funded by the NCAA Graduate Student Research Grant. Chapter Four utilized data from a larger online campus climate survey distributed to college students at a NCAA Division I school in the Northeast. The survey was distributed in fall 2014 and asked about student attitudes, behaviors, and experiences in relation to sexual assault. Data was filtered to include only those participants who self-identified as student-athletes. These studies are incredibly timely, as the NCAA has been improving policy to better address sexual assault in intercollegiate athletics.

Chapter Two focuses on GRC as a potential barrier for student-athletes to respond to post-sexual assault as prosocial bystanders. This study helps fill a gap by shining light on specific barriers to student-athlete bystander intentions which have not yet been explored. More specifically, this study sought to describe the extent of GRC among student-athletes and examine whether GRC may inhibit intentions to respond to post-sexual assault. The total sample included 300 student-athletes who completed an anonymous web-based survey that measured GRC and intentions to respond to post-sexual assault. The hypotheses explored gender differences between GRC scores, whether GRC was associated with intentions to respond to post-sexual assault, and how the relation between GRC and intentions to respond to post-sexual assault was moderated by gender, race, ethnicity, type of sport, and division. Implications for addressing student-athlete

health and wellness and improving bystander intervention with the student-population are further discussed in this chapter.

Chapter Three looks at how the campus climate impacts student-athlete awareness of sexual assault policies and resources. The purpose of this study was to examine how macro factors including participation in sexual assault prevention, perceptions of the institutional response to addressing sexual assault, and perceptions in campus staff to respond to incidents of sexual assault (i.e. campus police, athletic staff, and leadership) were associated with awareness of sexual assault policies and resources. There was a total of 308 student-athletes who participated in the study. It was hypothesized that student-athletes who participated in sexual assault prevention, had more positive perceptions of the institutional response, and more positive perceptions of campus staff (i.e. campus police, athletic staff, and leadership staff) would have a greater awareness of sexual assault policies and resources after controlling for race, ethnicity, and gender. Implications are discussed on the ways in which institutions of higher education can build a positive campus climate by delivering consistent messaging and engaging campus staff in sexual assault prevention education.

Chapter Four fills a gap in the literature by exploring the influence of college coaches in leading discussions with student-athletes around sexual violence to motivate proactive bystander opportunities to engage in sexual violence prevention on campus. The aim of this study was to examine the influence of college coaches in promoting readiness to help and awareness of campus resources by discussing sexual violence with their student-athletes. Gender differences between student-athletes who did and did not discuss sexual violence with their coach was also assessed. Participants were entered into drawings for cash prizes ranging from \$150 to \$300 as compensation for their time to take the survey. Of the 11,738 study participants who completed

the online survey, there were 175 self-identified student-athletes who responded to the question regarding coach discussion of sexual violence. Implications highlight the influential role of coaches in discussing sexual assault with their student-athletes and the importance of being actively involved in sexual assault prevention as proactive bystanders.

Conclusion

Improving sexual assault prevention with at-risk populations like student-athletes is imperative to not only protect the health and safety of student-athletes, but to also build a community response to reduce sexual assault. However, few studies focus on the contextual factors that influence student-athletes' knowledge and attitudes to prevent sexual assault. The following chapters seek to better understand the current state of sexual assault prevention with NCAA student-athletes, particularly as it relates to their intentions to prevent sexual assault, awareness of sexual assault policies and resources, and readiness to change. Implications to social work practice, policy, and research will be discussed in Chapter Five.

References

- Amar, A.F., Strout, T.D., Simpson, S., Cardiello, M., & Beckford, S. (2014). Administrator's perceptions of college campus protocols, response, and student prevention efforts for sexual assault. *Violence and Victims, 29*(4), 579-593.
- Banyard, V. (2014). Improving college campus-based prevention of violence against women: A strategic plan for research built on multipronged practices and policies. *Trauma, Violence, & Abuse, 15*(4), 339-351.
- Banyard, V.L., Eckstein, R.P., & Moynihan, M.M. (2010). Sexual violence prevention: The role of stages of change. *Journal of Interpersonal Violence 25*(1), 111-125.
- Banyard, V., Moynihan, M., & Crossman, M. (2009). Reducing sexual violence on campus: The role of student leaders as empowered bystanders. *Journal of College Student Development, 50*(4), 446-457.
- Banyard, V., Moynihan, M., Walsh, W., Cohn, E., & Ward, S. (2010). Friends of survivors. *Journal of Interpersonal Violence, 25*(2), 242-256.
- Bennett, S., Banyard, V., & Garnhart, L. (2014). To act or not to act, that is the question? Barriers and facilitators of bystander intervention. *Journal of Interpersonal Violence, 29*(3), 476-496.
- Binder, R. (2001). Changing a culture: Sexual assault prevention in the fraternity and sorority community. In A. J. Ottens & K. Hotelling (Eds.), *Sexual violence on campus: Policies, programs, and perspectives* (pp. 98–119). New York: Springer Publishing.
- Brackenridge, Celia H., Daz Bishopp, Sybille Moussalli, and James Tapp. 2008. "The Characteristics of Sexual Abuse in Sport: A Multidimensional Scaling Analysis of Events Described in Media Reports." *International Journal of Sport and Exercise Psychology 6*,

(4): 385-406.

Burgess-Proctor, A., Pickett, S., Parkhill, M., Hamill, T., Kirwan, M., & Kozak, A., (2016).

College women's perceptions of and inclination to use campus sexual assault resources: Comparing the views of students with and without sexual victimization histories. *Criminal Justice Review*, 41(2), 204-218.

Burn, S. (2009). A situational model of sexual assault prevention through bystander intervention.

Sex Roles, 60(11), 779-792.

Campbell, R., Dworkin, E. R., & Cabral, G. (2009). An ecological model of the impact of sexual

assault on women's mental health. *Trauma, Violence & Abuse*, 10 (3), 225–246

Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2017).

Report on the AAU campus climate survey on sexual assault and sexual misconduct.

Rockville, MD: The Association of American Universities.

Casey, E., & Lindhorst, T. (2009). Toward a multi-level, ecological approach to the primary

prevention of sexual assault: Prevention in peer and community contexts. *Trauma, Violence, & Abuse*, 10(2), 91-114.

Cohen, L., & Swift, S. (1999). The spectrum of prevention: Developing a comprehensive

approach to injury prevention. *Injury Prevention*, 5, 203-207.

Corboz, J., Flood, M., & Dyson, S. (2016). Challenges of bystander intervention in male-

dominated professional sport: Lessons from the Australian Football League. *Violence Against Women*, 22(3), 324-343.

Crosset, T. W., Benedict, J. R., & McDonald, M. A. (1995). Male student athletes reported for

sexual assault: A survey of campus police departments and judicial affairs offices.

Journal of Sport and Social Issues, 19, 126–140.

- Dahlberg, L.L., & Krug, E.G. (2002). Violence – a global public health problem. In: E.G. Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, & R. Lozano (Eds.), *World Report on Violence and Health* (pp. 3-21). Geneva, Switzerland: World Health Organization.
- Daltry, R. (2013). The impact of gender role conflict on the quality of life in female athletes. *The International Journal of Sport and Society*, 3(2), 49-65.
- DeLong, S., Graham, L., Magee, E., Treves-Kagan, S., Gray, C., McClay, A., . . . Reidy, D. (2018). Starting the conversation: Are campus sexual assault policies related to the prevalence of campus sexual assault? *Journal of Interpersonal Violence*, 33(21), 3315-3343.
- DeGue, Sarah. 2014. "Preventing Sexual Violence on College Campuses: Lessons from Research and Practice." Accessed 26 January 2019 https://www.nccpsafety.org/assets/files/library/Preventing_Sexual_Violence_on_College_Campuses.pdf
- Dworkin, E., Pittenger, S., & Allen, N. (2016). Disclosing sexual assault within social networks: A mixed-method investigation. *American Journal of Community Psychology*, 57(1-2), 216-228.
- Exner-Cortens, D. & Cummings, N. (2017). Bystander-based sexual violence prevention with college athletes: A pilot randomized trial. *Journal of Interpersonal Violence*, 1-24.
- Fasting, K., Brackenridge, C.H., & Sundgot-Borgen, J. (2003). Experiences of sexual harassment and abuse amongst Norwegian elite female athletes and non-athletes. *Research Quarterly for Exercise and Sport*, 74(1), 84-97.
- Garcia, C. M., Lechner, K. E., Frerich, E. A., Lust, K. A., & Eisenberg, M. E. (2012). Preventing sexual violence instead of just responding to it: Students' perceptions of sexual violence resources on campus. *Journal of Forensic Nursing*, 8, 61-71

- Hayes-Smith, R., & Levett, L. (2010). Student perceptions of sexual assault resources and prevalence of rape myth attitudes. *Feminist Criminology*, 5(4), 335-354.
- Hoffman, J.L., Rankin, S.R., & Loya, K.I. (2016). Climate as a mediating influence on the perceived academic success of women student-athletes. *Journal for the Study of Sports and Athletes in Education*, 10(3), 164-184.
- Kafonek, K. & Richards, T.N. (2017) An examination of strategies for the prevention of gender-based violence at four-year institutions of higher education, *Journal of School Violence*, 16(3), 271-285, doi: 10.1080/15388220.2017.1318576
- Kilanowski, J. (2017). Breadth of the socio-ecological model. *Journal of Agromedicine*, 22(4), 295-297.
- Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., Peterson, K., Planty, M., ... & Stroop, J. (2016). *Campus climate survey validation study: Final technical report*. Bureau of Justice Statistics Research and Development Series.
- Kroshus, E., Paskus, T., & Bell, L. (2018). Coach expectations about off-field conduct and bystander intervention by US college football players to prevent inappropriate sexual behavior. *Journal of Interpersonal Violence*, 33(2), 293-315.
- Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (Eds.). (2002). *World report on violence and health*. Geneva: World Health Organization.
- Latane, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help*. New York: Appleton-Century-Crofts.
- Lyndon, A., Duffy, D., Smith, P., & White, J. (2011). The role of high school coaches in helping prevent adolescent sexual aggression: Part of the solution or part of the problem? *Journal of Sport & Social Issues*, 35(4), 377-399.

- Macy, R., Martin, S., Nwabuzor Ogbonnaya, I., & Rizo, C. (2018). What do domestic violence and sexual assault service providers need to know about survivors to deliver services? *Violence Against Women, 24*(1), 28-44.
- McGovern, J. & Murray, P. (2016). *Consent communication: What does it mean for student athletes?* https://www.ncaa.org/sites/default/files/McNeil_Consent%20Communication.pdf
- McMahon, S. (2007). Understanding community specific rape myths: Exploring student athlete culture. *Journal of Women and Social Work, 22*(4): 357-370.
- McMahon, S. (2009). Hearing from student-athlete peer educators: A qualitative study of the impact of participation in an interpersonal violence peer education group. *Academic Athletic Journal, 20*(1), 1-28.
- McMahon, S., & Farmer, G. (2009). The bystander approach: Strengths-based sexual assault prevention with at-risk groups. *Journal of Human Behavior in the Social Environment, 19*(8), 1042-1065.
- McMahon, S., Postmus, J., & Koenick, R.A. (2011). Conceptualizing the engaging bystander approach to sexual violence prevention on college campuses. *Journal of College Student Development, 52*(1), 115-130.
- McMahon, S., & Stepleton, K. (2018). Undergraduate exposure to messages about campus sexual assault: Awareness of campus resources. *Journal of College Student Development, 59*(1), 110-115.
- Miller, E., Tancredi, D.J., McCauley, H.L., Decker, M.R., Virata, M.C.D., Anderson, H.A., O'Connor, B., & Silverman, J.G. (2013). One-year follow-up of a coach-delivered dating

- violence prevention program: A cluster randomized controlled trial. *American Journal of Preventive Medicine*, 45(1), 108-112.
- Milner, A.N., & Baker, E.H. (2017). Athletic participation and intimate partner violence victimization: Investigating sport involvement, self-esteem, and abuse patterns for women and men. *Journal of Interpersonal Violence*, 32(2), 268-289.
- Morean, M.E., Darling, N., Smit, J., DeFeis, J., Wergeles, M., Kruzer-Yashin, D., & Custer, K., (2018). Preventing and responding to sexual misconduct: Preliminary efficacy of a peer-led bystander training program for preventing sexual misconduct and reducing heavy drinking among collegiate athletes. *Journal of Interpersonal Violence*, 1-27.
- Mountjoy, M., Brackenridge, C., Arrington, M., Blauwet, C., Carska-Sheppard, A., Fasting, K., . . . Budgett, R. (2016). The IOC Consensus Statement: Harassment and abuse (non-accidental violence) in sport. *British Journal of Sports Medicine*, 50(17), 1019-29.
- NCAA Board of Governors. (2018). *NCAA policy to combat campus sexual violence*. Retrieved from: http://www.ncaa.org/sites/default/files/Aug2018SSI_UpdatedCampusSexualViolencePolicy_20180905.pdf
- O'Neil, J. (2008). Summarizing 25 years of research on men's gender role conflict using the gender role conflict scale: New research paradigms and clinical implications. *The Counseling Psychologist*, 36(3), 358-445.
- O'Neil, J. M. (2015). *Men's gender role conflict: Psychological costs, consequences, and an agenda for change*. Washington, DC: American Psychological Association.
- O'Neil, J. M., Helms, B. J., Gable, R. K., David, L., & Wrightsman, L. S. (1986). Gender-role conflict scale: College men's fear of femininity. *Sex Roles*, 14, 335- 350.
- Rankin, S. Merson, D., Garvey, J. C., Sorgen, C.H., Menon, I., Loya, K., & Oseguera, L. (2016).

- The influence of climate on the academic and athletic success of student-athletes: Results from a multi-institutional national study, *The Journal of Higher Education*, 87(5), 701-730. doi: 10.1080/00221546.2016.11777419
- Ramaeker, J., & Petrie, T. (2019). "Man Up!": Exploring intersections of sport participation, masculinity, psychological distress, and help-seeking attitudes and intentions. *Psychology of Men & Masculinities*, 20(4), 515-527.
- Sabina, C., & Ho, L. (2014). Campus and college victim responses to sexual assault and dating violence: Disclosure, service utilization, and service provision. *Trauma, Violence, & Abuse*, 15(3), 201-226. doi: 10.1177/1524838014521322
- Sable, M.R., Danis, F., Mauzy, D.L., & Gallagher, S.K. (2006). Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health*, 55(3), 157-162.
- Scales, A. (2009). Student gladiators and sexual assault: A new analysis of liability for injuries inflicted by college athletes. *Michigan Journal of Gender & Law*, 15, 205-389.
- Sinozich, S., & Langton, L. (2014). *Rape and sexual assault victimization among college females, 1995–2013*. Washington, DC: US Dept. of Justice.
<http://www.bjs.gov/content/pub/pdf/rsavcaf9513.pdf>
- Spies, J.E.(2006). Winning at all costs: An analysis of a University's potential liability for sexual assaults committed by its student athletes. *Marquette Sports Law Review*, 16, 429-461.
- Tabachnick, J. (2008). Engaging bystanders in sexual violence prevention. *National Sexual Violence Resource Center*. https://www.nsvrc.org/sites/default/files/Publications_NSVRC_Booklets_Engaging-Bystanders-in-Sexual-Violence-Prevention.pdf

- United States Department of Justice (2019). *Sexual assault: What is sexual assault?*.
<https://www.justice.gov/ovw/sexual-assault>
- United States Senate. (2014, July 9). *Sexual violence on campus: How too many institutions of higher education are failing to protect students*.
<http://www.mccaskill.senate.gov/SurveyReportwithAppendix.pdf>
- Walsh, W. A., Banyard, V. L., Moynihan, M. M., Ward, S., & Cohn, E. S. (2010). Disclosure and service use on a college campus after an unwanted sexual experience. *Journal of Trauma & Dissociation, 11*(2), 134–151.
- White House Task Force to Protect Students From Sexual Assault (U.S.). (2014). *Not alone: The first report of the white house task force to protect students from sexual assault*.
- White, J.W., Koss, M.P., Abbey, A., Cook, S., Ullman, S.E., & Thompson. M. (2015). *What you need to know about campus sexual assault victimization*. http://campusclimate.gsu.edu/files/2015/04/Facts-about-victimization-with-logo_09_-11_2015slc2.pdf
- Worthen, M., & Wallace, S. (2017). Intersectionality and perceptions about sexual assault education and reporting on college campuses. *Family Relations, 66*(1), 180-196.
- Xu, Y., Olfson, M., Villegas, L., Okuda, M., Wang, S., Liu, S., & Blanco, C. (2013). A characterization of adult victims of sexual violence: Results from the national epidemiological survey for alcohol and related conditions. *Psychiatry, 76*(3), 223–240.
- Young, B.R., Desmarais, S.L., Baldwin, J.A., & Chandler, R. (2016). Sexual coercion practices among undergraduate male recreational athletes, intercollegiate athletics, and non-athletes. *Violence Against Women, 23*(7), 1-18. doi: 10.1177/1077801216651339
- Yule, K. & Grych, J. (2017). College students' perceptions of barriers to bystander intervention. *Journal of Interpersonal Violence*. doi: 10.1177/0886260517706764

- Zinzow, H.M., Resnick, H.S., Amstadter, A.B., McCauley, J.L., Ruggiero, K.J., & Kilpatrick, D.G. (2010). Drug- or alcohol-facilitated, incapacitated, and forcible rape in relationship to mental health among a national sample of women. *Journal of Interpersonal Violence*, 25, 2217–2236.
- Zinzow, H., & Thompson, M. (2011). Barriers to reporting sexual victimization: Prevalence and correlates among undergraduate women. *Journal of Aggression, Maltreatment & Trauma*, 20(7), 711-725.
- Zinzow, H., & Thompson, M. (2015). A longitudinal study of risk factors for repeated sexual coercion and assault in U.S. college men. *Archives of Sexual Behavior*, 44(1), 213-222.

Chapter Two: Student-Athlete Barriers to Bystander Intentions: Assessing Gender Role Conflict and Opportunities to Respond to Post-Sexual Assault

Abstract

While research suggests that student-athletes have a lower willingness to intervene as a bystander to sexual assault than non-athletes, specific barriers to student-athlete bystander intentions have not been explored. This research examines how gender role conflict (GRC) may relate to student-athlete's role as bystanders to post-sexual assault. Using a non-probability cross-sectional design, 300 student-athletes from five NCAA institutions completed an anonymous web-based survey that measured GRC and intentions to respond to post-sexual assault. Results indicate that conflicts between work and leisure-family relations – one subconstruct of GRC – was associated with intentions to respond to post-sexual assault and was significantly moderated by gender. Findings underscore the importance of engaging student-athletes in bystander intervention training to prevent campus sexual assault.

Keywords: Sexual assault, gender role conflict, bystander intervention, prevention, student-athletes

Student-Athlete Barriers to Bystander Intentions:

Assessing Gender Role Conflict and Opportunities to Respond to Post-Sexual Assault

Introduction

Sexual assault continues to be a widespread issue on college campuses as studies consistently find high rates of victimization among college students (Krebs et al. 2016). According to the Association of American Universities (AAU) Campus Climate Survey on Sexual Assault and Sexual Misconduct, 26.1% of females and 6.3% of males experienced sexual assault (i.e. penetration or sexual touching as a result of physical force or incapacitation) during college (Cantor et al., 2017). Sexual assault victimizations are more likely to go unreported to the police, and only one in five students receive assistance from a victim services agency (Sinozich & Langton, 2014). Bystander intervention encourages college students to engage in both sexual assault prevention and response by learning prosocial helping behaviors and developing a greater sense of responsibility to intervene in situations involving sexual assault (Banyard et al., 2004). Opportunities to respond sexual assault include primary prevention (before an incident), secondary prevention (during an incident), and tertiary prevention (after an incident; McMahon & Banyard, 2012). Bystanders play a crucial role in supporting survivors of sexual assault after an incident occurs (Foubert et al., 2010), such as helping peers access resources or reporting a known perpetrator to authorities (McMahon & Banyard, 2012). Thus, tertiary prevention is essential in educating potential bystanders on strategies to mitigate the impact of sexual assault. Despite the growing popularity of bystander intervention programs to reduce campus sexual assault, college students perceive many barriers to intervening as a bystander (Bennett et al., 2014; Latane & Darley, 1970; Yule & Grych, 2017). These barriers are even more salient among student-athletes (Exner-Cortens & Cummings, 2017; McMahon & Farmer, 2009).

Student-athletes are an important population of focus for promoting bystander intervention. First, male student-athletes have been identified as a high-risk population for perpetrating sexual assault (Binder, 2001; McCray, 2015; McMahon et al., 2011; Moynihan & Banyard, 2008). Participation in contact sport versus non-contact sport has also been linked to greater perpetration of sexual assault (Sønderlund et al., 2014) and higher reports of sexual violence at Division I schools compared to Division II or III (Wiersma-Mosley & Jozkowski, 2019). In a study that analyzed reports of sexual assault at 20 campus police departments and 10 judicial affairs offices near schools with top ranked football and basketball programs, male student-athletes made up 3.8% of the total male student population but accounted for 19% of reported sexual assault perpetrators over a 3-year period (Crosset et al., 1995). Given that student-athletes spend more time together and have stronger relationships with their teammates than non-athletes (Clopton, 2010), there may be more opportunities for student-athletes to discern whether sexual assault was committed by their peers. Second, student-athletes may be victimized by sexual assault. Data from The National Longitudinal Study of Adolescent Health (Add Health) found that male and female students who participated in sports demonstrated a greater risk of experiencing sexual assault than students who did not participate in sports (Milner & Baker, 2017). Since survivors of sexual assault are more likely to disclose to their peers than report the incident to authorities (Banyard et al., 2010), student-athletes may divulge information about past victimizations to one of their teammates. Of the few studies that focus on bystander behaviors with student-athletes, it seems that student-athletes have a lower willingness to intervene than non-athletes (McGovern & Murray, 2016; McMahon, 2015; McMahon et al., 2011). Therefore, it is essential to identify potential barriers to bystander intentions among student-athletes, particularly responding to post-sexual assault.

One possible solution for improving bystander intentions with student-athletes is to examine gender role conflict (GRC) as a potential target for intervention. GRC is a theoretical construct that considers how psychological or behavioral issues stem from socialized gender norms in masculine contexts (O'Neil et al., 1986; O'Neil, 2008). While GRC has been seldom studied with student-athletes, evidence from quantitative and qualitative studies suggests that student-athletes may experience GRC at higher rates than non-athletes as a result of the hypermasculine sports culture and immense pressures to perform both on and off the court (Fallon & Jome, 2007; Steinfeldt et al., 2009; Steinfeldt et al., 2010; Ramaeker & Petrie, 2019). In fact, male and female athletes demonstrate greater GRC than non-athletes (Daltry, 2013; Ramaeker & Petrie, 2019). GRC may be further exacerbated for student-athletes aware of sexual assault allegations involving peer survivors or perpetrators. With a heightened sense of masculinity and invincibility, male and female student-athletes may be more reluctant to come forward about known sexual victimizations for fear of weakness or disloyalty to their team members (Corboz et al.; McGovern & Murray, 2016; McMahon, 2007; McMahon & Farmer, 2009). To address gaps in the literature, more research is needed to explicitly measure GRC with male and female student-athletes to assess the impact of masculine norms within the sports culture. Moreover, investigating how GRC may hinder student-athlete's intentions to respond to post-sexual assault will be useful to improving bystander intervention programs. Thus, the goal of this study is to describe the extent of GRC among student-athletes who participate on men's and women's teams and examine whether GRC may inhibit their intentions to respond to post-sexual assault.

Bystander Intentions to Respond to Post-Sexual Assault

Researchers have found that most survivors of sexual assault disclose to one of their peers instead campus police or campus authorities (Banyard et al., 2005; Banyard et al., 2010; Dworkin et al., 2016). In a large national study with college females who experienced sexual victimization, 2% of participants reported the incident to police, 4% reported to campus authorities, and 70% reported to someone else, most often a friend (Fisher et al., 2000). Bystanders can offer support to survivors who disclose to them, direct survivors on where to go for help, raise suspicion about a friend who may be a perpetrator, provide information to campus authorities or resident assistants, and corroborate information during an investigation with police or university officials (McMahon & Banyard, 2012). Bystanders can also encourage survivors to report the incident to campus authorities or law enforcement for further investigation and help survivors seek professional assistance when dealing with potential trauma. During telephone interviews with a national sample of 2,000 females from 4-year colleges, nearly half of the participants received a rape disclosure from a peer (Paul et al., 2013). Of those recipients, more than two thirds encouraged survivors to report the incident to the police or other authorities. Positive responses to disclosures, such as providing emotional support and tangible resources for coping, are important to a survivor's well-being, as perceived negative responses have been linked to worse psychopathological outcomes (Dworkin et al., 2019). In addition to supporting survivors who disclose, a potential bystander may be aware of suspected perpetration by one of their peers. Bystanders can provide valuable information by talking with a residence life or a staff member about these suspicions, reporting a friend to campus authorities, or cooperating during investigations (McMahon & Banyard, 2012).

Student-athletes may be potential bystanders to peer survivors of sexual assault due to

evidence of strong relationships with their teammates (Clopton, 2010). In focus groups with student-athletes at a school in the Northeast, both males and females expressed that close team bonds were an important predictor for one's willingness to intervene before or after a sexual assault occurs (McMahon & Farmer, 2009). Given that there are differential levels of social interactions for male and female student-athletes who participate in different types of sport (Clopton, 2012), more research is critical to understand sport participation and willingness to respond to post-sexual assault. Studies document increases in student-athletes' intentions to engage in bystander behaviors after participating in bystander intervention trainings (Jaime et al., 2015; McCauley et al., 2013; Moynihan et al. 2010). Despite prevention efforts, studies illustrate that student-athletes have a lower willingness to engage in bystander behaviors than non-athletes (McGovern & Murray, 2016; McMahon, 2015; McMahon et al., 2011), which may be attributed to context specific barriers in the sports culture such as fear of displaying weakness or betraying one's commitment to the team (Corboz et al., 2016; McGovern & Murray, 2016; McMahon, 2007; McMahon & Farmer, 2009).

Barriers to intervening in situations involving sexual assault are prevalent among college students (Bennett et al., 2014, Burn, 2009; Yule & Grych, 2017). The situational model for bystander intervention developed by Latane and Darley (1970) propose that barriers to intervening as a bystander include failure to notice, failure to identify the situation as high-risk, failure to take responsibility for the intervention, failure to intervene due to skills deficit, and failure to intervene due to audience inhibition. Student-athletes expressed similar obstacles including lack of knowledge about how to intervene, fears about making false accusations, and impacting the reputation of a teammate (McMahon & Farmer, 2009). In a pilot study with 80 male student-athletes, those randomly assigned to participate in a bystander intervention program

described barriers as opinions of others, relationship with people involved, and potential power differentials between teammates (Exner-Cortens & Cummings, 2017).

Descriptive information such as gender, race, or ethnicity may be fundamental to understanding student-athlete intentions to respond to post-sexual assault. In general, female college students are more likely to report incidents of sexual assault to university affiliates and law enforcement than male college students (Cantor et al., 2017). Some studies suggest that female student-athletes have greater intentions to intervene as a bystander than male student-athletes (McGovern & Murray 2016; McMahon 2015; Moynihan & Banyard, 2008), whereas other studies find no significant differences (McMahon & Farmer, 2009). When compared to males, females of all races and ethnicities may be more in tune to the issue of campus sexual assault since they are at a greater risk (Krebs et al., 2016) and have a higher likelihood of knowing a survivor of sexual assault (Weitzman et al., 2017). Bystander behaviors also vary across racial and ethnic groups (Weitzman et al., 2017). In a recent study, 750 college students participated in an online bystander intervention program and found that Black and Latinx females had higher scores on their ability and intent to intervene than White females, but White males had higher scores than Black and Latinx males (Burns et al., 2019). These demographic factors have not yet been explored among student-athletes' bystander intentions.

Gender Role Conflict

Some of the barriers faced by student-athletes may be framed using gender role conflict theory. O'Neil (2008) defines gender role conflict theory as "a psychological state in which socialized gender roles have negative consequences on the person or others" (pp. 362). GRC causes devaluations of self or others, restrictions or limitations in one's behavior, or violations from harming oneself or others due to the norms of masculine ideology (O'Neil, 2008). This

theory posits that GRC occurs when one perceives contrasting expectations for their gendered behavior, which is particularly true in the context of sport where sport promotes behaviors that are traditionally masculine (Daltry, 2013). Just as male student-athletes are instilled with a fear of femininity and expected to adhere to traditional male roles (O'Neil, 2015), female student-athletes are often expected to balance their athleticism and femininity (Allison, 1991). Studies with college-aged males demonstrate that athletes report significantly higher GRC scores than non-athletes (Ramaecker & Petrie, 2019) and greater stigma toward help-seeking (Steinfeldt et al., 2009). While less studied, females may be affected by patriarchal norms that cause GRC (O'Neil, 2015). In other words, female student-athletes may face pressure to exhibit male gender norms in the sports culture. Among females, higher athletic identity is correlated with greater GRC compared to those with lower athletic identity (Daltry, 2013). Female athletes also reported higher rates of masculinity than non-athletes (Miller & Levy, 1996). Despite a body of literature supporting GRC with males in various domains, more research is needed to describe the complexity of men's and women's GRC (O'Neil, 2015), specifically in the context of sport.

GRC is made up of four main subconstructs: (1) *success, power, and competition*; (2) *restrictive emotionality*; (3) *restrictive affectionate behavior*; and (4) *conflicts between work and leisure-family relations* (O'Neil, 2008). Each of the subconstructs that make up GRC manifest within the context of sports. According to O'Neil (2008), *success, power, and competition* describes attitudes about one's personal success that are achieved through competition and power. The college sports culture encourages student-athletes to place a greater emphasis and priority on succeeding in athletics over their other responsibilities (Jayakumar & Comeaux, 2016). Second, *restrictive emotionality* depicts one's fears and restrictions in regard to expressing personal feelings and emotions. Student-athletes must demonstrate mental toughness

which romanticizes an elite athlete who is unable to display weakness (Caddick & Ryall, 2012). *Restrictive affectionate behavior* is defined as one's restrictions in expressing feelings or thoughts with others of the same gender and also involves one's difficulty touching others of the same gender. With masculinity deeply entrenched in the sport culture, any display of femininity by an athlete is considered the antithesis of sport. For example, Griffin explains that we often see feminization of male athletes who fail and the masculinization of female athletes who succeed (as cited in Ferez, 2012). Lastly, *conflicts between work and leisure-family relations* captures one's restrictions in their ability to balance work, school, and family relationships, which may lead to health problems, overwork, stress, and a lack of leisure and relaxation (O'Neil, 2008). Student-athletes must fulfill their dual role as a college student and an athlete, which sometimes creates conflicts in their identity and performance (Jayakumar & Comeaux, 2016; Harrison et al., 2009; Yopyk & Prentice, 2005) and results in role conflict (Adler & Adler, 1991; Desertrain & Weiss, 1988; Lance, 2004; Jayakumar & Comeaux, 2016).

Through this theoretical lens, student-athletes may fail to respond to post-sexual assault as prosocial bystanders to support peer survivors or report suspected perpetrators. Focus groups with teams and individual interviews at a Division I school in the Northeast revealed that a collective victim-blaming culture exists among student-athletes as a result of GRC (McMahon, 2007). Participants expressed how their physical strength and confidence would prevent them from being victimized; yet also acknowledged how these expectations could create barriers in reporting sexual assault (McMahon, 2007). Student-athletes may fear overstepping boundaries to support survivors of sexual assault if the survivor does not want to report the incident. In another study, male student-athletes emphasized GRC in focus groups in which taking action as a prosocial bystander would affect the entire team dynamic (McGovern & Murray, 2016). Thus,

student-athletes may be reluctant to intervene as a bystander in situations where a teammate is a suspected perpetrator in fear of being perceived as weak or disloyal to their teammates. GRC may be an important factor to consider since studies underscore how perceptions of others are barriers to bystander intervention, especially teammates (Exner-Cortens & Cummings, 2017; McMahon & Farmer, 2009).

Although these studies underline key insights into patterns of GRC, more research is needed to explicitly measure GRC and the athletic experience (O'Neil, 2015). Student-athletes may experience GRC due to the hypermasculinity of the sports culture; however, there is a scarcity of research on GRC in male and female athletes. The rates of GRC among student-athletes are largely unknown. Moreover, initial findings from qualitative studies with student-athletes raise GRC as a potential barrier for bystanders to intervene in situations involving sexual assault (McGovern & Murray, 2016; McMahon, 2007) and therefore warrants further exploration. By looking at the different ways in which the sport culture promotes certain expectations for both male and female student-athletes through GRC, it is possible to gain a better understanding of student-athlete intentions to respond to sexual assault after an incident occurs.

The Present Study

The purpose of this study is to describe the extent of GRC among student-athletes by documenting descriptive information between male and female student-athletes and to examine how different dimensions of GRC are related intentions to respond to post-sexual assault. This study aims to fill a key gap by understanding barriers that may be associated with intervening as a bystander to sexual assault among student-athletes, who are often overlooked as a vulnerable group of college students. Pinpointing what obstacles may exist for student-athletes' intentions to

respond to post-sexual assault will be useful to professionals providing support to student-athletes, creating best practices for sexual assault prevention, and building policy to promote the safety and well-being of student-athletes.

The hypotheses for this study are listed below:

1. Male student-athletes will exhibit higher scores of GRC than female student-athletes.
2. Student-athletes with higher scores of GRC will exhibit lower intentions to respond to post-sexual assault, controlling for race, ethnicity, type of sport and division.
3. The relation between GRC and intentions to respond to post-sexual assault will be moderated by gender such that males will experience a weaker association compared to females when controlling for race, ethnicity, type of sport, and division.

Method

Participants

College students that were 18 years or older who actively participated in an NCAA sport were eligible to participate in this study. Using convenience sampling, the researcher identified contacts at five NCAA member schools in the United States across each division level including three Division I programs, one Division II program, and one Division III program. Quota sampling was also used to attain an equal number of males and female student-athletes. Recipients were given a \$10 Amazon e-gift card for their participation. The contacts at each school were designated as gatekeepers and emailed the survey link to their respective student-athlete listserv. The online survey was distributed to 1151 student-athletes and 461 agreed to participate. Of those, 82 participants were screened out due to eligibility criteria or quota conditions. An additional 79 participants were removed for insufficient data. The total sample

included 300 student-athletes for a response rate of 26%. Missing data ranged from 1% to 4% per entry but did not exceed 5%.

As illustrated in Table 1 below, there were 139 male student-athletes (46.3%) and 161 (53.7%) female student-athletes. The majority of participants were White (72.6%), followed by Black or African American (14.0%), Other (8.0%), Asian or Pacific Islander (4.0%), and Native American or American Indian (1.3%). In terms of ethnicity, 86.9% of the participants were Non-Hispanic and 13.1% were Hispanic. Most of the student-athletes participated in a non-contact sport (63.2%) versus a contact sport (36.8%). There were 169 (56.3%) student-athletes who played in Division I, 49 (16.3%) in Division II, and another 82 (27.3%) in Division III.

Table 1

Student-Athlete Demographics

Characteristic	Frequency	% (n)
Gender (<i>n</i> = 300)		
Males	139	46.3%
Females	161	53.7%
Race (<i>n</i> = 299)		
White	217	72.3%
Black or African American	42	14.0%
Other	24	8.0%
Asian or Pacific Islander	12	4.0%
Native American or American Indian	4	1.3%
Ethnicity (<i>n</i> = 298)		
Hispanic	39	13.1%
Non-Hispanic	259	86.9%
Type of Sport (<i>n</i> = 299)		
Contact Sport	110	36.7%
Non-Contact Sport	189	63.0%
Division (<i>n</i> = 300)		
I	169	56.3%
II	49	16.3%
III	82	27.3%

Procedures

This study utilized a non-probability cross-sectional survey design to distribute a self-administered questionnaire through an anonymous web-based survey powered by Qualtrics. The questionnaire was pretested with a group of 5-10 doctoral students at the host research institution to reduce measurement bias and finalized based on pre-testing feedback. A unique link was created for participating schools and sent to the point of contact at each school's athletic department. The contact persons then distributed the survey link to their student-athlete listserv weekly until the sample size was reached. Athletic staff were also invited to verbally remind their student-athletes about the opportunity to take the survey during regularly scheduled meetings. IRB approval was received from the host institution and each participating institution.

Measures

Gender Role Conflict

The independent variables in the study were measured using the Gender Role Conflict Scale – Male and Female Versions (O'Neil et al., 1986) which has been tested with athletes in the past (Steinfeldt & Steinfeldt, 2010; Steinfeldt, England, Steinfeldt, & Speight, 2009; Desertrain & Weiss, 1988; Daltry, 2013). Using the original scale, the female version was modified by changing the pronouns in each of the questions that yielded similar factor structures to the male version (Borthick, Knox, Taylor, & Dietrich, 1997). Women's GRC is currently undefined and there is no theoretical measure of women's conflicts with their gender roles (O'Neil, 2015). However, this scale measures the ways in which athletes are expected to perform according to male gendered norms. The subscales that make up GRC include *success, power, and competition; restrictive emotionality; restrictive affectionate behavior; and conflicts between work and leisure-family relations*. *Success, power, and competition* is a 13-item subscale which

focus on the individual's perceptions of succeeding in one's career and ability to perform masculinity. Questions include "Being smarter or physically stronger than other men/women is important to me." *Restrictive emotionality* is a 10-item subscale that measures fears about expressing one's feelings and difficulty finding words to express basic emotions. For example, "I have difficulty telling others I care about them." *Restrictive affectionate behavior* included 8-items that measures limitations in expressing one's feelings and thoughts with other men/women as well as difficulty touching other men/women such as "Affection with other men/women makes me tense." The last subscale for GRC included 6-items for *conflicts between work and leisure-family relations* (e.g. "I feel torn between my hectic work schedule and caring for my health"). Answer choices were on a Likert scale that ranged from 6 = strongly agree to 1 = strongly disagree with a higher score indicating a higher endorsement of GRC. Each subscale was recoded into one continuous variable that summed the total score. The internal consistency of subscales ranged from .85 to .92 for the male version and .87 to .91 for the female version.

Intentions to Respond to Post-Sexual Assault

A subscale from the Bystander Intention to Help Scale, formerly known as the Bystander Attitudes Scale (Banyard et al., 2007; Banyard, 2008) was used to measure intentions to respond to post-sexual assault ($\alpha = .94$; Banyard et al., 2014). The 8-items listed strategies to support survivors or report suspected perpetration. Questions include "I would accompany a friend to a local crisis center" or "If I heard that a friend was accused of sexual abuse or intimate abuse, I would come forward with what I knew rather than keeping silent." The questions were slightly modified to measure bystander intentions rather than behaviors. Participants indicated how likely they think they would engage in each type of bystander behavior on a five-point scale (1 = not at all likely to 5 = extremely likely). This scale was recoded into one continuous variable that

summed the total score. A higher score indicated higher intentions to respond to post-sexual assault.

Moderating Variables

Gender binary was used as a moderator to differentiate bystander intentions to respond to post-sexual assault. Survey participants were asked to indicate whether they played for a men's or women's team and were coded based on their gender binary (0 = male, 1 = female). This question prompted the corresponding GRC scale for males or females to be asked in the survey flow.

Control Variables

The control variables in this study included race, ethnicity, type of sport, and division. Participants were asked to specify their race (White, Black or African American, Native American or American Indian, Asian / Pacific Islander, or Other). The majority of participants were White (72.6%), with small percentages of other races. Therefore, race was recoded coded as binary variable (White = 1, Non-White = 0). Participants were also asked to indicate their ethnicity as Hispanic or Non-Hispanic. This variable was also coded into a binary variable (Hispanic = 1, Non-Hispanic = 0). In an open-ended question, participants wrote in the name of their primary sport which was recoded into a binary variable for contact (1) and non-contact (0). For division, participants selected whether they played for NCAA Division I, II, or III. Division was dummy coded into dichotomous variables to compare each division to the reference category (DI).

Data Analysis

Data was analyzed in Statistical Package for the Social Sciences (SPSS, version 25.0). After data cleaning, variables were recoded as described above. Since participants were

prompted to answer separate questions on GRC based on their participation on a men's team or women's team, a new variable for each GRC subscale was created that combined the data for gender binary student-athletes (i.e. males and females). The GRC subscales were recoded into continuous variables that summed the total score. Independent samples t-tests analyzed the average GRC scores between male and female student-athletes using the full GRC scale and subscales. Preliminary analyses assessed whether there were significant gender differences with the outcome variable. Results determined no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. To reduce structural multicollinearity, the predictor variables were mean centered which involved calculating the mean for each continuous independent variable and then subtracting the mean from the original values. Next, an ordinary least squares multiple regression model was used to determine whether GRC differentiates between intentions to respond to post-sexual assault, controlling for race, ethnicity, type of sport, and division. A second multiple regression examined gender as a moderator between GRC and intentions to respond to post-sexual assault. To account for missing data, analyses were run using pairwise deletion to include available data.

Results

Independent Samples T-Tests

Independent samples t-tests were used to determine overall GRC scores as well as GRC subscales between male and female student-athletes. The results of the independent samples t-tests are presented in Table 2. For the overall GRC scores, the relationship approached significance between male student-athletes ($M = 135.86$, $SD = 29.50$) and female student-athletes ($M = 129.48$, $SD = 29.43$; $t(298) = 1.870$, $p = .062$). Male student-athletes exhibited higher overall GRC scores than females.

The next set of independent samples t-tests analyzed the subscales for GRC between male and female student-athletes. Restrictive affectionate behavior was the only statistically significant subscale as male student-athletes ($M = 24.28$, $SD = 8.25$) had significantly higher scores than female student-athletes ($M = 19.79$, $SD = 8.38$; $t(296) = 4.654$, $p = .001$). There were no significant findings for success, power, and competition; restrictive emotionality; or conflicts between work and leisure-family relations.

While there were no statistically different mean scores between gender and the remaining GRC subscales, male student-athletes had higher mean scores than female student-athletes for most of the GRC subscales. For success, power, and competition, male student-athletes endorsed higher mean scores ($M = 55.52$, $SD = 10.72$) than female student-athletes ($M = 53.68$, $SD = 11.17$). Male student-athletes also endorsed higher mean scores for restrictive emotionality ($M = 33.09$, $SD = 10.91$) compared to female student-athletes ($M = 31.79$, $SD = 11.11$). Meanwhile, female student-athletes endorsed higher mean scores for conflicts between work and leisure-family relations ($M = 24.22$, $SD = 6.61$) than male student-athletes ($M = 22.98$, $SD = 6.97$).

Table 2

Mean Differences Between Gender and Gender Role Conflict (n = 300)

Variable	Males		Females		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Gender Role Conflict (Full Scale)	135.86	29.50	129.48	29.43	1.870	.062+
Success, Power, & Competition	55.52	10.72	53.68	11.17	1.451	.148
Restrictive Emotionality	33.09	10.91	31.79	11.11	1.012	.312
Restrictive Affectionate Behavior	24.28	8.25	19.79	8.38	4.654	.001**
Conflict between Work, Leisure, Family Relations	22.98	6.97	24.22	6.61	-1.578	.116

Note. *M* = Mean. *SD* = Standard Deviation.

+ $p < .10$, * $p < .05$, ** $p < .001$

Multiple Regression

The ordinary least squares multiple regression examined the association between GRC (success, power, and competition; restrictive emotionality, restrictive affectionate behavior, and conflicts between work and leisure-family relations) and student-athlete intentions to respond to post-sexual assault, while controlling for race, ethnicity, type of type of sport, and division. The moderating effect of gender on the outcome variable was also assessed. Preliminary analyses revealed significant differences between gender and intentions to respond to post-sexual assault as male student-athletes displayed lower intentions to respond post-sexual assault ($M = 30.08$, $SD = 8.29$) than female student-athletes ($M = 33.00$, $SD = 7.10$; $t(298) = -3.279$, $p = .001$).

The main effects of GRC and student-athlete intentions to respond to post-sexual assault are displayed in Table 3. The total variance explained by the model as a whole was 8%, $F(10, 286) = 2.48$, $p = .007$). Only gender was statistically significant with intentions to respond to post-sexual assault ($B = 2.79$, $p = .006$), as females had higher intentions to respond to post-sexual assault than males. Ethnicity approached significance ($B = -2.80$, $p = .054$).

The next multiple regression included interaction effects between GRC and intentions to respond to post-sexual assault (Table 4). The total variance explained by the model as a whole was 11%, $F(14, 282) = 2.49$, $p = .002$). Ethnicity approached significance with intentions to respond to post-sexual assault. Hispanic student-athletes had lower intentions to respond to post-sexual assault than non-Hispanics ($B = -2.67$, $p = .065$). Division also approached significance, as student-athletes playing in Division 3 had lower intentions to respond to post-sexual assault than student-athletes in Division I ($B = -1.89$, $p = .073$). Gender was significant with intentions to respond to post-sexual assault ($B = 2.52$, $p = .012$). Female student-athletes had higher intentions to respond to post-sexual assault than male student-athletes.

Table 3

Main Effects of Gender Role Conflict and Intentions to Respond to Post-Sexual Assault

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Race (Non-White=0)	.32	1.12	.018	.779
Ethnicity (Non-Hispanic=0)	-2.80	1.45	-.12	.054+
Type of Sport (Contact=0)	-1.08	1.00	-.07	.281
Division 2 (Division 1=0)	-.72	1.41	-.03	.610
Division 3 (Division 1=0)	-1.69	1.06	-.10	.112
Gender (Male=0)	2.78	1.00	.18	.006**
Success, Power, & Competition	.03	.05	.04	.641
Restrictive Emotionality	-.08	.06	-.11	.167
Restrictive Affectionate Behavior	-.03	.07	-.27	.722
Conflict between Work, Leisure, Family Relations	.10	.09	.08	.282

Note. Reference categories are in parentheses

+ $p < .10$, * $p < .05$, ** $p < .01$

Table 4

Interaction Effects of Gender Role Conflict and Intentions to Respond to Post-Sexual Assault

Variable	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Race (Non-White=0)	.80	1.14	.05	.482
Ethnicity (Non-Hispanic=0)	-2.69	1.45	-.12	.065+
Type of Sport (Contact=0)	-1.06	1.00	-.07	.291
Division 2 (Division 1=0)	-.70	1.40	-.03	.617
Division 3 (Division 1=0)	-1.89	1.05	-.11	.073+
Gender (Male=0)	2.52	1.00	.16	.012*
Success, Power, & Competition	-.04	.08	-.05	.612
Restrictive Emotionality	.05	.09	-.06	.623
Restrictive Affectionate Behavior	-.16	.11	-.17	.157
Conflict between Work, Leisure, Family Relations	.35	.13	.30	.006**
Success, Power, & Competition*Gender	.12	.11	.13	.258
Restrictive Emotionality*Gender	-.05	.12	-.05	.700
Restrictive Affectionate Behavior*Gender	.19	.14	.15	.194
Conflict between Work, Leisure, Family Relations*Gender	-.48	.18	-.30	.007**

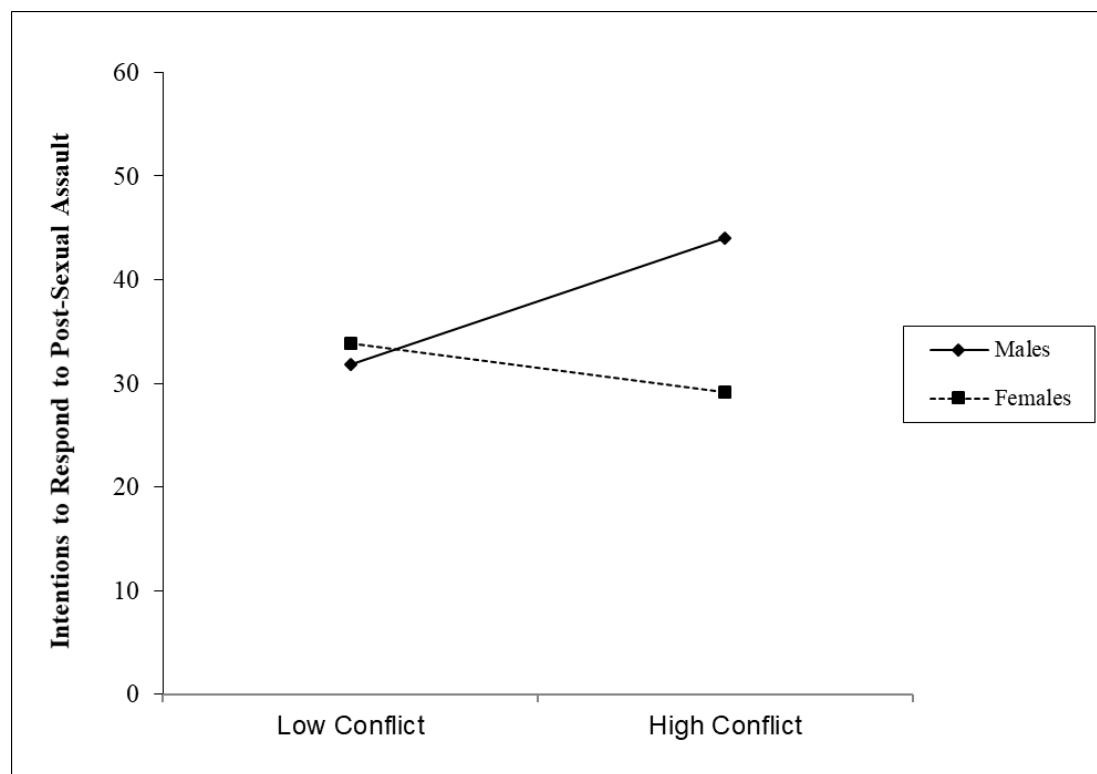
Note. Reference categories are in parentheses

+ $p < .10$, * $p < .05$, ** $p < .01$

Out of the GRC subscales, only conflicts between work and leisure-family relations was statistically significant with intentions to respond to post-sexual assault ($B = .35, p = .006$). Student-athletes who scored higher on the conflicts between work and leisure-family relations subscale had higher intentions to respond to post-sexual assault than those who scored lower on the conflict between work and leisure-family relations subscale. The other GRC subscales were not significant. When moderated by gender, conflicts between work and leisure-family relations ($B = -.48, p = .007$) was significant with intentions to respond to post-sexual assault. Among female student-athletes, but not male student-athletes, higher conflicts between work and leisure-family relations was associated with lower intentions to respond to post-sexual assault as a bystander (see Figure 1). The other GRC subscales were not significantly moderated by gender.

Figure 1

Moderating Effect of Gender on Conflicts between Work and Leisure-Family Relations



Discussion

The aim of this study was to determine the extent to which male versus female student-athletes experience GRC and how GRC may be associated with intentions to respond to post-sexual assault as bystanders. This study also sought to explore gender binary differences between male and female student-athletes as it relates to respond to post-sexual assault. The first hypothesis that male student-athletes will exhibit higher scores of GRC than female student-athletes was supported only for the full GRC scale and restrictive affectionate behavior subscale. Results indicate that male student-athletes experienced higher GRC scores overall than female student-athletes. These results are consistent with past literature as male student-athletes are more susceptible to GRC (Ramaeker & Petrie, 2019; Steinfeldt et al., 2009; Steinfeldt et al., 2010). Not surprisingly, males are expected to uphold masculinity more than females as per ascribed gendered norms. While acknowledging that gender role expectations are changing, future research should develop more appropriate ways to measure GRC for female student-athletes that distinguishes male gendered ideals within the context of sport and female gendered expectations in social situations.

In addition, male student-athletes experienced higher restrictive affectionate behavior than female student-athletes. Studies have found that restrictive affectionate behavior subscale has been significantly correlated to homophobia (Kassing et al., 2005; McDermott et al., 2014). According to O'Neil (2008), "Men struggle with intimacy and self-disclosure with women and other men because of their gender role socialization" (p. 391). These homophobic attitudes permeate the sports culture to maintain hegemonic masculinity (Anderson, 2002). Homosexuality is commonly used as a label for athletes who are deemed weak or cowardly (Ferez, 2012), which could lead to social marginalization among male student-athletes (Pascoe,

2007). Thus, male student-athletes may have difficulty showing affection with their peers in fear of any negative connotations. Although there were no significant differences between gender and the other GRC subscales, these findings suggest that student-athletes as a whole have been socialized into the sports culture where they must prioritize winning, balance multiple demands (Jayakumar & Comeaux, 2016), and practice mental toughness (Caddick & Ryall, 2012).

Contrary to the second hypothesis that student-athletes with higher scores of GRC will exhibit lower intentions to respond to post-sexual assault, student-athletes' intentions to respond to post-sexual assault increased as conflicts between work and leisure-family relations increased. These findings also suggest that student-athletes may be proactive toward intervening in campus sexual assault despite conflicts between work and leisure-family relations. Participating in intercollegiate athletics has been found to be more beneficial than harmful to student-athletes, as student-athletes learn important time management and organizational skills that allow them how to be more responsible, more productive, and more engaged in school activities (Rothschild-Checroune et al., 2012). Thus, student-athletes may be better prepared to handle difficult situations and feel a greater sense of responsibility to support peer survivors of sexual assault on their campus. Consistent with literature on bystander intervention, college students have a greater willingness to intervene if they feel a greater sense of responsibility (Burn, 2009; Latane & Darley, 1970; Yule & Grych, 2017). Researchers should continue to investigate how to instill a greater sense of responsibility among college students to improve their bystander intentions to respond to post-sexual assault.

Regression analyses revealed that female student-athletes had higher intentions to respond to post-sexual assault than male student-athletes. There is mounting evidence that supports a greater willingness to intervene as a bystander by female student-athletes compared to

male student-athletes (McGovern & Murray 2016; McMahon 2015; Moynihan & Banyard, 2008). These findings mirror the overall gender differences among the general student population, as females are more likely to intervene in situations involving sexual assault than males (Burn, 2009). These gender differences may be attributed to greater acceptances of rape myths by college-aged men (McDaniel & Rodriguez, 2017), including student-athletes. Rape myth acceptances are widely held attitudes and beliefs that perpetuate male violence against women and have been found to be higher among student-athletes compared to other college students (Navarro & Tewksbury, 2017; Young et al., 2016).

While the control variables were not significant, ethnicity and division approached significance. Hispanic student-athletes had lower intentions to respond to post-sexual assault than non-Hispanics, which contributes to a small body of literature on the ways in which race or ethnicity influence bystander outcomes. While students of color have to be found to have a greater willingness to intervene than White students (Brown et al., 2014; Lake et al., 2015; Weitzman et al., 2017), a review of the literature found that Hispanic female survivors face cultural barriers to accessing informal and formal resources such as cultural values, embarrassment or shame, lack of knowledge about resources or laws, and safety concerns (Rizo & Macy, 2011). These barriers may carry over into Hispanics' bystander intentions. Scholars must continue to research bystander intentions among student-athletes of color to better improve sexual assault prevention with diverse populations. Division also emerged as a potential area of concern, as Division I student-athletes demonstrated higher intentions to respond to post-sexual assault than Division III student-athletes. These findings highlight the noticeable gap in resources for Division III programs. In a report by the U.S. Senate (2014), only 37% of colleges and universities provided sexual assault prevention to student-athletes, and 82% of those were targeted toward Division I

programs. Student-athletes playing in Division III may have lower bystander intentions due to missed opportunities for sexual assault prevention.

The other GRC subscales were not associated with intentions to respond to post-sexual assault. These findings contradict past studies related to help-seeking behaviors among college students (Vogel et al., 2014), including student-athletes (Steinfeldt et al., 2009). Research has linked success, power, and competition to attitudes and behaviors that support violence against women (O'Neil, 2008). Due to the lack of research of GRC in the context of sport, there may already be a high emphasis on success, power, and competition among athletes (Steinfeldt et al., 2009) which can result in little variation on outcomes such as bystander intervention. Restrictive emotionality has been associated with intimacy and interpersonal relationships (O'Neil, 2008). However, there may be more nuanced emotional expression within the sports culture that could factor into help-seeking behaviors (Steinfeldt et al., 2010). Restrictive affectionate behavior has been found as a predictor of negative views of help seeking (Berger et al., 2005; Vogel et al., 2014). Since student-athletes often express game-day excitement through hugging or slapping on the backside that violate masculine gender roles, research must observe specific domains to understand affectionate behaviors in sports (Steinfeldt et al., 2009). For this reason, student-athletes may not feel restricted to intervene as a bystander by displaying affection in support of a sexual assault survivor. These GRC subscales need to be further contextualized in sport to elucidate student-athlete bystander intentions.

The results of the moderated effects of gender between GRC and intentions to respond to post-sexual assault were supported in Hypothesis 3 for conflicts between work and leisure-family relations subscale. The results indicate that there were no significant gender differences for success, power, and competition, restrictive emotionality, or restrictive affectionate behavior on

intentions to respond to post-sexual assault. These findings reflect the overall institutionalization of sport as a masculine domain that influences masculine traits regardless of gender (Chalabaev et al., 2012). However, higher conflicts between work and leisure-family relations was associated with lower intentions to respond to post-sexual assault for females, but not for males. Findings suggest that there may be greater pressures for female student-athletes to succeed within the masculine sports culture, which may further prevent them from intervening as a bystander to sexual assault. Female student-athletes perceive more role conflict between academic and athletic expectations than male student-athletes (Lance, 2004). Furthermore, female student-athletes exhibit greater GRC if they have a lower ability to cope with and endure negative emotions (Daltry, 2013). Due to collective beliefs in the sports culture that sexual assault happens to weaker women who put themselves in precarious situations (McMahon, 2009), it may be perceived as an additional burden for female student-athletes to get involved as a bystander. Future studies should delve into these complexities perceived by female-student athletes that hinder their bystander intentions to respond to post-sexual assault.

Implications

This study makes an important contribution to nearly 35 years of literature on GRC. Despite a wealth of literature supporting GRC (O'Neil, 2008) in masculine contexts, these findings confirm that student-athletes are indeed a vulnerable population at-risk of GRC. Results indicate that male and female student-athletes are strongly impacted by the masculine norms of the sports culture that warrants further exploration. Researchers should consider examining whether conforming to or violating masculine norms is associated with GRC (O'Neil, 2015). Since GRC has been linked to problematic behaviors, such as negative psychological well-being (Kaya et al., 2019) and violence against women (Amato, 2012; McDermott et al., 2017), studies

should also assess GRC on different outcomes with student-athletes. In addition, it may be useful to modify the gender role conflict scale to better assess experiences of female student-athletes, as they may feel targeted for failing to balance masculinity and femininity (O'Neil, 2013).

A positive shift in the sport culture could help promote the safety and well-being of male and female student-athletes. For male student-athletes, it is important to move away from attitudes and behaviors that reflect GRC by encouraging healthy masculinity (O'Neil, 2008). Through education, student-athletes can challenge homophobia by capitalizing on their leadership skills learned in sport, which are qualities that help reduce homophobic behaviors (Poteat & Vecho, 2016). Building confidence in male student-athletes to display affection with other males will not only reduce the stigma of homosexuality, but also facilitate conversations that encourage help seeking. Increased support should be offered to female student-athletes to break down pressures associated with succeeding in an environment dominated by males, such as building leadership positions for more females in athletics. Since time management has been recognized as an important tool for academic and athletic success (Rothschild-Checroune et al., 2012), female student-athletes can be encouraged to utilize these skills to better manage their stress and effectively communicate their needs (Gomez et al., 2018).

In addition to gender differences, this study also sheds light on disparities among student-athlete ethnicity and division level. Since Hispanics had lower intentions to respond to post-sexual assault as compared to non-Hispanics, additional support should also be made available for student-athletes of color. According to the NCAA Demographics Database (2018), 65% of all student-athletes are White, which calls attention to promoting cultural awareness and understanding of diversity issues in intercollegiate athletics. This research establishes the need for increased services and resources in athletics to support student-athlete wellness and

normalize help-seeking behaviors, which has often been stigmatized among student-athletes (Moore, 2017; Ramaeker & Petrie, 2019).

By identifying specific barriers to respond to post-sexual assault in intercollegiate athletics, such as GRC, bystander intervention programs can be tailored for the student-athlete population. Developing more relatable trainings where student-athletes will help student-athletes learn strategies for how to be prosocial bystanders for their peers. By creating safe spaces for intimate dialogue, student-athletes can practice how they would intervene as a bystander and respond to post-sexual assault in various situations, such as how to approach sensitive situations with a teammate. In addition, curriculum on bystander intervention with student-athletes could adopt a more culturally relevant model for Hispanics, which has shown positive increases in attitudes toward bystander intentions (Lawson et al., 2012). Advancing effective bystander intervention programs with student-athletes can contribute to best practices. For example, the *NCAA Sexual Assault Prevention Tool Kit* (2019) mandates that athletic departments are fully versed in institutional policies and processes to address sexual assault, and engages all student-athletes, coaches, and staff in yearly sexual violence prevention. Building on these guidelines can help break down student-athlete barriers to intervening as a bystander and ultimately reduce campus sexual assault.

Limitations

There were several limitations in this study. First, this study only assessed a small number of bystander situations by measuring intentions to respond to post-sexual assault. Other studies should investigate a wider range of bystander opportunities—including attitudes and behaviors—for student-athletes before, during, and after a sexual assault occurs. Additionally, researchers should consider dividing the construct of responding to post-sexual assault into two

subscales to separate items that support survivors of sexual assault and items that measure confronting or reporting perpetrators. If these items are treated as separate variables rather than a composite score, future studies could unlock situational differences in individual bystander intentions.

Aside from gender, student-athlete characteristics were not explored when assessing differences in mean GRC scores. Since some of the control variables were significant in the regression analyses, (i.e. ethnicity and division), future research should examine these demographics factors in relation to GRC. The survey also did not allow for more inclusive gender identities. Sport traditionally uses a gender binary classification of teams, which implicitly positions those who identify as lesbian, gay, bisexual, transgender, queer or questioning, and intersex (LGBTQI) as inferior (Segrave, 2016). Future studies should allow for more inclusive gender identities to better understand bystander intentions among LGBTQI student-athletes.

Many participants did not fully complete the web-based survey, which may be due to participant fatigue. It is possible that participants felt uncomfortable answering some of the sensitive questions around their emotions or sexual assault. To address dropout rates, it may be useful to distribute a paper survey during regularly scheduled meetings versus a web-based survey. Given the 26% response rate and use of convenience sampling, self-selection bias may be a threat to internal validity and results may not be generalizable to all student athletes. However, this response rate is in line with other online surveys, which averages around 30% and varies considerably (Shih & Fan, 2009). Researchers should consider employing random sampling for similar studies moving forward. Finally, cross-sectional studies do not allow for causal inference and results cannot infer that GRC directly impacts intentions to respond to post-

sexual assault. Future studies need to better assess predictability of GRC on responding to sexual assault and strengthen the research design to increase generalizability to student-athletes.

Conclusion

The results of this study shed light on both GRC and bystander intentions among the student-athlete population. This research is the first to explicitly measure gender differences in GRC between male and female student-athletes, revealing that males experience greater GRC than females. Furthermore, these results highlight GRC as a potential barrier to respond to post-sexual assault as a bystander, particularly for Hispanic student-athletes and females who experience conflicts with work and leisure-family relations. Building context-specific supports and prevention with student-athletes is imperative to promoting positive behaviors that reduce campus sexual assault.

References

- Allison, M. T. (1991). Role conflict and the female athlete: Pre-occupations with little grounding. *Journal of Applied Sport Psychology, 3*, 49–60.
- Amato, F.J. (2012). The relationship of violence to gender role conflict and conformity to masculine norms in a forensic sample. *The Journal of Men's Studies, 20*(3), 187-208.
- Anderson, E. (2002). Openly gay athletes: Contesting hegemonic masculinity in a homophobic environment. *Gender and Society, 16*(6), 860-877. doi: 10.1177/089124302237892
- Anderson, E. (2005). *In the game: Gay athletes and the cult of masculinity*. Albany, NY: SUNY.
- Atkinson, M., & Young, K. (2008). *Deviance and social control in sport*. Champaign, IL: Human Kinetics.
- Banyard, V. L., Moynihan, M. M., & Cares, A.C., & Warner, R. (2014). How do we know if it works? Measuring outcomes in bystander-focused abuse prevention on campuses. *Psychology of Violence 4*(1), 101-115.
- Banyard, V. L., Moynihan, M. M., & Plante, E. G. (2007). Sexual violence prevention through bystander education: An experimental evaluation. *Journal of Community Psychology, 35*, 463–481.
- Banyard, V., Plante, E., Cohn, E., Moorhead, C., Ward, S., & Walsh, W. (2005). Revisiting unwanted sexual experiences on campus: A 12-year follow-up. *Violence Against Women, 11*(4), 426-446.
- Banyard, V. L., Plante, E. G., & Moynihan, M. M. (2004). Bystander education: Bringing a broader community perspective to sexual violence prevention. *Journal of Community Psychology, 32*, 61–79.
- Banyard, V., Moynihan, M., Walsh, W., Cohn, E., & Ward, S. (2010). Friends of survivors.

- Journal of Interpersonal Violence*, 25(2), 242-256.
- Bennett, S., Banyard, V., & Garnhart, L. (2014). To act or not to act, that is the question? Barriers and facilitators of bystander intervention. *Journal of Interpersonal Violence*, 29(3), 476-496.
- Berger, J., Levant, R., McMillan, K., Kelleher, W., & Sellers, A. (2005). Impact of gender role conflict, traditional masculinity ideology, alexithymia, and age on men's attitudes toward psychological help seeking. *Psychology of Men & Masculinity*, 6(1), 73-78.
- Binder, R. (2001). Changing a culture: Sexual assault prevention in the fraternity and sorority community. In A. J. Ottens & K. Hotelling (Eds.), *Sexual violence on campus: Policies, programs, and perspectives* (pp. 98–119). New York: Springer Publishing.
- Borthick, M.J., Knox, P.L., Taylor, J.R., & Dietrich, M.S. (August, 1997). Gender role conflict and suicide probability: Age 18-24 years. Paper presented at the American Psychological Association, Chicago, IL.
- Brown, A. L., Banyard, V. L., & Moynihan, M. M. (2014). College students as helpful bystanders against sexual violence: Gender, race, and year in college moderate the impact of perceived peer norms. *Psychology of Women Quarterly*, 38, 350-362.
- Burn, S. (2009). A situational model of sexual assault prevention through bystander intervention. *Sex Roles*, 60(11), 779-792.
- Burns, V., Eaton, A., Long, H., & Zapp, D. (2019). Exploring the role of race and gender on perceived bystander ability and intent: Findings before and after exposure to an online training program to prevent sexual assault on campus. *Violence Against Women*, 25(8), 999-1017.
- Caddick, N. & Ryall, E. (2012). The Social Construction of ‘Mental Toughness’ – a Fascistoid

- Ideology?, *Journal of the Philosophy of Sport*, 39(1), 137-154.
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2017). *Report on the AAU campus climate survey on sexual assault and sexual misconduct*. Rockville, MD: The Association of American Universities.
- Chalabaev, A., Sarrazin, P., Fontayne, P., Boiché, J., & Clément-Guillotin, C. (2013). The influence of sex stereotypes and gender roles on participation and performance in sport and exercise: Review and future directions. *Psychology of Sport & Exercise*, 14 (2), 136-144.
- Clopton, A. W. (2010). The impact of intercollegiate athletic participation upon sense of community across multiple levels of competition. *International Journal of Sport Management*, 12, 440–456.
- Clopton, A.W. (2012). Social capital, gender, and the student athlete. *Group Dynamics: Theory, Research, and Practice*, 16(4), 272-288.
- Corboz, J., Flood, M., & Dyson, S. (2016). Challenges of bystander intervention in male-dominated professional sport: Lessons from the Australian Football League. *Violence Against Women*, 22(3), 324-343.
- Crosset, T. W., Benedict, J. R., & McDonald, M. A. (1995). Male student athletes reported for sexual assault: A survey of campus police departments and judicial affairs offices. *Journal of Sport and Social Issues*, 19, 126–140.
- Daltry, R. (2013). The impact of gender role conflict on the quality of life in female athletes. *The International Journal of Sport and Society*, 3(2), 49-65.
- Desertrain, G.S., & Weiss, M.R. (1988). Being female and athletic: A cause for conflict? *Sex Roles*, 18(9/10), 567-582.

- Dworkin, E., Brill, C., & Ullman, S. (2019). Social reactions to disclosure of interpersonal violence and psychopathology: A systematic review and meta-analysis. *Clinical Psychology Review, 72*, 101750.
- Dworkin, E., Pittenger, S., & Allen, N. (2016). Disclosing sexual assault within social networks: A mixed-method investigation. *American Journal of Community Psychology, 57*(1-2), 216-228.
- Exner-Cortens, D. & Cummings, N. (2017). Bystander-based sexual violence prevention with college athletes: A pilot randomized trial. *Journal of Interpersonal Violence, 1-24*.
- Fallon, M.A., & Jome, L.M. (2007). An exploration of gender-role conflict expectations and conflict among women rugby players. *Psychological of Women Quarterly, 31*, 311-321.
- Ferez, S. (2012). From women's exclusion to gender institution: A brief history of the sexual categorization process within sport. *The International Journal of the History of Sport, 29*(2), 272-285. doi: 10.1080/09523367.2012.641221
- Fisher, B., Turner, Michael G, Cullen, Francis T, & National Institute of Justice. (2000). *The sexual victimization of college women*. U.S. Dept. of Justice, Office of Justice Programs, National Institute of Justice.
- Foubert, J., Langhinrichsen-Rohling, J., Brasfield, H., & Hill, B. (2010). Effects of a rape awareness program on college women: Increasing bystander efficacy and willingness to intervene. *Journal of Community Psychology, 38*(7), 813-827.
- Frye, V. (2007). The informal social control of intimate partner violence against women: Exploring personal attitudes and perceived neighborhood social cohesion. *Journal of Community Psychology, 35*, 1001-1018.
- Gomez, J., Bradley, J., & Conway, P. (2018). The challenges of a high-performance student

- athlete. *Irish Educational Studies*, 37(3), 329-349. doi: 10.1080/03323315.2018.1484299
- Harrison, C. K., Stone, J., Shapiro, J., Yee, S., Boyd, J. A., & Rullan, V. (2009). The role of gender identities and stereotype salience with the academic performance of male and female college athletes. *Journal of Sport & Social Issues*, 33(1), 78–96
- Jayakumar, U.M., & Comeaux, E. (2016). The cultural cover-up of college athletics: How organizational culture perpetuates an unrealistic and idealized balancing act. *The Journal of Higher Education*, 87(4), 488-515.
- Jaime, M., McCauley, H., Tancredi, D., Nettiksimmons, J., Decker, M., Silverman, J., . . . Miller, E. (2015). Athletic coaches as violence prevention advocates. *Journal of Interpersonal Violence*, 30(7), 1090-1111.
- Kassing, L. R., Beesley, D., & Frey, L. I. (2005). Gender role conflict, homophobia, age, and education as predictors of male rape myth acceptance. *Journal of Mental Health Counseling*, 27, 311-328.
- Kaya, A., Iwamoto, D., Brady, J., Clinton, L., & Grivel, M. (2019). The role of masculine norms and gender role conflict on prospective well-being among men. *Psychology of Men & Masculinities*, 20(1), 142-147.
- Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., Peterson, K., Planty, M., ... & Stroop, J. (2016). *Campus climate survey validation study: Final technical report*. Bureau of Justice Statistics Research and Development Series.
- Lance, L.M. (2004). Gender differences in perceived role conflict among university student-athletes. *College Student Journal*, 38(2), 179.
- Lake, C., Snell, A., Gormley, C., Wiefek, N., & Lethbridge-Cejku, F. (2015). *The no mas study*:

Domestic violence and sexual assault in the U.S. Latin@ Community.

http://nomore.org/wp-content/uploads/2015/04/Report.CASA_.F.revised.f.050715.pdf

Latane, B., & Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help*. New York: Appleton-Century-Crofts.

Lawson, S., Munoz-Rojas, D., Gutman, L., & Siman, M. (2012). Changing attitudes and perceptions of Hispanic men ages 18 to 25 about rape and rape prevention. *Issues in Mental Health Nursing, 33*(12), 864-870.

McCauley, H., Tancredi, D., Silverman, J., Decker, M., Austin, S., McCormick, M., . . . Miller, E. (2013). Gender-equitable attitudes, bystander behavior, and recent abuse perpetration against heterosexual dating partners of male high school athletes. *American Journal of Public Health, 103*(10), 1882-1887.

McCray, K.L. (2015). Intercollegiate athletes and sexual violence. *Trauma, Violence, and Abuse 16* (4), 438-443.

McDermott, R., Naylor, P.D., McKelvey, D., & Kantra, L (2017). College men's and women's masculine gender role strain and dating violence acceptance attitudes: Testing sex as a moderator. *Psychology of Men & Masculinity, 18*(2), 99-111.

McDermott, R., Schwartz, J., Lindley, L., & Proietti, J. (2014). Exploring men's homophobia: Associations with religious fundamentalism and gender role conflict domains. *Psychology of Men & Masculinity, 15*(2), 191-200.

McDaniel, M., & Rodriguez, D. (2017). Undergraduate men's self-reports of sexual assault and perceptions of college campus acquaintance rape. *Journal of Interpersonal Violence, 1-19*

McGovern, J. & Murray, P. (2016). *Consent communication: What does it mean for student athletes?* https://www.ncaa.org/sites/default/files/McNeil_Conent%20Communication.pdf

- McMahon, S. (2007). Understanding community specific rape myths: Exploring student athlete culture. *Journal of Women and Social Work, 22*(4): 357-370.
- McMahon, S. (2015). Participation in high school sports and bystander intentions, efficacy to intervene, and rape myth beliefs. *Journal of Interpersonal Violence 30* (17), 2980–2998.
- McMahon, S. & Banyard, V. (2012). When can I help? A conceptual framework for preventing violence through bystander intervention. *Trauma, Violence & Abuse., 13*, 3-14.
- McMahon, S., & Farmer, G. (2009). The bystander approach: Strengths-based sexual assault prevention with at-risk groups. *Journal of Human Behavior in the Social Environment, 19*(8), 1042-1065.
- McMahon, S., Postmus, J., & Koenick, R.A. (2011). Conceptualizing the engaging bystander approach to sexual violence prevention on college campuses. *Journal of College Student Development, 52*(1), 115-130.
- Miller, J.S., & Levy, G.D. (1996). Gender role conflict, gender-typed characteristics, self-concepts, and sport socialization in female athletes and nonathletes. *Sex Roles, 35*(1/2), 111-122.
- Milner, A.N., & Baker, E.H. (2017). Athletic participation and intimate partner violence victimization: Investigating sport involvement, self-esteem, and abuse patterns for women and men. *Journal of Interpersonal Violence, 32*(2), 268-289.
- Moynihan, M., & Banyard, V. (2008). Community responsibility for preventing sexual violence: A pilot study with campus greeks and intercollegiate athletes. *Journal of Prevention & Intervention in the Community, 36*(1-2), 23-38.

- Moore, M. (2017). Stepping outside of their comfort zone: Perceptions of seeking behavioral health services amongst college athletes. *Journal of Issues in Intercollegiate Athletics, Special Issue*, 130-144.
- National Collegiate Athletic Association. (2019). *Sexual Violence Prevention Toolkit: An Athletics Toolkit for a Healthy and Safe Culture, Second Edition*. https://ncaaorg.s3.amazonaws.com/ssi/violence/SSI_SexualViolencePreventionToolkit.pdf
- Navarro, J., & Tewksbury, R. (2017). National comparisons of rape myth acceptance predictors between nonathletes and athletes from multi-institutional settings. *Sexual Abuse : A Journal of Research and Treatment*, 1-17. doi: 10.1177/1079063217732790.
- O'Neil, J. (2008). Summarizing 25 years of research on men's gender role conflict using the gender role conflict scale: New research paradigms and clinical implications. *The Counseling Psychologist*, 36(3), 358-445.
- O'Neil, J. (2013). Gender role conflict research 30 years later: An evidence-based diagnostic schema to assess boys and men in counseling. *Journal of Counseling & Development*, 91(4), 490-498.
- O'Neil, J. M. (2015). *Men's gender role conflict: Psychological costs, consequences, and an agenda for change*. Washington, DC: American Psychological Association.
- O'Neil, J. M., Helms, B. J., Gable, R. K., David, L., & Wrightsman, L. S. (1986). Gender-role conflict scale: College men's fear of femininity. *Sex Roles*, 14, 335- 350.
- Poteat, V., & Vecho, O. (2016). Who intervenes against homophobic behavior? Attributes that distinguish active bystanders. *Journal of School Psychology*, 54, 17-28.
- Ramaeker, J., & Petrie, T. (2019). "Man Up!": Exploring intersections of sport participation, masculinity, psychological distress, and help-seeking attitudes and intentions. *Psychology*

of Men & Masculinities, 20(4), 515-527.

- Rizo, C. F., & Macy, R. J. (2011). Help seeking and barriers of Hispanic partner violence survivors: A systematic review of the literature. *Aggression and Violent Behavior*, 16, 250-264.
- Rothschild-Checroune, E., Gravelle, F., Dawson, D., & Karlis, G. (2012). Balancing academic and athletic time management : A qualitative exploration of first year student athletes' university football experiences. *Loisir Et Société / Society and Leisure*, 35(2), 243-261.
- Sable, M.R., Danis, F., Mauzy, D.L., & Gallagher, S.K. (2006). Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health*, 55(3), 157-162.
- Segrave, J. (2016). Challenging the gender binary: The fictive and real world of quidditch. *Sport in Society: Sex Integration in Sport and Physical Culture*, 19(8-9), 1299-1315.
- Sinozich, S., & Langton, L. (2014). *Rape and sexual assault victimization among college females, 1995–2013*. Washington, DC: US Dept. of Justice.
<http://www.bjs.gov/content/pub/pdf/rsavcaf9513.pdf>
- Shih, T., & Fan, X. (2009). Comparing response rates in e-mail and paper surveys: A meta-analysis. *Educational Research Review*, 4(1), 26-40.
- Sønderlund, A., O'Brien, K., Kremer, P., Rowland, B., De Groot, Fl., Staiger, P., Zinkiewicz, L., & Miller, P. (2014). The association between sports participation, alcohol use and aggression and violence: A systematic review. *Journal of Science and Medicine in Sport*, 17(1), 2-7.
- Steinfeldt, J.A., England, B., Steinfeldt, M.C., Speight, Q.L. (2009). Gender role conflict and

- stigma toward help-seeking among college football players. *Psychology of Men & Masculinity*, 10(4), 261-272. doi: 10.1037/a0017223
- Steinfeldt, Jesse A., & Steinfeldt, M. Clint. (2010). Gender role conflict, athletic identity, and help-seeking among high school football players. *Journal of Applied Sport Psychology*, 22(3), 262-273.
- United Educators. (2015). *Confronting Campus Sexual Assault: An Examination of Higher Education Claims*. https://www.bgsu.edu/content/dam/BGSU/human-resources/documents/training/lawroom/Sexual_assault_claim_study.pdf
- United States Department of Justice (2017). Sexual assault. <https://www.justice.gov/ovw/sexual-assault>
- United States Senate. (2014). *Sexual violence on campus: How too many institutions of higher education are failing to protect students*. <http://dcrc.org/wp-content/uploads/2014/10/Sen.-McCaskills-Sexual-Violence-on-Campus-Survey-Report1.pdf>
- Vogel, D., Wester, S., Hammer, J., & Downing-Matibag, T. (2014). Referring men to seek help: The influence of gender role conflict and stigma. *Psychology of Men & Masculinity*, 15(1), 60-67.
- Weitzman, A., Cowan, S., & Walsh, K. (2017). Bystander interventions on behalf of sexual assault and intimate partner violence victims. *Journal of Interpersonal Violence*, 35(7-8).
- White, J.W., Koss, M.P., Abbey, A., Cook, S., Ullman, S.E., & Thompson, M. (2015). *What you need to know about campus sexual assault victimization*. http://campusclimate.gsu.edu/files/2015/04/Facts-about-victimization-with-logo_09_-11_2015slc2.pdf
- Wiersma-Mosley, J.D. & Jozkowski, K.N. (2019). A brief report of sexual violence among universities with NCAA division I athletic programs. *Behavioral Sciences*, 9(2), 17.

- Woznyj, H., Shanock, L., Heggestad, E., Long, S., & Cardemil, Esteban V. (2017). What did you mean by that? Justice implications of interpersonal interactions for Latino/as. *Journal of Latina/o Psychology*, 5(3), 195-212.
- Yopyk, D., & Prentice, D. (2005). Am I an athlete or a student? Identity salience and stereotype threat in student-athletes. *Basic and Applied Social Psychology*, 27, 329–336.
- Young, B.R., Desmarais, S.L., Baldwin, J.A., & Chandler, R. (2016). Sexual coercion practices among undergraduate male recreational athletes, intercollegiate athletics, and non-athletes. *Violence Against Women*, 23(7), 1-18. doi: 10.1177/1077801216651339
- Yule, K. & Grych, J. (2017). College students' perceptions of barriers to bystander intervention. *Journal of Interpersonal Violence*. doi: 10.1177/0886260517706764

Chapter Three: Sexual Assault Prevention Education with Student-Athletes: Exploring Perceptions of Campus Climate and Awareness of Sexual Assault Policies and Resources

Abstract

Increasing awareness of school sexual assault policies and resources is a central component of sexual assault prevention education. Research suggests that the state of the campus climate impacts an individual's level of awareness, particularly for at-risk groups like student-athletes. The purpose of this study was to examine how macro factors such as participation in sexual assault prevention education, perceptions of the institutional response to addressing sexual assault, and perceptions of campus staff (i.e. campus police, athletic staff, and administration) are associated with awareness of sexual assault policies and resources. Student-athletes at five NCAA schools participated in a web-based survey to assess their perceptions of the campus climate and awareness of sexual assault policies and resources. The results from an ordinary least squares multiple regression model revealed that past participation in sexual assault prevention, more positive perceptions of the institutional response, and more positive perceptions of campus police and administration were associated with a greater awareness of sexual assault policies and resources while controlling for race, ethnicity, and gender. Perceptions of athletic staff was not significantly related to awareness of policies and resources. These findings demonstrate that delivering consistent messaging and engaging campus staff in sexual assault prevention provides a foundation for building a positive campus climate which, in turn, may reduce campus sexual assault.

Keywords: Sexual assault, prevention, campus climate, awareness of sexual assault, student-athletes

Sexual Assault Prevention Education with Student-Athletes: Exploring Perceptions of Campus Climate and Awareness of Sexual Assault Policies and Resources

Introduction

While institutions of higher education have increased efforts to address sexual assault, few colleges and universities have focused on the ways in which the campus response to allegations of sexual assault impacts the student experience. In a national study with college students from 27 institutions, 11.7% of students experienced nonconsensual penetration or sexual touching by force or incapacitation during their time in college, with even higher rates among female students (26.1%; Cantor et al., 2017). Despite studies consistently finding high rates of campus sexual assault (Cantor et al., 2017; Krebs et al., 2016), underreporting to campus authorities remains as high as 80% (Sinozich & Langton, 2014; White et al., 2015). Research suggests that participation in sexual assault prevention education (Hayes-Smith & Levett, 2010), the institutional response to allegations of sexual assault, and confidence in campus staff influences help-seeking for sexual assault survivors (Sable et al., 2006; Zinzow & Thompson, 2011). On average, 63.3% of college students believe that campus officials would take a report of sexual assault seriously and only 49.2% trust the university to conduct a fair investigation (Cantor et al., 2017).

Institutions of higher education also have the potential to worsen outcomes for victims of sexual assault as a result of institutional betrayal. Institutional betrayal is defined as systemic or institutional actions – and inactions – that perpetuate traumatic experiences for survivors of sexual assault, such as covering up any wrongdoings, retaliating responses toward sexual assault reports, failing to respond to reports of sexual assault, or lacking civil rights for oppressed groups (Smith & Freyd 2014). These experiences may lead to poor physical and mental health among

survivors (Smith & Freyd, 2013, 2017), which could be further intensified for students who have a greater connection to their school such as student-athletes (Smith & Freyd, 2013, 2014).

Recommendations for preventing the mishandling of sexual assault at the institutional level are to build transparency and promote institutional values that protect students (Bloom & Farragher, 2013; Smith & Freyd, 2014). To promote institutional reform, many colleges and universities implement sexual assault prevention education to address campus sexual assault. Raising awareness of school policies and resources is a critical component of sexual assault prevention education, as students learn school definitions of sexual assault, and aids in transparency by showing how the school handles situations involving sexual assault, and what professional resources are available on campus to support student survivors. Studies have found that greater awareness of school sexual assault policies has been linked to lower rates of campus sexual assault (DeLong et al, 2018). However, there seems to be a lack of student awareness of school sexual assault policies and resources (McMahon & Stepleton, 2018; Walsh et al., 2010). While there is evidence that the campus climate influences students' awareness of sexual assault policies and resources, few studies explore the impact of the campus climate on at-risk populations like student-athletes who may be more vulnerable to institutional betrayal (Smith & Freyd, 2014). Therefore, the purpose of this study is to examine student-athlete perceptions of the campus climate and their awareness of sexual assault policies and resources.

Student-Athletes and Sexual Assault

Student-athletes are a unique subpopulation of college students. In the 2017-2018 academic year, there were nearly half a million student-athletes competing across 1,1000 National Collegiate Athletic Association (NCAA) membership institutions (NCAA, 2018). Although student-athletes make up a smaller percentage of the student population, they are not

immune to sexual assault. Previous research found that female athletes face greater sexual harassment in the sport environment (McGinley et al., 2016) and may be more susceptible to sexual harassment from male authority figures (Fasting et al., 2003). In a longitudinal study that followed teens to college, results yielded no significant differences between the prevalence of sexual assault victimization between female student-athletes (14.8%) and non-athletes (15.0%; Milner & Baker, 2017). Meanwhile, male student-athletes have been overrepresented in the literature as perpetrators of sexual assault (Binder, 2001; Crosset et al., 1995). A study conducted with 379 male college students at a public university found that more than half of the students who endorsed perpetrating some form of sexual coercion participated in sports (Young et al., 2016).

Since student-athletes feel more comfortable with teammates and other student-athletes than non-athletes (NCAA, 2017), greater awareness of sexual assault policies and resources may better position student-athletes to recognize sexual assault involving one of their peers as a survivor or perpetrator. Although the campus climate has not been studied in relation to sexual assault with student-athletes, female student-athletes seem to have greater awareness of campus-wide resources than males (NCAA, 2017). Moreover, college students who participate in intramural or university sports teams are more likely to believe sexual assault prevention education is not important (Jozkowski et al., 2015). To address the gaps in the literature and improve sexual assault prevention education with student-athletes, it is imperative to explore macro factors that may affect student-athlete awareness of policies and resources for sexual assault.

Campus Climate and Awareness of Sexual Assault Policies and Resources

Colleges and universities are responsible for creating a safe campus climate. Since

institutions of higher education have the capacity to shape community norms that oppose sexual assault and support respectful relationships, more comprehensive theoretical models are needed to assess how knowledge and attitudes could change as a result of sexual assault prevention education (Banyard, 2014). Through the socio-ecological model, institutions of higher education can help build a community response to sexual assault using sexual assault prevention education. Bronfenbrenner's (1977) socio-ecological model recognizes the multifaceted interaction between individual, relationship, community, societal factors. The social-ecological model situates a comprehensive campus-based prevention strategy to address risk and protective factors across each of these levels (DeGue, 2014). Students may be more aware of school sexual assault policies if those in their peer network and social environment are committed to changing social norms that contribute to sexual assault. That said, institutions of higher education will be more successful in reducing sexual assault by building community responsibility. When applying this model to the campus climate, consistent messaging from prevention training and from campus staff (i.e. campus police, athletic staff, and administration) may influence the level of awareness of school sexual assault policies and resources.

There has been a push by the White House Task Force to Protect Students from Sexual Assault (2014) to assess the campus climate regarding sexual misconduct, including the institutional response to addressing allegations of sexual assault. Research suggests that survivors of sexual assault have a variety of fears including the following: fear of retaliation, fear of not being believed, and disbelief in successful prosecution (Sable et al., 2006; Zinzow & Thompson, 2011). Spencer and colleagues (2017) found that over 260 undergraduate students at a large southern university who experienced sexual assault during their time at college were more likely to formally report the incident to authorities when they not only felt that the

university would handle the report appropriately but also had a positive perception of campus climate. Interviews with college students also highlighted how positive perceptions of the campus climate would enhance knowledge of available resources (Garcia et al., 2012). Since most of the literature focuses on survivors' experience of reporting sexual assault, more studies are needed to uncover perceptions of institutional response in responding to allegations of sexual assault and the impact on student awareness of school sexual assault policies and resources.

The campus climate is also greatly affected by perceptions of campus staff, such as campus police, staff, and administration. Trust, respect, confidentiality, trained professionals, as well as comprehensive and consistent response are believed to be important qualities that college students look for in campus staff when seeking assistance for sexual assault (Strout et al., 2014). A national study found that college students have a low perceived confidence in campus staff and school leadership efforts related to sexual misconduct prevention and response (Krebs et al., 2016). Not only is sexual assault seldom reported to campus police (Krivoshey et al., 2013), nearly 30% of reported cases are dropped by the survivor (Murphy et al., 2014). Other studies indicate survivor fear or dislike of campus police as a barrier to reporting to formal helpers (Sable et al., 2006; Zinzow & Thompson, 2011). Racial discrimination is also a perceived barrier to reporting sexual assault to police, as Non-White female survivors fear the incident would be viewed as their fault and thus did not want to get police involved compared to White females (Thompson et al., 2007). Many colleges and universities have greater enforced mandated reporting of sexual assault by campus staff, mainly in response to the insufficient response to high-profile sexual assault victimizations by student-athletes (Mancini et al., 2016).

Over the years many resources have been put in place on college campuses to address sexual assault. More recently, the release of the *Dear Colleague Letter* not only reinforced

federal requirements under Title IX (1972) that prohibits discrimination based on sex in education and activities, but also encouraged colleges and universities to take more prosocial measures to prevent sexual assault, including raising awareness of campus policies and procedures (United States Department of Education, 2011). Most institutions of higher education implement sexual assault prevention education to their students to raise awareness of sexual assault and how to respond if an incident occurs to themselves or their peers (Amar et al., 2014; Kafonek & Richards, 2017). A meta-analysis of empirical literature found that sexual assault prevention education has a positive influence on college students' knowledge and attitudes toward sexual assault (Newlands & O'Donohue, 2016). Many college students believe that sexual assault prevention education is important for themselves and for the student body, especially among females and younger students (Jozkowski et al., 2015). Findings from qualitative research indicates that college students are eager for continued education on sexual assault and available campus resources (Garcia et al., 2012). However, the bulk of research focuses on implementing sexual assault prevention education at the individual level (Vladutiu et al., 2011), rather than examining factors at multiple levels of the environment.

Despite sexual assault prevention efforts, there is a lack of awareness of sexual assault policies and resources among the student population (Burgess-Proctor et al., 2016; Krebs et al., 2016; Sabina & Ho, 2014). For example, when a group of criminal justice students were surveyed on their perceptions of sexual assault and awareness of resources, half of the participants said they received information about sexual assault and, of those, only 39% knew where to get information about sexual assault from the university (Hayes-Smith & Levett, 2010). Lack of awareness is likely also influenced by poor policies and definitions of sexual assault. A statewide study of four-year colleges in Ohio found that colleges had inconsistent or confusing

definitions of sexual assault, lacked 24-hour reporting services as well as clear policies on confidentiality and anonymity for student survivors (Krivoshey et al., 2013). Results from a campus climate survey at a public university in the Northeast revealed that, even though students were exposed to sexual assault either from their personal experience or friend's experience, students had limited knowledge of campus resources and slight confidence in knowing where to go for assistance should an assault occur (McMahon & Stepleton, 2018).

Demographic factors may impact the student experience as it relates to sexual assault. Studies suggest that there is a greater awareness of sexual assault resources among females than males (Walsh et al., 2010; Banyard et al., 2007). Given that females receive more disclosures than males (Banyard et al., 2010; Paul et al., 2014), females may be more inclined to learn how to support survivors of sexual assault if they are unsure how to go about reporting the incident to campus authorities or seeking assistance from campus services. There may also be racial and ethnic disparities between college students. A recent study found that students of color are more supportive of sexual assault prevention education than White students (Worthen & Wallace, 2017). Students of color are at a higher risk of sexual assault victimization (Cantor et al., 2017) and at a greater risk for institutional betrayal when seeking assistance for sexual assault (Gomez, 2015). Thus, students of color may show more interest in sexual assault prevention education to better understand school sexual assault policies and resources for themselves or for other minority students. Improving communication and education around campus sexual assault with students of color are believed to mitigate some of the individual and sociocultural risk factors (Ollen et al., 2016).

Campus Climate and Student-Athletes

As the largest national governing body of intercollegiate athletics, the NCAA strives to

promote student-athlete success in academics, well-being, and fairness (NCAA, 2019). NCAA member institutions are held accountable for meeting these standards. To assess the current campus climate, the NCAA Growth, Opportunities, Aspirations and Learning of Students in college (GOALS) Study surveyed experiences and well-being of current student-athletes across more than half of NCAA member institutions and found that the majority of student-athletes feel a strong sense of belonging at their college and part of an inclusive team environment (Paskus & Bell, 2016). Positive perceptions of the campus climate and interactions with athletic staff generally promote student-athlete success (Hoffman et al., 2016; Rankin et al, 2016); however, student-athletes report feeling more comfortable speaking with their team captains and coaches about team issues compared to faculty or administrators (Paskus & Bell, 2016). Taken together, student-athletes seem to have positive perceptions of the overall campus climate at their respective institutions.

However, few studies have explored institutional response and administration as it relates to handling sexual assault in athletics (Helling, 2020; McCray, 2015; Mountjoy et al., 2016; Scales, 2009; Spies, 2006). Sexual assault in athletics is not properly addressed when there is abuse of power relationships between staff and student-athletes, a sport culture of secrecy and defense, and failed sport leadership (Mountjoy et al., 2016). In a historical analysis of sexual assault perpetration by student-athletes, colleges with renowned athletic programs not only mishandled allegations of sexual assault to protect their players and overall reputations, but also demonstrated patterns of untrustworthy staff (Mordecai, 2017). Many survivors of sexual assault are discouraged from pursuing charges in allegations involving student-athlete perpetrators as a result of delayed responses by athletic department staff and university administrators (Melnick, 1992). These occurrences may influence negative perceptions of the institutional response and

campus staff by student-athletes. In addition, a national study found that 20% of schools give athletic departments oversight of sexual assault cases involving student-athletes, which demonstrates different adjudication procedures for student-athletes than non-athletes (United States Senate, 2014). Due to the inconsistencies in institutional responses to sexual assault, student-athletes may receive mixed messages about school sexual assault policies.

In response to criticism for lacking policies to address sexual assault (Ananiades, 2012; Parent, 2003; Scales, 2009), the NCAA has taken several steps to improve sexual assault prevention efforts. The NCAA Board of Governors (2018) requires university chancellors and presidents, athletic directors, as well as Title IX coordinators to annually report that their institution is: a) maintaining compliance with institutional policies, processes, and adjudications for sexual assault; b) providing information on institutional policies and resources are readily available to student-athletes, and c) educating coaches, athletics administrators and student-athletes on prevention, intervention, and response. The NCAA Sport Science Institute also released the *Sexual Violence Prevention Toolkit* (2019) as a resource for institutional leaders to not only prevent campus sexual assault, but to also engage student-athletes as prosocial bystanders. Student-athletes are encouraged to collaborate on campus efforts to prevent sexual assault and are also empowered to assist peer survivors of sexual assault and change community norms to prevent campus violence (NCAA Sport Science Institute, 2019). However, little is known about the student-athlete experience and their awareness of sexual assault policies and resources since the NCAA initiated new guidelines and best practices to reduce sexual assault.

Current Study

The extant literature has largely ignored the macro factors associated with student-athlete awareness of sexual assault policies and resources. This study seeks to assess how participation

in sexual assault prevention, perceptions of institutional response, and perceptions of campus staff are related to awareness of school sexual assault policies and resources. More specifically, this article aims to examine how participation in sexual assault education and training as well as perceptions of the campus climate are associated with awareness of sexual assault policies and resources. Taking into account how one's awareness, perceptions, and responses to campus sexual assault can be influenced by lived experiences that are informed by structural forms of oppression and privilege, such as race, ethnicity, and gender (Worthen, & Wallace, 2017), it is important to control for these demographic factors. It is hypothesized that student-athletes who participate in sexual assault prevention, have positive perceptions of the institutional response, and positive perceptions of campus staff (i.e. campus police, athletic staff, and administration) will have greater awareness of sexual assault policies and resources after controlling for race, ethnicity, and gender.

Method

Participants

To be eligible for this study, college students who were 18 years or older and actively participated in an NCAA sport were invited to participate. The researcher utilized convenience and quota sampling to target an equal number of male and female student-athletes at five NCAA membership institutions through professional connections. The survey was emailed to approximately 1,150 student-athletes across Division I, II, and III programs in the United States. Two schools were located in the Northeast, two in the Southeast, and one in the West. Of the 461 participants who agreed to participate, 82 participants were screened out due to eligibility criteria or quota conditions. Another 71 participants were removed due to missing data that exceeded 3%. There was a total of 308 student-athletes with a response rate of 27%.

Table 1

Student-Athlete Demographics (n = 308)

Characteristic	Frequency	% (n)
Race		
White	220	72.4%
Black or African American	42	13.8%
Other	25	8.2%
Asian or Pacific Islander	13	4.3%
Native American or American Indian	4	1.3%
Missing	4	1.3%
Ethnicity		
Hispanic	40	13.2%
Non-Hispanic	263	86.8%
Gender		
Men's Team	144	46.8%
Women's Team	164	53.2%
Division Level		
Division I	173	56.2%
Division II	50	16.2%
Division III	85	27.6%

As illustrated in Table 1 above, the final sample included 53.3% of females and 48.8% of males. The majority of participants were White (72.4%), followed by Black or African American (13.8%), Other (8.2%), Asian or Pacific Islander (4.3%), and Native American or American Indian (1.3%). Another 13% of the participation identified as Hispanic versus Non-Hispanic (86.8%). In terms of NCAA division level, 56.2% were Division I, 16.2% were Division II, and 27.6% were Division III.

Procedures

This study used a non-probability cross-sectional survey design. An anonymous, self-administered questionnaire was created in Qualtrics with a unique link for each participating school. The survey was pretested with a small group of doctoral students enrolled in core curriculum classes at the host research institution. Pretesting not only ensured that the questions were clearly worded and organized to reduce measurement bias, but also recorded the amount of

time needed to complete the survey. The final survey was sent to a gatekeeper at each school's athletic department. To ensure anonymity, the gatekeepers emailed the survey link to their student-athlete listserv weekly until the desired sample size was reached. Athletic staff verbally reminded their student-athletes during regularly scheduled activities about the opportunity to take the survey. Institutional Review Board approval was received from the host institution and each participating institution. Recipients received a \$10 Amazon e-gift card for participating.

Measures

Participation in Sexual Assault Prevention

One question asked participants to indicate whether they participated in training or education on sexual assault during their time in college. Answer choices included yes, no, or not sure. Responses were recoded into a new dichotomous variable with yes = 1 and no/not sure = 0.

Perceptions of Institutional Response

Perceptions of institutional response is operationalized as the perceived ways in which the university or college addressed campus sexual assault through prevention and response. The scale is measured using the perception of school leadership climate for sexual misconduct prevention and response which was tested in the Bureau of Justice Statistics' Campus Climate Survey Validation Study (CCSVS; Krebs et al., 2016). The 7-item scale measures perceptions of campus leadership efforts related to sexual assault such as "Sexual harassment is not tolerated at this school" and "This school is doing a good job of investigating incidents of sexual assault." Participants select whether they agree or disagree ranging from strongly agree = 3, agree = 2, disagree = 1, strongly disagree = 0 ($\alpha = .95$). Scores total from 0-21, with a higher score demonstrating more positive attitude toward reporting to an organization.

Perceptions of Campus Staff

Nine items are used to measure the perceptions of campus staff that are divided into subscales about campus police ($\alpha = .89$), athletic staff ($\alpha = .90$), and administration ($\alpha = .93$; Krebs et al., 2016). While the original scale from the CCSVS included perceptions of faculty, the scale was modified to include athletic staff as a way to incorporate a better sense of the athletic culture. The same three questions are asked for each subscale (e.g. “are genuinely concerned about my well-being,” “are doing all they can to protect students from harm,” and “treat students fairly”). Responses for the separate subscales are summed for strongly agree = 3, agree = 2, disagree = 1, strongly disagree = 0.

Awareness of Sexual Assault Policies and Resources

Knowledge of sexual assault policies and resources was adapted using by the Awareness and Perceived Fairness of School Sexual Assault Policy and Resources by the CCSVS (Krebs et al., 2016). For the purposes of this study, two items were dropped from the original scale to focus exclusively on participant’s knowledge of the school’s sexual assault policies and resources. The Cronbach alpha for the revised instrument resulted in higher reliability ($\alpha = .91$) than the full scale ($\alpha = .89$). Participants are asked to indicate their agreement with statements such as “I am aware of and understand this school’s procedures for dealing with reported incidents of sexual assault” and “If a friend of mine were sexually assaulted, I know where to take my friend to get help” on a Likert scale from strongly agree to strongly disagree. Higher scores signified greater awareness of school sexual assault policies and resources.

Control Variables

The control variables included race, ethnicity, and gender. Participants selected their race as either White, Black or African American, Native American or American Indian, Asian or Pacific Islander, or Other. Most of the participants who completed the survey were White

(72.4%). As a result of small percentages of participation from other races, race was recoded coded as binary variable (White = 1, Non-White = 0). Participants also specified their ethnicity (Hispanic = 1, Non-Hispanic = 0). For gender, participants were asked if they were a member of a men's or women's team (men's team = 0, women's team = 1).

Statistical Analysis

Data collected from the Qualtrics survey was imported to the Statistical Package for the Social Sciences (SPSS, version 25.0) where analysis was performed. Descriptive statistics were used to examine the sample's demographic information, as well as the means and range of the variables. Correlation analyses explored whether awareness of sexual assault policies and resources were correlated with sociodemographic variables and the campus climate. An ordinary least squares multiple regression model was used to assess student-athlete's participation in sexual assault prevention, perceptions of campus staff and perceptions of institutional response differentiates between awareness of school sexual assault policies and resources, while controlling for race, ethnicity, and gender. Preliminary analyses were conducted to ensure there were no violations of assumptions of normality, linearity, multicollinearity, and homoscedasticity.

Results

Correlations between race, ethnicity, gender, participation in sexual assault prevention, perceptions of institutional response, perceptions of campus staff, and awareness of sexual assault policies and resources are presented in Table 2. Covariates were all significantly correlated to the outcome variable.

Table 2

Correlations (n = 308)

	1	2	3	4	5	6	7	8	9
1. Race	1								
2. Ethnicity	-.30**	1							
3. Gender	.10+	.07	1						
4. Participation in SA Prevention	.08	.01	-.14*	1					
5. Perceptions of Institutional Response	.19**	-.12*	-.18**	.14*	1				
6. Perceptions of Campus Police	.23**	-.10+	.02	.07	.61**	1			
7. Perceptions of Athletic Staff	.29**	-.07	-.06	.06	.46**	.54**	1		
8. Perceptions of Administration	.25**	-.09	.08	.00	.54**	.66**	.58**	1	
9. Awareness of SA Policies and Resources	.23**	-.18**	-.13*	.24**	.62**	.53**	.35**	.46**	1

Note. Sexual Assault (SA)

+p < .10, *p < .05, p ** < .001

Table 3

Campus Climate and Awareness of Sexual Assault Policies and Resources

Variables	<i>B</i>	<i>SE B</i>	β	<i>p</i>
Race (0=Non-White)	.29	.24	.06	.216
Ethnicity (0=Non-Hispanic)	-.57	.30	-.09	.059+
Gender (0=Men's Team)	-.21	.20	-.05	.304
Participation in Sexual Assault Prevention	.99	.27	.16	.000**
Perceptions of Institutional Response	.18	.03	.40	.000**
Perceptions of Campus Police	.19	.06	.20	.002*
Perceptions of Athletic Staff	-.04	.05	-.04	.462
Perceptions of Administration	.11	.06	.11	.073+

Note: Reference categories are in parentheses.

+p < .10, *p < .05, **p < .001

An ordinary least squares multiple regression model assessed the association of participation in sexual assault prevention, perceptions of institutional response, perceptions of campus police, perceptions of athletic staff, and perceptions of administration with awareness of sexual assault policies and resources after controlling for race, ethnicity, and gender (see Table 3). The total variance explained by the model as a whole was 46.9%, ($F(8, 289) = 31.93, p < .001$). Most of the campus climate variables were significant including participation in sexual assault prevention ($\beta = .16, p < .001$), perceptions of institutional response ($\beta = .40, p < .001$), and perceptions of campus police ($\beta = .20, p = .002$). Past participation in sexual assault prevention, more positive perceptions of institutional response, and more positive perceptions of campus police were associated with greater awareness of school policies and resources for sexual assault. Perceptions of athletic staff and perceptions of administration were not significant. However, perceptions of administration approached significance ($\beta = .11, p = .073$), as more positive perceptions of administration indicated greater awareness of sexual assault policies and resources. While the control variables were not statistically significant, ethnicity approached significance ($\beta = -.09, p = .059$). Hispanic student-athletes had lower awareness of sexual assault policies and resources than non-Hispanics.

Discussion

The goal of this study was to examine how student-athlete perceptions of the campus climate impact their awareness of school sexual assault policies and resources. The hypothesis supported that student-athletes who have participated in sexual assault prevention, have positive perceptions of the institutional response, and have positive perceptions of campus staff was associated with a greater awareness of sexual assault policies and resources after controlling for race, ethnicity, and gender. Results indicate that past participation in sexual assault prevention

was related to an increase in awareness of sexual assault policies and resources, which is consistent with past literature (Morean et al., 2018). Studies demonstrate that there is a powerful impact of sexual assault prevention through education and training on individual knowledge of the prevalence, impact, and consequences of sexual assault (Newlands & O'Donohue, 2016). Before the NCAA mandated annual sexual assault prevention for athletic departments in 2017, institutions of higher education did not always provide targeted training to student-athletes (Amar et al., 2014). Only 37% of colleges and universities provided sexual assault prevention to student-athletes nationwide, with the majority targeting Division I programs (United States Senate, 2014). Few four-year institutions were concerned with programming to address the risks and needs of student-athletes (Kafonek & Richards, 2017). This study shows the positive influence of sexual assault prevention education with student-athletes. Researchers should consider studying the effect of sexual assault prevention on student-athletes' knowledge, attitudes, and behaviors when engaging in sexual assault prevention education.

As hypothesized, positive perceptions of the institutional response to handling allegations of sexual assault, as well as positive perceptions of the campus police and administration, were associated with greater awareness of school sexual assault policies and resources. Student-athlete perceptions of institutional response and campus staff align with findings from other studies in which students believe that negative perceptions of the institutional response and campus staff could have detrimental consequences on responding to sexual assault (Sable et al., 2006; Spencer et al., 2017; Zinzow & Thompson, 2011). Further, these results reflect the growing efforts of colleges and universities to better address sexual assault, particularly with student-athletes. Institutions of higher education have been partnering with on-campus personnel to lead sexual assault prevention, with the majority led by enforcement followed by student services staff,

campus administrators, and faculty members (Kafonek & Richards, 2017). Through a community effort, colleges and universities could convey consistent messaging and create more opportunities for students to build rapport with campus staff. More research needs to assess how institutions and campus staff are addressing sexual assault and transforming the overall campus climate to increase awareness of their school's sexual assault policies and resources.

Different than expected, perceptions of athletic staff did were not significantly related to awareness of school sexual assault policies and resources. Due to fact that the NCAA implemented mandated sexual assault prevention education within the last year, it may be too early to detect any major shifts in athletics departments. However, this finding suggests that athletic staff need to prioritize sexual assault prevention in their programs to raise awareness of sexual assault policies and resources. There are many high-profile cases in which athletic departments kept allegations of sexual assault from being shared with institutional administrators to protect student-athlete perpetrators eligibility to play (Scales, 2009). It is possible that these beliefs permeate the collegiate sport culture and student-athletes therefore receive mixed messaging about responding to sexual assault. In addition, athletic departments may not be participating in campus-wide prevention efforts. Future studies should investigate whether student-athletes are receiving consistent messaging from the institution and athletics department. Since athletic staff facilitate student-athlete success in their performance on the field and in the classroom (Rankin et al, 2016), they may also be influential advocates for sexual assault prevention within their department. For instance, coaches have been key figures for promoting sexual violence prevention with their student-athletes (Jaime et al. 2015; McMahan 2009; Miller et al. 2013; Tredinnick & McMahan, 2019). More research is needed to determine how athletic staff influence student-athlete awareness of sexual assault policies and resources.

Regression analyses revealed that race, ethnicity, and gender did not yield significant differences. These findings contradict past research (Worthen & Wallace, 2017; Walsh et al., 2010; Banyard et al., 2007). However, recent studies suggest that the likelihood of experiencing institutional betrayal is not influenced by race or gender (Pinciotti & Orcutt, 2019). While ethnicity was not statistically significant to awareness of school sexual assault policies and resources, Hispanic student-athletes appeared to have a lower awareness than non-Hispanic student-athletes. Scholars theorize that students of color may encounter microaggressions when seeking assistance for sexual assault due to limited cultural competence within university care systems (Gomez, 2015). Student-athletes of color face greater campus challenges than White student-athletes (NCAA, 2017) and are less likely to find the campus and team environments inclusive or accepting (Bernhard, 2014; Paskus & Bell, 2016). Thus, student-athletes of color, particularly Hispanic student-athletes, may be deterred from staying abreast of current policies and resources in fear that their actions will not be taken as seriously as their White peers. Future research must continue to explore demographic factors as potential predictors of awareness of sexual assault policies and resources in the context of the campus climate.

Implications and Future Directions

The present study makes an important contribution to literature on sexual assault prevention and growing literature on campus climates with at-risk populations. Findings call attention to increasing sexual assault prevention education with student-athletes, particularly on school sexual assault policies and resources. Few colleges and universities offer targeted prevention to at-risk groups (Kafonek & Richards, 2017) like student-athletes. Due to developing research that suggest that student-athletes who have been victimized by sexual assault may be vulnerable to institutional betrayal (Helling, 2020; Mountjoy et al., 2016; Pinciotti & Orcutt,

2019; Smith & Freyd, 2014), institutions of higher education should consider offering a range of sexual assault prevention education to student-athletes. Students are more receptive to sexual assault prevention education when programs are facilitated by professionals, targeted toward single-gender audiences, and offered more frequently throughout a student's college career (Vladutiu et al., 2011). For example, there are several programs that use a sports-based curriculum to incorporate concrete strategies for bystanders that take place during same-sex conversations, such as Mentors in Violence Prevention (1995) or Coaching Boys into Men (Miller et al., 2013). By framing sexual violence as a community responsibility (Banyard, 2015), student-athletes are encouraged to be peer leaders to reduce campus sexual assault. Student-athletes who participate in bystander intervention education demonstrate increased awareness of school sexual assault policies and resources (Morean et al, 2018). More studies should explore effective means for sexual assault prevention education with student-athletes.

Institutions of higher education need to continue conducting campus climate surveys to assess experiences, attitudes, and behaviors related to sexual assault, as put forth by the White House Task Force to Protect Students From Sexual Assault (2014). Campus climate surveys provide essential information to help improve programs on campus that seek to address violence (Wood et al., 2017), especially for at-risk populations like student-athletes. Implementing campus climate surveys helps bridge the gap between research, practice, and policy to assess current sexual assault policy and outcomes, which will lead to opportunities for improved data collection, increased funding for research and programming, and effective educational programs and tools (Klein et al., 2018). Replicating studies that assess the campus climate will also justify the need more for adequate resources for institutions of higher education to develop, review, and update policies on sexual assault (DeLong et al., 2018).

Participants demonstrated that institutions of higher education have a profound impact on the campus climate and creating a community response to addressing sexual assault. Thus, institutions of higher education should encourage policy reform to cultivate a more robust institutional culture. Colleges and universities should collaborate with athletic departments to improve protocols that better protect student-athletes when they disclose incidents of sexual assault to campus staff and better enforce Title IX policies. With the recent NCAA policy on campus sexual assault (2017), it is especially timely for athletic departments to take the necessary steps to become fully versed in university sexual assault policies, provide resources and education to staff and students within their respective athletic departments, and boost campus-wide efforts to reduce sexual assault. Another area for future research includes focusing on student-athlete experiences regarding the institutional response to sexual assault and interactions with campus staff. Assessing institution's compliance with mandatory training and reporting of sexual assault is important to ensure student-athletes' needs are being met.

Although this study adds to the literature on sexual assault prevention, there are some limitations to consider. The dichotomous yes/no variable used to measure sexual assault prevention education could not determine information about the type of sexual assault prevention they attended, including the program's audience, length, or content. Future surveys should evaluate the impact of specific types of sexual assault prevention education on awareness of sexual assault policies and resources. Moreover, it cannot be concluded that the campus climate predicts awareness of school policies and resources without assessing for other potential covariates. Since the survey asked participants to indicate their participation on a men's or women's team, participants did not specify their true gender identify. Other studies should incorporate more inclusive answer choices to better assess a range of different gender identities.

The awareness of sexual assault policy and resources scale had a high Cronbach alpha after dropping two items; however, the modified scale warrants a confirmatory factor analysis to measure the exact validity. In addition, researchers should consider studying covariates such as past victimization of sexual assault, type of sport, or NCAA Division level to explore differences in student-athlete perceptions of the campus climate. In terms of the research design, there may be self-selection bias because respondents who read the email invitation voluntarily opted to continue with the survey. Finally, this study is not representative of NCAA student-athletes as a result of convenience and quota sampling. Researchers should implement a stronger research design with random sampling to increase generalizability.

In spite of its limitations, this study identifies notable factors that influence the student-athlete experience in relation to sexual assault. Participation in sexual assault prevention, perceptions of the institutional response, and perceptions of campus staff appear to impact student-athletes' awareness of school sexual assault policies and resources. Institutions of higher education have a duty to protect the health and safety of student-athletes as part of the community-wide effort to reduce sexual assault. Delivering consistent messaging across the university will build a safe and reliable environment for all students.

References

- Amar, A.F., Strout, T.D., Simpson, S., Cardiello, M., & Beckford, S. (2014). Administrator's perceptions of college campus protocols, response, and student prevention efforts for sexual assault. *Violence and Victims, 29*(4), 579-593.
- Ananiades, T. (2012). Penalty on the field: Creating a NCAA sexual assault policy. *Jeffrey S. Moorad Sports Law Journal, 19*(2), 463-479.
- Banyard, V. L. (2014). Improving college campus-based prevention of violence against women: A strategic plan for research built on multipronged practices and policies. *Trauma, Violence, & Abuse, 15*, 339-351.
- Banyard, V. L. (2015). *Toward the next generation of bystander prevention of sexual and relationship violence: Action coils to engage communities*. New York, NY: Springer.
- Banyard, V.L., Ward, S., Cohn, E.S., & Plante, E.G. (2007). Unwanted sexual contact on campus: A comparison of women's and men's experiences. *Violence and Victims, 22*, 52-70. doi:10. 1891/088667007780482865
- Banyard, V. L., Moynihan, M. M., Walsh, W. A., Cohn, E. S., & Ward, S. (2010). Friends of survivors: The community impact of unwanted sexual experiences. *Journal of Interpersonal Violence, 25*, 242-256.
- Burgess-Proctor, A., Pickett, S., Parkhill, M., Hamill, T., Kirwan, M., & Kozak, A., (2016). College women's perceptions of and inclination to use campus sexual assault resources: Comparing the views of students with and without sexual victimization histories. *Criminal Justice Review, 41*(2), 204-218.
- Bernhard, L.M. (2014). "Nowhere for me to go:" Black female student-athlete experiences on a predominantly white campus. *Journal for the Study of Sports and Athletes in Education,*

8(2), 67–76. doi: 10.1179/1935739714Z.000000000019

Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.

Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2017).

Report on the AAU campus climate survey on sexual assault and sexual misconduct.

Rockville, MD: The Association of American Universities.

Crosset, T. W., Benedict, J. R., & McDonald, M. A. (1995). Male student athletes reported for sexual assault: A survey of campus police departments and judicial affairs offices.

Journal of Sport and Social Issues, 19, 126–140.

Delong, S., Graham, L., Magee, E., Treves-Kagan, S., Gray, C., McClay, A., . . . Reidy, D.

(2018). Starting the conversation: Are campus sexual assault policies related to the prevalence of campus sexual assault? *Journal of Interpersonal Violence, 33*(21), 3315-

3343.

Fasting, K., Brackenridge, C.H., & Sundgot-Borgen, J. (2003). Experiences of sexual harassment and abuse amongst Norwegian elite female athletes and non-athletes. *Research Quarterly for Exercise and Sport, 74*(1), 84-97.

Garcia, C. M., Lechner, K. E., Frerich, E. A., Lust, K. A., & Eisenberg, M. E. (2012). Preventing sexual violence instead of just responding to it: Students' perceptions of sexual violence resources on campus. *Journal of Forensic Nursing, 8*, 61-71

Gomez, J. M. (2015). Microaggressions and the enduring mental health disparity: Black Americans at risk for institutional betrayal. *Journal of Black Psychology, 41*, 121-143.

Hayes-Smith, R., & Levett, L. (2010). Student perceptions of sexual assault resources and prevalence of rape myth attitudes. *Feminist Criminology, 5*(4), 335-354.

Helling, J. (2020). Moral injury in non-military contexts: The case of elite sports. *Moral Injury*

Special Interest Group Newsletter, 1(3). 4-6.

- Hoffman, J.L., Rankin, S.R., & Loya, K.I. (2016). Climate as a mediating influence on the perceived academic success of women student-athletes. *Journal for the Study of Sports and Athletes in Education*, 10(3), 164-184.
- Jacoby, K. (2019, Dec. 16). College athletes more likely to be disciplined for sex assault. *USA Today Network*. <https://www.usatoday.com/in-depth/news/investigations/2019/12/12/ncaa-athletes-more-likely-disciplined-sex-assault/4379153002/>
- Jaime, M.C.D, McCauley, H.L., Tancredi, D.J., Nettiksimmons, J., Decker, M.R., Silverman, J.G., O'Connor, B., Stetkevich, N., & Miller, E. (2015). Athletic coaches as violence prevention advocates. *Journal of Interpersonal Violence*, 30 (7), 1090-111.
- Jozkowski, K., Henry, D., & Sturm, A. (2015). College students' perceptions of the importance of sexual assault prevention education: Suggestions for targeting recruitment for peer-based education. *Health Education Journal*, 74(1), 46-59.
- Kafonek, K. & Richards, T.N. (2017) An examination of strategies for the prevention of gender-based violence at four-year institutions of higher education, *Journal of School Violence*, 16(3), 271-285, doi: 10.1080/15388220.2017.1318576
- Katz, J. 1995. "Reconstructing masculinity in the locker room: The Mentors in Violence Prevention Project." *Harvard Educational Review*, 65(2), 163-174.
- Klein, L., Graham, L.M., Treves-Kagan, S., Deck, P.G., DeLong, S.M., & Martin, S.L. (2018). Leveraging data to strengthen campus sexual assault policies. *Journal of Interpersonal Violence*, 32(21), 3298-3314.
- Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., Peterson, K., Planty, M., ... & Stroop, J. (2016). *Campus climate survey validation study: Final technical report*. Bureau of

Justice Statistics Research and Development Series.

- Krivoshey, M.S., Adkins, R., Hayes, R., Nemeth, J.M., & Klein, E.G. (2013). Sexual assault reporting procedures at Ohio colleges. *Journal of American College Health*, 61(3), 142-47.
- Mancini, C., Pickett, J., Call, C., & Roche, S. (2016). Mandatory Reporting (MR) in higher education: College students' perceptions of laws designed to reduce campus sexual assault. *Criminal Justice Review*, 41(2), 219-235.
- McCray, K.L. (2015). Intercollegiate athletes and sexual violence. *Trauma, Violence, and Abuse*, 16(4), 438-443.
- McGinley, M., Rospenda, K., Liu, L., & Richman, J. (2016). It isn't all just fun and games: Collegiate participation in extracurricular activities and risk for generalized and sexual harassment, psychological distress, and alcohol use. *Journal of Adolescence*, 53, 152-163.
- McMahon, S. (2009). Hearing from student-athlete peer educators: A qualitative study of the impact of participation in an interpersonal violence peer education group. *Academic Athletic Journal*, 20(1), 1-28.
- McMahon, S., & Seabrook, R. (2019). Impact of exposure to sexual violence prevention messages on students' bystander behavior. *Health Promotion Practice*, 20(5), 711-720.
- McMahon, S., & Stepleton, K. (2018). Undergraduate exposure to messages about campus sexual assault: Awareness of campus resources. *Journal of College Student Development*, 59(1), 110-115.
- Miller, E., Tancredi, D.J., McCauley, H.L., Decker, M.R., Virata, M.C.D., Anderson, H.A., O'Connor, B., & Silverman, J.G. (2013). One-year follow-up of a coach-delivered dating violence prevention program: A cluster randomized controlled trial. *American Journal of Preventive Medicine*, 45(1), 108-112.

- Milner, A.N., & Baker, E.H. (2017). Athletic participation and intimate partner violence victimization: Investigating sport involvement, self-esteem, and abuse patterns for women and men. *Journal of Interpersonal Violence, 32*(2), 268-289.
- Melnick, M. (1992). Male athletes and sexual assault. *Journal of Physical Education, Recreation, and Dance, 63*(5), 32-36. doi: 10.1080/07303084.1992.10604186.
- Mordecai, L. (2017). Sexual violence in intercollegiate athletics: A historical perspective of male athletic entitlement. *Journal of Issues in Intercollegiate Athletics, Special Issue, 36-56.*
- violence through bystander intervention. *Trauma, Violence & Abuse., 13*, 3-14.
- Morean, M.E., Darling, N., Smit, J., DeFeis, J., Wergeles, M., Kruzer-Yashin, D., & Custer, K., (2018). Preventing and responding to sexual misconduct: Preliminary efficacy of a peer-led bystander training program for preventing sexual misconduct and reducing heavy drinking among collegiate athletes. *Journal of Interpersonal Violence, 1-27.*
- Mountjoy, M., Brackenridge, C., Arrington, M., Blauwet, C., Carska-Sheppard, A., Fasting, K., . . . Budgett, R. (2016). The IOC Consensus Statement: Harassment and abuse (non-accidental violence) in sport. *British Journal of Sports Medicine, 50*(17), 1019-29.
- Murphy, S., Edwards, K., Bennett, S., Bibeau, S., & Sichelstiel, J. (2014). Police reporting practices for sexual assault cases in which “The victim does not wish to pursue charges”. *Journal of Interpersonal Violence, 29*(1), 144-156.
- NCAA (2017). *NCAA Study of Student-Athlete Social Environments (2012-2016) January 2017 Preliminary Report.* http://www.ncaa.org/sites/default/files/2017RES_NCAA_Convention_Social_Environments_present_20170807.pdf
- NCAA. (2018). *Number of NCAA college athletes reaches all-time high.* <http://www.ncaa.org/about/resources/media-center/news/number-ncaa-college-athletes-reaches-all-time-high>

- NCAA. (2019). *National Collegiate Athletic Association*. <http://www.ncaa.org/>
- NCAA Board of Governors. (2018). *NCAA policy to combat campus sexual violence*.
http://www.ncaa.org/sites/default/files/Aug2018SSI_UpdatedCampusSexualViolencePolicy_20180905.pdf
- NCAA Sport Science Institute. (2019). *Sexual Violence Prevention Toolkit: An Athletics Toolkit for a Healthy and Safe Culture Second Edition*. https://ncaaorg.s3.amazonaws.com/ssi/violence/SSI_SexualViolencePreventionToolkit.pdf
- Newlands, R., & O'Donohue, W. (2016). A critical review of sexual violence prevention on college campuses. *Acta Psychopathologica*, 2(2), 14. doi:10.4172/2469-6676.100040
- Parent, C.M. (2003). Personal fouls: How sexual assault by football players is exposing universities to Title IX liability. *Fordham Intellectual Property, Media & Entertainment Law Journal*, 13(2), 617-652.
- Paskus, T., & Bell, L. (2016, January). *NCAA GOALS study of the student-athlete experience: Initial summary of findings*. http://www.ncaa.org/sites/default/files/GOALS_2015_summary_jan2016_final_20160627.pdf
- Paul, L. A., Kehn, A., Gray, M. J., & Salapska-Gelleri, J. (2014). Perceptions of, and assistance provided to, a hypothetical rape victim: Differences between rape disclosure recipients and nonrecipients. *Journal of American college health*, 62(6), 426-433.
- Pinciotti, C., & Orcutt, H. (2018). Institutional betrayal: Who is most vulnerable? *Journal of Interpersonal Violence*, 1-19. doi: 0.1177/0886260518802850
- Rankin, S. Merson, D., Garvey, J.C., Sorgen, C.H., Menon, I., Loya, K., & Oseguera, L. (2016). The influence of climate on the academic and athletic success of student-athletes: Results from a multi-institutional national study. *The Journal of Higher Education*, 87(5), 701-

730.

- Sable, M.R., Danis, F., Mauzy, D.L., & Gallagher, S.K. (2006). Barriers to reporting sexual assault for women and men: Perspectives of college students. *Journal of American College Health, 55*(3), 157-162.
- Sabina, C., & Ho, L. (2014). Campus and college victim responses to sexual assault and dating violence: Disclosure, service utilization, and service provision. *Trauma, Violence, & Abuse, 15*(3), 201-226. doi: 10.1177/1524838014521322
- Scales, A. (2009). Student gladiators and sexual assault: A new analysis of liability for injuries inflicted by college athletes. *Michigan Journal of Gender & Law, 15*, 205-389.
- Sinozich, S., & Langton, L. (2014). *Rape and sexual assault victimization among college females, 1995–2013*. Washington, DC: US Dept. of Justice.
<http://www.bjs.gov/content/pub/pdf/rsavcaf9513.pdf>
- Smith, S.P., & Freyd, J.J. (2013). Dangerous safe havens: Institutional betrayal exacerbates sexual trauma. *Journal of Traumatic Stress, 26*(1), 119-124. doi: 10.1002/jts.21778
- Smith, S.P., & Freyd, J.J. (2014). Institutional betrayal. *American Psychologist, 69*(6), 575-587.
- Smith, C.P., & Freyd, J.J. (2017). Insult, then injury: Interpersonal and institutional betrayal linked to health and dissociation. *Journal of Aggression, Maltreatment, & Trauma, 26*(10), 1117-1131. doi: 10.1080/10926771.2017.1322654
- Spencer, C., Stith, S., Durtschi, J., & Toews, M. (2017). Factors related to college students' decisions to report sexual assault. *Journal of Interpersonal Violence, 1*-20.
- Spies, J.E.(2006). Winning at all costs: An analysis of a University's potential liability for sexual assaults committed by its student athletes. *Marquette Sports Law Review, 16*, 429-461.
- Strout, T. F., Amar, A., & Astwood, K. (2014). Women's Center staff perceptions of the campus

- climate on sexual violence. *Journal of Forensic Nursing*, 10(3), 135-143.
- Title IX, Education Amendments of 1972, Title 20 U.S.C. Sections 1681-1688. (1972).
- Thompson, M., Sitterle, D., Clay, G., & Kingree, J. (2007). Reasons for not reporting victimizations to the police: Do they vary for physical and sexual incidents? *Journal of American College Health*, 55(5), 277-282.
- Tredinnick, L., & McMahon, S. (2019). College coaches' influence on student-athlete engagement in sexual assault prevention: Promoting readiness to help and awareness of campus resources. *Sport and Society*, 22(10), 1-16.
- United States Department of Education. (2011). *Dear Colleague Letter on Title IX Coordinators*.
<http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201504-title-ix-coordinators.pdf>
- United States Senate. (2014, July 9). *Sexual violence on campus: How too many institutions of higher education are failing to protect students*.
<http://www.mccaskill.senate.gov/SurveyReportwithAppendix.pdf>
- Vladutiu, C. J., Martin, S. L., & Macy, R. J. (2011). College- or university-based sexual assault prevention programs: A review of program outcomes, characteristics, and recommendations. *Trauma, Violence, & Abuse*, 12, 67-86.
- Walsh, W. A., Banyard, V. L., Moynihan, M. M., Ward, S., & Cohn, E. S. (2010). Disclosure and service use on a college campus after an unwanted sexual experience. *Journal of Trauma & Dissociation*, 11(2), 134-151.
- White House Task Force to Protect Students From Sexual Assault (U.S.). (2014). *Not alone: The first report of the white house task force to protect students from sexual assault*.
- White, J. W., Koss, M. P., Abbey, A., Thompson, M., Cook, S., & Swartout, (2015). *What you*

need to know about campus sexual assault perpetration. <http://campus>

[climate.gsu.edu/files/2015/04/Facts-about-perpetration-with- logo_09_11_15slc2.pdf](http://climate.gsu.edu/files/2015/04/Facts-about-perpetration-with-logo_09_11_15slc2.pdf)

Wood, L., Sulley, C., Kammer-Kerwick, M., Follingstad, D., & Busch-Armendariz, N. (2017).

Climate surveys: An inventory of understanding sexual assault and other crimes of interpersonal violence at institutions of higher education. *Violence Against Women*, 23(10), 1249-1267. doi: 10.1177/1077801216657897

Worthen, M., & Wallace, S. (2017). Intersectionality and perceptions about sexual assault education and reporting on college campuses. *Family Relations*, 66(1), 180-196.

Zinzow, H., & Thompson, M. (2011). Barriers to reporting sexual victimization: Prevalence and correlates among undergraduate women. *Journal of Aggression, Maltreatment & Trauma*, 20(7), 711-725.

Chapter Four: College Coaches' Influence on Student-Athlete Engagement in Sexual Violence Prevention: Promoting Readiness to Help and Awareness of Campus Resources¹

Co-Authored by Sarah McMahon, MSW, PhD

(This is an Accepted Manuscript of an article published by Taylor & Francis in *Sport in Society* on 06/07/2019, available online at

<https://www.tandfonline.com/doi/abs/10.1080/17430437.2019.1624723>)

Abstract

Increasing one's readiness to help (Banyard, 2010) and awareness of campus resources (Hayes-Smith & Levett, 2010) is vital to the success of bystander intervention, which has been identified as a promising strategy for engaging student-athletes in sexual violence prevention (Moynihan et al., 2010). While studies suggest that high school coaches may play an influential role in promoting engagement in sexual violence prevention with their student-athletes (Miller et al., 2013), there is a lack of research on the potential influence of college coaches. This exploratory study examines college coaches' impact of discussing sexual violence with student-athletes on engaging in sexual violence prevention. Data collected from a Mid-Atlantic Division I university indicate that student-athletes who discussed sexual violence with their coach were more likely to take action to prevent sexual violence and more familiar with campus resources than those who did not. Implications for research and practice will be discussed.

Keywords: student-athletes, campus sexual assault, college coaches, prevention, bystander intervention

¹ Tredinnick, L. & McMahon, S. (2019). College coaches' influence on student-athlete engagement in sexual assault prevention: Promoting readiness to help and awareness of campus resources. *Sport in Society*, 22(10), 1-16. doi: 10.1080/17430437.2019.1624723.

Over the past three decades, a solid body of research has established the scope and impact of the problem of campus sexual violence². Repeatedly, studies have found that about one in five women experience sexual violence while attending college, and about five percent of men do as well (Cantor et al., 2015; Krebs et al., 2007; Krebs et al., 2016). Current approaches to sexual violence prevention, such as bystander intervention, aim to raise awareness of sexual violence as a problem as well as available resources on campus. In addition, sexual violence prevention encourages students to recognize the importance of taking helpful action. McMahon and Banyard (2012) describe that helping behavior can be proactive (such as learning more about sexual violence) as well as interrupting high-risk situations or assisting peers who have experienced victimization or perpetration. Research has demonstrated that in order to take helpful action, individuals typically enter through a series of stages related to their readiness to help (Banyard, Eckstein, & Moynihan, 2010) and there are many influences on their movement to action. This includes those in leadership positions who can help to raise awareness and encourage engagement in prevention (Banyard, 2014; McMahon, 2015). On a college campus, these influencers can include administrative leadership, faculty, and staff in certain positions, such as coaches. However, there are few studies that explore helping behavior and the role of coaches within intercollegiate athletics (Corboz, Flood, & Dyson, 2016; Moynihan et al., 2010), even though athletes have often been identified as a group considered at risk for sexual violence (McMahon, Postmus, & Koenick, 2011). Research illustrates that high school coaches may serve as educators or mentors to reduce sexual violence (Jaime et al., 2015; Lyndon et al., 2011;

² Sexual violence is a multi-faceted term and we recognise that different terms are used interchangeably to encapsulate this, such as sexual assault, sexual harassment or sexual misconduct. We acknowledge the difference in these terms, and default to the term sexual violence throughout this paper, except where quoting others' work or statistics that refers to alternative term.

Miller et al., 2013) but to the best of our knowledge, this has not been examined in the context of college campuses. Therefore, it is imperative to explore the ways in which college coaches could be more involved in prevention programming for student-athletes to help raise awareness of campus sexual violence and available resources.

The aim of the current study is to explore the influence of college coaches in encouraging readiness to help and awareness of campus resources among student-athletes by discussing sexual violence with their teams. Gender differences between student-athletes who do and do not discuss sexual violence with their coach are also assessed. This study will fill a key gap in the research by exploring the potential influence of coaches in starting a conversation about sexual violence with their teams.

Student-Athletes and Sexual Violence

Student-athletes are often considered to be at high-risk for committing sexual assault and may require targeted interventions (McCray, 2015; McMahon, Postmus, & Koenick, 2011). However, much of the research is mixed as to whether or not athletes actually have greater proclivity to commit acts of sexual violence (Crosset, Benedict, & McDonald, 1995; Smith & Stewart, 2003; Murnen & Kohlman, 2007; Young, Desmarais, Baldwin, & Chandler, 2017). Some studies suggest that athletic participation in college is associated with sexual aggression (see Murnen & Kohlman, 2007). When examining reported sexual assaults across Division I programs in the early 1990s, researchers found that one in three college sexual assaults were committed by male student athletes (Crosset, Benedict, & McDonald, 1995). A random study of student sexual assault claims (n= 305) reported from 104 colleges and universities between 2011 and 2013 discovered that 15% of perpetrators were student-athletes, and more than half of multiple perpetrator sexual assaults involved players from football and basketball teams (United

Educators, 2015). Meanwhile, Young, Desmarais, Baldwin, and Chandler (2017) distributed an online survey to students at a public university in the southeast and discovered that out of 46% of male undergraduates who self-reported perpetrating some form of sexual coercion, over 50% were athletes participating in recreational and intercollegiate sports.

There is a lack of information about the victimization of student-athletes by peers, but there is growing recognition that student-athletes may also be susceptible to victimization from prominent figures such as coaches, staff, or administrators. In the wake of the #MeToo movement, a number of athletes came forward about incidents of sexual assault, particularly in intercollegiate athletics. For example, a Women's National Basketball Association (WNBA) player recently sued her college for their negligence in mishandling sexual assault allegations by a member of the athletic department, as multiple complaints by student-athletes were not officially reported (McIntosh, 2018). Perhaps one of the most infamous moments of the #MeToo movement thus far was when hundreds of athletes, both male and female, testified against team doctor Larry Nassar for countless incidents of sexual assault on the national and collegiate levels. There are approximately 256 allegations of sexual abuse by Dr. Nassar from 1998 to 2015 (Mountjoy, 2019). Scholarly research on sexual assault perpetrated by athletic staff is limited. One study analyzed 325 cases of sexual abuse in sport that were reported in national and international newspapers between 1992 and 2006 and discovered that 98% of perpetrators in these cases were coaches, teachers, or instructors directly involved with athletes (Brackenridge et al., 2008). Due to the high-profile nature of these cases, these numbers are not generalizable, and more information is needed to accurately measure the perpetration rates of athletic staff.

Although rates of sexual assault perpetrated by personnel within intercollegiate athletics are largely unknown, athletic staff play a crucial role in educating student-athletes and can

potentially extend this to preventing sexual assault within their athletic department. Coaches especially bear the responsibility to protect the safety and wellbeing of their team members. The National Association for Sport and Physical Education (2015) established the National Standards for Sport Coaches which outlines eight domains for coaches to provide a quality sporting experience for their athletes at all levels of sport, with one of the domains listed as “developing a safe sport environment,” where coaches are explicitly called upon to reduce the potential for abuse and sexual harassment and prevent potentially negative behaviors by athletes, staff, or spectators (NASPE, 2015). In fact, physical and psychological health are key to successful student-athlete performances (Rice et al., 2016; Denehy, 2002). Coaches may be the first to recognize changes in academic or athletic performance among their student-athletes. That being said, coaches are essential in mentoring student-athletes both on and off the field.

The Role of Coaches

The role of college coaches is an understudied yet potentially impactful area of research. According to socioecological theory developed by Bronfrenbrenner (1977), there are multiple levels of influence on individuals’ beliefs and actions related to violence (Dahlberg & Krug, 2002), including sexual assault (DeGue, 2014). The socioecological model posits that there is an interwoven relationship that exists between individuals, relationships, communities, and societal factors in which factors from one level can affect factors from another level (Dahlberg & Krug, 2002). In order to address sexual violence, the Centers for Disease Control and Prevention recommend utilizing this model for prevention to achieve a wider impact on college campuses rather than an individual impact (DeGue, 2014). Most intervention programs to date have focused on changing the attitudes, beliefs and behaviors of individual students but have not looked at the influence of other socio-ecological levels. There has been a call for research to look

at other contextual factors on campus that may impact students' attitudes and behaviors to intervene as bystanders, including the influence of those in key leadership positions (Banyard, 2014; McMahon, 2015a). Thus, coaches may be in a position to provide a protective influence to encourage prosocial bystander intervention and the prevention of sexual assault within intercollegiate athletics. As prominent figures on campus, coaches may have the capacity to encourage individual student-athletes, teams, campuses, and surrounding communities to engage in helping behavior and prevention activities. In addition, coaches will be able to educate student-athletes on how to identify sexual assault and what resources are available on campus and in the community should they need to access help.

Literature suggests that coaches can make a powerful impact on athletes' actions and behaviors outside of sport. For one, coaches have the capacity to impact positive youth development with their players. A number of qualitative studies reveal that coaches can serve a dual purpose by being a sports coach as well as a mentor by teaching life skills (Gould et al., 2007) and influencing positive youth outcomes, particularly for at-risk youth (Richardson, 2012). There is evidence that coaches can help athletes avoid negative health behaviors such as using performance enhancing drugs (Erickson, McKenna, & Backhouse, 2015; MacNamara & Collins, 2014) or alcohol use (Mastroleo et al., 2012). Coaches can also be a major resource to influence healthy behaviors such as nutrition (Jacob et al., 2016) and body image (Beckner & Record, 2016). Moreover, coaches have been found to foster academic success (Blum, 2018; Christensen et al., 2019).

Using a multilevel analysis of the National Collegiate Athletic Association (NCAA)'s Growth, Opportunities, Aspirations, and Learning of Students in College (GOALS) survey, researchers discovered that coaches who demonstrated ethical leadership had a strong positive

effect on student-athlete outcomes including college choice satisfaction and team inclusion climate while abusive coaching behavior more strongly predicted the negative outcome such as willingness to cheat (Yukhymenko-Lescroart, Brown, & Paskus, 2015). With that said, the type of coaching style influences both positive and negative behaviors in student-athletes.

Few studies focus on the coach's ability to propagate traditional gender roles in sports. A qualitative study with 10 college coaches found that some coaches viewed sport as a valuable learning environment for players to learn about masculine norms and played a major role in educating male athletes on taking accountability and responsibility (Steinfeldt et al., 2011). In a review of quantitative and qualitative articles that sought to understand aggression and violence in athletes, a number of studies suggest that coaches are instrumental in the development of morals, determining what is "acceptable" aggression, and influencing the level of aggressive behavior during sporting events (Kimble et al., 2010). These studies point to the ways in which hegemonic masculinity may be involved in some aspects of the sports culture.

Alternatively, coaches may possess the power to challenge traditional gender norms. Interviews with 24 cricket coaches in India found that most coaches acknowledged that there were gender inequalities and even demonstrated a willingness to intervene as active bystanders during risky situations, yet they still maintained traditional gendered beliefs and struggled with how to extend their authority role beyond the playing field (Miller et al., 2015). Similarly, key informant interviews were held with five high school coaches as well as a focus group with six high school coaches in three key sports (football, basketball, and soccer; Lyndon et al., 2011). The five themes that emerged from the research were: coaches believe they have influence over athletes' character and life on and off the field; coaches lack education in gender-based sexual aggression; coaches endorse rape myths; coaches minimize the problem of male sexual

aggression, and; coaches are resistant to being engaged in sexual aggression prevention. These interviews reveal that coaches can make a significant impression on their athletes, but first must be educated on the issue of sexual assault to reduce common misconceptions and gendered beliefs that promote violence against women (Lyndon et al., 2011). Kroshus, Paskus, and Bell (2018) distributed a survey to over 3,000 NCAA college football coaches and found that coaches who communicated clear expectations about relationship violence, appropriate treatment of the opposite sex, and importance of taking action were associated with an athlete's likelihood to intervene as a bystander. Moreover, coaches who upheld disciplinary action for poor off-field behavior also influenced perceived repercussions for not intervening in risky situations (Kroshus, Paskus, & Bell, 2018). These studies demonstrate the vital role of coaches in violence prevention as well as the importance of teaching and modeling healthy masculinity.

There are only two studies specifically about the role of coaches and sexual violence prevention. Miller et al.'s (2013) evaluated the Coaching Boys Into Men program, where coaches receive training to talk to high school athletes about respect, nonviolence, and intervening abusive behaviors (Miller et al., 2013). A two-armed cluster randomized control trial of 16 high schools in Northern California evaluated the long-term impact of the program with 1513 male athletes. The 12 month follow up showed that athletes in the experimental group demonstrated less support for peers' abusive behaviors and less abuse perpetration as compared to those athletes in the control group (Miller et al., 2013). Researchers also surveyed 176 coaches to measure attitudes and confidence implementing and interviewed 36 coaches to assess feasibility of the Coaching Boys Into Men program. Coaches reported that athletes had greater confidence to intervene and increased communication with their teammates and coaches; they also shared the program was easy to implement and incredibly beneficial for their athletes (Jaime et al.,

2015). In another, qualitative study, interviews with athletes who participated as peer educators in a campus-based prevention program found that coaches were often an important source of support. This was demonstrated through actions such as discussing the program with the team, encouraging them to attend the prevention programs and join as peer educators, giving time to peer educators to discuss the program with their teammates, discussing their pride in having students represent the team in the program, and excusing them from practice to attend (McMahon, 2009). While these studies indicate a potentially important role of coaches, more research is needed to evaluate their role in promoting involvement in activities to prevent sexual violence.

Readiness to Help and Awareness of Campus Resources

Bystander intervention education has become a popular prevention method to address sexual violence on college campuses. Bystander intervention inspires participants to take responsibility in their respective communities by encouraging them to intervene in situations that could lead to sexual assault either before or during an incident, challenge social norms that perpetuate sexual violence, and develop skills to support survivors of sexual assault (Banyard, Plante, & Moynihan, 2005). Research has demonstrated that in many situations, the “bystander effect” occurs where individuals believe that they do not need to take action during an emergency situation since other onlookers will likely step in; therefore, there is a diffusion of responsibility in which onlookers fail to intervene (Darley & Latane, 1968). Thus, it is essential to find ways to encourage taking responsibility and action to prevent sexual violence. Through bystander intervention education programs, participants typically learn tools and strategies for how to identify and intervene in risky situations. In order for bystander intervention to be effective, college students must be prepared to act in the event that they witness or hear about

sexual assault, as well as risky situations that could lead to assault. Taking action is partially motivated by an individual's awareness of sexual assault and their confidence to intervene. In addition, other levels of the social ecology (peers, group membership, organizations) may influence whether an individual intervenes (Banyard, 2011; McMahon, 2015a). Intervening as a bystander is also based partly upon their ability to assess the situation and their willingness to take responsibility for sexual assault in their community (Banyard, Eckstein, & Moynihan, 2010; Banyard et al., 2014).

One of the ways to encourage student engagement in sexual assault prevention is through building one's readiness to help, also known in the literature as readiness to change (Banyard Eckstein, & Moynihan, 2010). Readiness to help determines a person's understanding and motivation for engaging in prevention work. In relation to bystander intervention, community members are empowered to change their attitudes and behaviors to increase the likelihood to intervene in risky situation (Banyard, Eckstein, & Moynihan, 2010). Based on the transtheoretical model (TTM), individuals progress through several stages before they can change adverse behaviors (Prochaska & DiClemente, 1986). The TTM has been used extensively in changing health-related behaviors such as substance use, dieting, and sexual activity (Prochaska et al., 1994) and has recently been applied to sexual violence prevention (Banyard, Eckstein, & Moynihan, 2010; Cares et al., 2015; Hoxmeier, O'Connor, & McMahon, 2018). Therefore, learning about college students' helping behaviors may help inform bystander intervention programs for different subpopulations such as student-athletes. Coaches have the opportunity, as key leaders, to influence the norms among their teams and to create expectations that athletes will take helpful action when faced with situations related to sexual violence.

As a part of being ready to engage in helping behavior, it is important for students to be

aware of campus resources. Students can be better prepared to seek assistance in their local campus communities in case something happens to themselves or their peers. Increasingly, college campuses provide a range of services for students in need, including counseling and victim assistance, and/or have developed relationships with local service providers. Supportive bystanders can help peer survivors of sexual assault access and navigate these services in times of crises (McMahon & Banyard, 2012). Despite this, the research indicates a general lack of awareness of sexual assault resources on campus that are available to assist students (Burgess-Proctor et al., 2016; Hayes-Smith & Levett, 2010; Walsh et al., 2010). For example, in a study with 247 female students at a Midwest university, both victims and non-victims reported high uncertainty in their knowledge of campus sexual assault resources (Burgess-Proctor et al., 2016). Similarly, a survey with 224 undergraduate students from a large, public southeastern university revealed that nearly half of the students did not report receiving information about available resources on campus (Hayes-Smith & Levett, 2010). Walsh and colleagues (2010) also set out to measure knowledge and use of crisis centers at a public New England university with 1,230 undergraduate students including victims of sexual assault and friends of victims. More than half of the participants in their study did not know where a center was located (Walsh et al., 2010). Overall, these results indicate that most students were not obtaining the necessary information to access available services on campus.

Gender has been identified as potentially playing a role in both helping behaviors and awareness of campus resources. Studies have demonstrated females having higher levels of readiness to help (Banyard, Eckstein, & Moynihan, 2010; Hoxmeier, O'Connor, & McMahon, 2018) and having greater intentions to intervene as helpful bystanders and a greater gains from bystander intervention education (Banyard, 2008; Banyard & Moynihan, 2011; Burn, 2009;

Cares et al., 2015; McMahon et al., 2015; Moynihan et al., 2015). Scholars also suggest that females may be more likely to intervene based on their shared group connection and heightened awareness of the issue (Burn, 2009; Banyard, 2011; Tjaden & Thoennes, 2000). In fact, some studies find that females have a greater awareness of resources than males and females who knew how to access resources were more likely to use it than those who did not (Walsh et al., 2010), although other studies suggest that there are no significant gender differences (Hayes-Smith & Levett, 2010).

Research on bystander intervention among student-athletes are mixed. While some studies show that athletes are less willing to intervene than non-athletes (McGovern & Murray, 2016; McMahon, 2015b; McMahon, Postmus, & Koenick, 2011), other studies suggest that there are no significant differences (McMahon, 2010). Overall studies indicate that male and female student-athletes are positively impacted after participating in bystander intervention training (McMahon, 2009; Moynihan et al., 2010; McGovern & Murray, 2016), yet female student-athletes may be more receptive to bystander intervention than male student-athletes (McGovern & Murray, 2016; McMahon, 2010). Male student-athletes have also reported lower intentions to intervene than female student-athletes (McGovern & Murray, 2016; McMahon, 2015b). Conversely, McMahon and Farmer (2009) found in a survey with 197 student-athletes that males had a higher average score on willingness to confront sexually assaultive behavior than females but there were no significant differences between gender. More research is needed to better understand readiness to help and awareness of campus resources between male and female college students to inform bystander intervention programs, particularly with student-athletes.

Methods

The data used for this study was part of a larger campus climate survey that measured students' experiences, behaviors, and attitudes related to sexual violence at a Division I public university in the Mid-Atlantic.

Sample and Participants

All students attending the university at the time were invited to participate in the online campus climate survey. A comprehensive outreach plan was implemented that branded the survey and involved members of the campus community in promoting the survey. As an incentive to complete the survey, drawings for cash prizes ranging from \$150 to \$300 were distributed to 75 winners. The campus survey was administered using Qualtrics. Of the 41,815 eligible students invited to take the survey, 12,343 responded to the survey for a response rate of 29%. A number of surveys were ultimately removed for partial or no response, with a final analytic sample of 11,738. There were 191 participants who self-identified as a member of an NCAA athletic team, 175 of whom responded to the question about coach discussion (18% of the total number of student-athletes at the University).

Measures

Readiness to Help

Willingness to engage in preventative action to address sexual and relationship violence was measured by the Readiness to Help scale developed by Banyard, Moynihan, Cares, and Warner (2014). The scale consists of 36 items, measured on a 5-point Likert scale and includes three subscales: No Awareness, Taking Responsibility, and Action. The five items under No Awareness indicate that the participant was not aware or concerned about sexual assault as a problem on campus such as "I don't think sexual violence is a problem at [university name]," "I

don't think there is much I can do about sexual violence at [university name]" ($\alpha=.68$). There were three items for Taking Responsibility, which Banyard et al. (2014) describe as reflecting a clear sense of a participant taking responsibility for the problem ($\alpha= .70$). A sample question is, "Sometimes I think I should learn more about sexual violence." The four items under Action assess participants' recent activities to prevent sexual abuse on campus. An example of Action items were "I have recently attended a program about sexual violence," and "I have been or am currently involved in ongoing efforts to end sexual violence on campus" ($\alpha= .88$).

Awareness of Campus Resources

The Awareness of Campus Resources scale (McMahon, Stepleton, & Cusano, 2014) includes eight items for participants to indicate their awareness of resources available on campus specifically related to sexual assault on a Likert Scale from 1 (not at all aware) to 5 (extremely aware). There were eight resources at the university under study including a victim services office, counseling office, Title IX compliance, student conduct office, student legal services, sexual assault prevention programming, health services, and employment equity office. The Cronbach alpha for Awareness of Campus Resources was high at .85.

Coach Discussion

Participants who identified as student-athletes were asked an additional follow up question to measure coach discussion of the topic of sexual violence since starting college. The single question asked, "have any of the topics covered in this survey (sexual assault, rape, reporting sexual assault, etc.) been discussed by your coach?" with a dichotomous response "yes" or "no".

Demographic Variables

Demographics used in this study included athletic status, gender identity and race.

Athletic status was measured by participants self-identifying as a member of an NCAA athletic team at the university. Gender identity asked, “What is your current gender identity?” with options male, female, transgender male, transgender female, or other with an option to write in. There was only one participant who identified as a transgender athlete and it was unknown if they participated on a men’s or women’s team, so they were removed. Answer choices for participants’ race included African American, Asian American, Hispanic, White, or other (including American Indian).

Data Analysis Strategies

To describe the extent to which coaches prevent sexual assault among student-athletes, data was sorted first by athletic status (yes/not) and further by coach discussion (yes/no). Descriptive statistics were run to examine the sample’s demographic information, as well as the means and range of independent and dependent variables. From there, composite variables were created using the item stem for each subscale of interest. Independent-samples t-test compared the mean scores of the Readiness to Help subscales and Awareness of Campus Resources between student-athletes who discussed sexual assault with their coach and those who did not. A second set of independent-samples t-tests were run to compare differences by gender in coach discussion on each outcome variable. Data was sorted between males and females who discussed sexual assault with their coach on the Readiness to Help subscales and Awareness of Campus Resources. Finally, data was sorted between males and females who did not discuss sexual assault with their coach on the different outcome variables. Pairwise deletion was used to handle missing data due to the small sample size.

Results

Using participants from the entire athlete sample, the first phase of analysis looked at the

demographic characteristics of the participants using frequencies in SPSS. Of the 175 student-athletes who completed the online survey, there were 110 females and 65 males. A total of 47.7% said that sexual assault was discussed by their coach compared to 52.6% whose coaches did not. Demographic information is provided in Table 1.

Table 1.

Characteristics of Student-Athletes (n=175)

Characteristic	Frequency	% (n)
Gender		
Female	110	62.9%
Male	65	37.1%
Race		
White	117	66.9%
Asian American	7	4.0%
Black or African American	26	14.9%
Hispanic	13	7.4%
Other	12	6.9%

Independent samples t-tests were used to compare Readiness to Help subscales and Awareness of Campus Resources for those who did discuss sexual assault with their coach and those who did not (see Table 2). In terms of the Readiness to Help subscales, two of the subscales were not significant: No Awareness and Taking Responsibility. However, there was a significant difference in student-athletes who discussed with their coach in the Action subscale ($M = 2.65$, $SD = .83$) and those who did not ($M = 2.34$, $SD = .86$); $t(2.323)$, $p = .021$. These results indicate that those student athletes who discussed sexual assault with their coach were more likely to report actively participating in activities to prevent sexual assault on campus. Results related to the Awareness of Campus Resources Scale were also statistically significant between those who discussed with coach ($M = 3.02$, $SD = .84$) and those who did not ($M = 2.69$,

$SD = .72$); $t(2.797)$, $p = .006$. Student-athletes whose coaches discussed the issue of sexual violence were more familiar with campus resources than student-athletes who did not.

Table 2.

Coach Discussion and Student-Athlete Engagement in Sexual Violence Prevention

Variable	N	Coach Discussion		No Coach Discussion		<i>t</i>	<i>p</i>
		Yes	No	<i>M</i>	<i>SD</i>		
Readiness to Help: No Awareness	161	2.33	0.61	2.26	0.63	0.733	0.465
Readiness to Help: Taking Responsibility	161	3.32	0.66	3.29	0.73	0.301	0.764
Readiness to Help: Action	161	2.65	0.83	2.34	0.86	2.323	0.021*
Awareness of Campus Resources	173	3.02	0.84	2.69	0.72	2.797	0.006*

* $p < .05$

Note. *M* = Mean. *SD* = Standard Deviation.

The next set of analyses looked at differences of outcome subscales for Readiness to Help between male and female student-athletes. Of those who did discuss the issue of sexual violence with their coach, there were no significant differences between males and females on the Readiness to Help nor the Awareness of Campus Resources scale.

Lastly, t-tests were performed to assess differences between male and female student-athletes who did not have discussions regarding sexual violence with their coach compared with the outcome subscales. None of the Readiness to Help subscales were significant; however, female students ($M = 2.59$, $SD = .72$) were significantly less aware of campus resources than male students ($M = 2.92$, $SD = .69$); $t(2.017)$, $p = .047$.

Discussion

Findings from this exploratory study illustrate the potential for coaches to influence student-athletes' engagement with sexual violence prevention. Results indicate that student-athletes whose coaches discussed the issue of sexual violence were significantly more likely to take action by becoming involved in prevention activities on campus, and also indicated a greater awareness of campus resources that support survivors of sexual violence. These findings echo Miller and colleagues' work with high school athletes that found that coaches have an important role to play in influencing students' attitudes and behaviors related to sexual violence, including taking prosocial action (Miller et al., 2013), as well as McMahon's (2009) qualitative interviews with college student-athletes who served as sexual violence peer educators and expressed the importance of the support of their coaches. These findings are also aligned with conceptual literature and ecological models advocating for the need to incorporate a range of levels in campus sexual violence prevention, including university and community leaders such as administrators, faculty, and staff such as coaches (Banyard, 2014; McMahon, 2015a).

Despite the finding that speaking about sexual violence was associated with positive outcomes, the current study found that less than 50% of student-athletes reported that their coaches discussed the topic of campus sexual violence. This suggests that there are missed opportunities for coaches to engage their students in dialogue about these issues. This is important for a number of reasons. First, coaches of men's teams have a unique platform to set expectations for their students' behaviors on and off the field, and to help shape social norms around treating others with respect. There is growing research on the importance of engaging men as allies in sexual violence prevention work (e.g., Barone, Wolgemuth, & Linder, 2007; Casey & Ohler, 2012). In particular, research supports the idea that individual behavior is shaped

by perceptions of how others may approve of their actions and thus, strategies to influence social norms are critical, including hearing from male role models and peers (Berkowitz, 2005). Rather than approaching male athletes as potential aggressors, coaches can address them as having the potential for leadership by becoming actively involved in prevention efforts on campus and by taking a public stand against all types of violence, including sexual violence.

Like coaches of men's teams, coaches of women's teams have the ability to promote high expectations for maintaining positive behaviors, as well as discouraging inappropriate behaviors by their peers. When discussing the topic of sexual violence, coaches should acknowledge that sexual violence can happen to anyone, even female athletes, who may view themselves as less vulnerable to assault and abuse due to factors such as their physical and mental strength, self-esteem and confidence (McMahon, 2007). These results also suggest that females who do not discuss sexual violence with their coach are significantly less aware of resources. Because females are more likely to be victims of sexual violence in general, it is critically important for them to be aware of resources available should something occur.

For both men and women's teams, coaches can encourage teammates to engage in prosocial behavior to prevent sexual violence and intervene to help diffuse risky situations as well as to provide support to peers who disclose (Kroshus, Paskus, & Bell, 2018). Due to the significant influence sport has on the community, coaches and student-athletes have the power to shift social norms and advocate as influential leaders against sexual assault (Raliane, 2017; Katz, 1995). Student-athletes are a unique subpopulation of college students who are often looked up to as role models on campuses and can therefore potentially impact the attitudes and behaviors of other students and members of the campus community. However, the results of the current study indicate that discussion of the issue by coaches did not significantly impact

student-athletes' awareness of sexual violence as a problem on campus nor their sense of taking responsibility to engage in sexual assault prevention. This again may represent a missed opportunity. Research has demonstrated that many student-athletes are interested in taking positive action, but do not always know how, which is true in research with the larger student population as well (McMahon & Farmer, 2009). This highlights the potential role of coaches to engage students in discussion about the situations they may encounter and the importance of being actively involved in prevention. This can be done in conjunction with having students participate in education and training programs to help them develop skills for engaging in prosocial behavior in effective and safe ways. Studies that assessed bystander intervention programs with those who participate in intercollegiate athletics have had relatively positive results (Moynihan et al., 2010).

Despite these findings, there are limitations in this study. Because this is an exploratory study with a small sample size, the results may not be representative of the student-athlete population. Work is needed to determine if similar results are found in other student-athlete populations from different institutions. In addition, there were more females who filled out the online survey than males, which may introduce self-selection bias, but which is true of most research on the issue of sexual violence. It is possible that the female athletes were more concerned with sexual violence on campus and were more inclined to complete the survey. At the same time, these participants may be more active in the campus community to prevent sexual violence which may factor into their decision to take the survey. Moreover, it is unclear what coaches who discussed sexual violence with their student-athletes specifically said. Therefore, more research needs to be conducted to further study college coaches' influence on preventing sexual violence to understand what types of statements they are making and how the variation in

frequency and content may impact student-athletes' attitudes and behaviors. Lastly, the sample was too small to test for differences among some variables such as race and type of sport, which may also introduce variation into the level of coach input and patterns by coach characteristics. Further studies could also examine other potential mediators and moderators of the impact of coach involvement, such as student-athletes' previous education, their own attitudes and beliefs, and whether they know someone who experienced violence. In addition, researchers should consider assessing patterns by coaches who discuss sexual violence with their student-athletes based on the type of sport.

Although this study included a small group of student-athletes, these findings have important implications for bystander intervention programming with various subpopulations of college students. More specifically, this study shows that coaches who speak with their student-athletes about sexual violence are more likely to influence those student-athletes to take preventative action against sexual assault and increase their awareness of campus resources. Therefore, college coaches have an extraordinary ability and duty to support student-athletes in preventing and addressing sexual violence on campuses. Identifying key figures, such as college coaches, to promote engagement in sexual violence prevention are essential to raising awareness of sexual violence as a problem on college campuses and inspiring their students to take helpful action. By increasing readiness to help and awareness of campus resources among the college community at large, students will be better prepared to prevent incidents of sexual violence.

References

- Banyard, V.L. (2008). Measurement and correlates of prosocial bystander behavior: The case of interpersonal violence. *Violence and Victims, 23*(1), 83-97.
- Banyard, V.L. (2011). Who will help prevent sexual violence: Creating an ecological model of bystander intervention. *Psychology of Violence, 1*, 216–229.
- Banyard, V. L. (2014). Improving college campus-based prevention of violence against women: A strategic plan for research built on multipronged practices and policies. *Trauma, Violence, and Abuse, 15*(4), 339-351. doi: 10.1177/1524838014521027.
- Banyard, V.L., Eckstein, R.P., & Moynihan, M.M. (2010). Sexual violence prevention: The role of stages of change. *Journal of Interpersonal Violence, 25*(1), 111-125.
- Banyard, V.L., Moynihan, M.M., & Crossman, M.T. (2009). Reducing sexual violence on campus: The role of student leaders as empowered bystanders. *Journal of College Student Development, 50*(4), 446-457.
- Banyard, V. L., Moynihan, M.M., Cares, A.C., Warner, R., & Hamby, S. (2014). How do we know if it works? Measuring outcomes in bystander-focused abuse prevention on campuses. *Psychology of Violence, 4*(1), 101-15.
- Banyard, V.L., Moynihan, M.M., & Hamby, S. (2011). Variation in bystander behavior related to sexual and intimate partner violence prevention: Correlates in a sample of college students. *Psychology of Violence, 1*(4), 287-301.
- Banyard V.L, Moynihan, M.M., & Plante, E.G. (2007). Sexual violence prevention through bystander education: An experimental evaluation. *Journal of Community Psychology, 35*, 463–481.
- Barone, R.P., Wolgemuth, J.R., & Linder, C. (2007). Preventing sexual assault through

- engaging college men. *Journal of College Student Development*, 48(5), 585-594.
- Beckner, B.N., & Record, R.A. (2015). Navigating the thin-ideal in an athletic world: Influence of coach communication on female athletes' body image and health choices. *Health Communication*, 31(3), 1-10. doi: 10.1080/10410236.2014.957998.
- Berkowitz, A.D. (2005). An overview of the social norms approach. In L.C. Lederman & L. Stewart (Eds). *In changing the culture of college drinking* (pp. 193 -214). Cresskill, NJ: Hampton Press.
- Blum, D. (2018). The books or the ballgames: Understanding student-athletes' experiences in school (Blum_ucr_0032D_13360). [Doctoral dissertation, University of California Riverside.] ProQuest Dissertation Publishing.
- Brackenridge, C.H., Sybille Moussalli, D.B., & Tapp, J. (2008). The characteristics of sexual abuse in sport: A multidimensional scaling analysis of events described in media reports. *International Journal of Sport and Exercise Psychology*, 6(4), 385-406.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Burgess-Proctor, A., Pickett, S.M., Parkhill, M.R., Hamill, T.S., Kirwan, M., Kozak, A.T., & Mancini, C. (2016). College women's perceptions of and inclination to use campus sexual assault resources: Comparing the views of students with and without sexual victimization histories. *Criminal Justice Review*, 41(2), 204-218.
- Burn, S.M. (2009). A situational model of sexual assault prevention through bystander intervention. *Sex Roles*, 60, 779-792. doi:10.1007/s11199-008-9581-5
- Cantor, D., Fisher, B., Chibnall, S.H., Townsend, R., Lee, H., Thomas, G., & Bruce, C. (2015). Report on the AAU campus climate survey on sexual assault and sexual misconduct. <https://www.aau.edu/sites/default/files/%40%20Files/Climate%20Survey/>

AAU_Campus_Climate_Survey_12_14_15.pdf

- Cares, A.C., Banyard, V.L., Moynihan, M.M., Williams, L.M., Potter, S.J., & Stapleton, J.G. (2015). Changing attitudes about being a bystander to violence: Translating an in-person sexual violence prevention program to a new campus. *Journal of Violence Against Women, 21*(2), 165-187.
- Casey, E.A., & Ohler, K. (2010). Being a positive bystander: Male antiviolence allies' experiences of "stepping up". *Journal of Interpersonal Violence, 27*(1), 62-83.
- Christensen, K.M., Raposa, E.B., Hagler, M.A., Erickson, L., & Rhodes, J.E. (2019). Role of athletic coach mentors in promoting youth academic success: Evidence from the add health national longitudinal study. *Applied Developmental Science, 1*-11. doi: 10.1080/10888691.2019.1582344.
- Corboz, J., Flood, M. & Dyson, S. (2016). Challenges of bystander intervention in male-dominated professional sport: Lessons from the Australian Football League. *Violence Against Women, 22*(3), 324-343.
- Crosset, T. W., Benedict, J.R., & McDonald, M.A. (1995). Male student-athletes reported for sexual assault: A survey of campus police departments and judicial affairs offices. *Journal of Sport and Social Issues, 19*(2), 126-140.
- Dahlberg L.L., & Krug E.G. (2002). Violence-a global public health problem. In E. Krug, L.L. Dahlberg, J.A. Mercy, A.B. Zwi, R. Lozano (Eds.). *World Report on Violence and Health* (pp. 1-19). Geneva, Switzerland: World Health Organization.
- Darley, J.M. and Latane, B. (1968). Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology, 8*(4), 377-83.

- DeGue, S. (2014). Preventing sexual violence on college campuses: Lessons from research and practice. https://www.nccpsafety.org/assets/files/library/Preventing_Sexual_Violence_on_College_Campuses.pdf
- Denehy, J. (2002). Promoting the health of student athletes. *The Journal of School Nursing, 18*(6), 309-312.
- Erickson, K., McKenna, J., & Backhouse, S.H. (2015). A qualitative analysis of the factors that protect athletes against doping in sport. *Psychology of Sport and Exercise, 16*(2), 149-155.
- Gould, D., Collins, K., Lauer, L., & Chung, Y. (2007). Coaching life skills through football: A study of award winning high school coaches. *Journal of Applied Sport Psychology, 19*(1), 16-37.
- Hayes-Smith, R. M., & Levett, L.M. (2010). Student perceptions of sexual assault resources and prevalence of rape myth attitudes. *Feminist Criminology, 5*(4), 335-354.
- Hoxmeier, J.C., O'Connor, J., & McMahon, S. (2018). Readiness to help: How students' sexual assault awareness, responsibility, and action correlate with bystander intervention behavior. *Violence and Gender, 5*(4), 233-240. doi: 10.1089/vio.2017.0054
- Jaime, M.C.D, McCauley, H.L., Tancredi, D.J., Nettiksimmons, J. Decker, M.R., Silverman, J.G., O'Connor, B., Stetkevich, N., & Miller, E. (2015). Athletic coaches as violence prevention advocates. *Journal of Interpersonal Violence, 30*(7), 1090-111.
- Jacob, L., Larmarche, B., Provencher, V., Laramée, C., Valois, P., Goulet, C. & Drapeau, V. (2016). Evaluation of a theory-based intervention aimed at improving coaches' recommendations on sports nutrition to their athletes. *Journal of the Academy of Nutrition and Dietetics, 116*(8): 1308-1315.

- Katz, J. (1995). Reconstructing masculinity in the locker room: The mentors in violence prevention project. *Harvard Educational Review, 65*(2), 163-174.
- Kimble, N.B. Russo, S.A., Bergman, B.G., & Galindo, V.H. (2010). Revealing an empirical understanding of aggression and violent behavior in athletics. *Aggression and Violent Behavior, 15*(6), 446-462.
- Krebs, C.P., Lindquist, C.H., Warner, T.D., Fisher, B.S., & Martin, S.L. (2007). The campus sexual assault (CSA) study: Final report. *Washington, DC: National Institute of Justice, US Department of Justice.*
- Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., Peterson, K., Planty, M., Langton, L. & Stroop, J. (2016). *Campus climate survey validation study: Final technical report.* Bureau of Justice Statistics Research and Development Series.
- Kroshus, E., Paskus, T., & Bell, L. (2018). Coach expectations about off-field conduct and bystander intervention by US college football players to prevent inappropriate sexual behavior. *Journal of Interpersonal Violence, 33*(2), 293-315. doi: 10.1177/0886260515605122.
- Lyndon, A.E., Duffy, D.M., Smith, P.H. & White, J.W. (2011). The role of high school coaches in helping prevent adolescent sexual aggression: Part of the solution or part of the problem? *Journal of Sport & Social Issues, 35*(4), 377–399.
- MacNamara, Á., & Collins, D. (2014). Why athletes say no to doping: A qualitative exploration of the reasons underpinning athletes' decision not to dope. *Performance Enhancement & Health, 3*(3-4), 145-152.

- Mastroleo, N.R., Marzell, M., Turrisi, R., & Borsari, B. (2012). Do coaches make a difference off the field? The examination of athletic coach influence on early college student drinking. *Addiction Research and Theory*, 20(1), 64-71.
- McCray, K.L. (2015). Intercollegiate athletes and sexual violence. *Trauma, Violence, and Abuse*, 16(4), 438-443.
- McGovern, J. & Murray, P. (2016). Consent communication: What does it mean for student athletes? https://www.ncaa.org/sites/default/files/McNeil_Consent%20Communication.pdf
- McIntosh, W. (2018, Jan 17). Atlanta dream star Layshia Clarendon is suing the University of California, alleging sexual assault. *SBNation*. <https://www.sbnation.com/2018/1/17/16903514/atlanta-dream-layshia-clarendon-lawsuit-university-of-california-sexual-assault>
- McMahon S. (2007). Understanding community specific rape myths: exploring student athlete culture. *Affilia: Journal of Women and Social Work*, 22(4), 357-370. doi: 10.1177/0886109907306331.
- McMahon, S. (2009). Hearing from student-athlete peer educators: A qualitative study of the impact of participation in an interpersonal violence peer education group. *Academic Athletic Journal*, 20(1), 1-28.
- McMahon, S. (2010). Rape myth beliefs and bystander attitudes among incoming college students. *Journal of American College Health*, 59(1), 3-11.
- McMahon, S. (2015a). Call for research on bystander intervention to prevent sexual violence: The role of campus environments. *American Journal of Community Psychology*, 55(3), 472-489.

- McMahon, S. (2015b). Participation in high school sports and bystander intentions, Efficacy to intervene, and rape myth beliefs. *Journal of Interpersonal Violence, 30*(17), 2980–2998. <http://doi.org/10.1177/0886260514555009>.
- McMahon, S. & Banyard, V.L. (2012). When can I help? A conceptual framework for preventing violence through bystander intervention. *Trauma, Violence & Abuse, 13*(1), 3-14. doi: 10.1177/1524838011426015.
- McMahon, S. & Farmer, L.G. (2009). The bystander approach: Strengths-based sexual assault prevention with at-risk groups. *Journal of Human Behavior in the Social Environment, 19*(8), 1042-1065.
- McMahon, S., Palmer, J.E., Banyard, V., Murphy, M., & Gidycz, C.A. (2017). Measuring bystander behavior in the context of sexual violence prevention: Lessons learned and new directions. *Journal of Interpersonal Violence, 32*(16), 2396-2418.
- McMahon, S., Postmus, J.L., & Koenick, R.A. (2011). Conceptualizing the engaging bystander approach to sexual violence prevention on college campuses. *Journal of College Student Development, 52*(1), 115-130.
- McMahon, S., Stepleton, K., & Cusano, J. (2014). Awareness of Campus Resources Scale.
- McMahon, S., Winter, S.M., Palmer, J.E., Postmus, J.L., Peterson, A.N., Zucker, S. & Koenick, R.A. (2015). A randomized controlled trial of a multi-dose bystander intervention program using peer education theater. *Health Education Research, 30*(4). 554-68. doi: 10.1093/her/cyv022.
- Miller, E., Tancredi, D.J., McCauley, H.L., Decker, M.R., Virata, M.C.D., Anderson, H.A., O'Connor, B., & Silverman, J.G. (2013). One-year follow-up of a coach-delivered dating

- violence prevention program: A cluster randomized controlled trial. *American Journal of Preventive Medicine*, 45(1), 108-112.
- Miller, E., Das, M., Verma, R., O'Connor, B., Ghosh, S., Jaime, M.C.D., & McCauley, H.L. (2015). Exploring the potential for changing gender norms among cricket coaches and athletes in India." *Violence Against Women*, 21(2), 188-205.
- Mountjoy, M. 2019. 'Only by speaking out can we create lasting change': What can we learn from the Dr Larry Nassar tragedy?" *British Journal of Sports Medicine*, 53, 57-60. doi: 10.1136/bjsports-2018-099403.
- Moynihan, M.M., Banyard, V.L., Cares, A.C., Potter, S.J., Williams, L.M. & Stapleton, J.G. (2015). Encouraging responses in sexual and relationship violence prevention: What program effects remain 1 year later? *Journal of Interpersonal Violence*, 30(1), 110-132.
- Murnen, S.K., & Kohlman, M.H. (2007). Athletic participation, fraternity membership, and sexual aggression among college men: A meta-analytic review. *Sex Roles*, 57(1-2), 145-157.
- NASPE (National Association for Sport and Physical Education). (2015). National Standards for Sport Coaches: July 2018 Revision Draft. <https://www.shapeamerica.org/uploads/pdfs/2018/standards/National-Standards-for-Sport-Coaches-DRAFT.pdf>
- Prochaska J.O., Diclemente C.C. (1986) Toward a comprehensive model of change. In Miller W.R., Heather N. (eds) *Treating Addictive Behaviors*. Applied Clinical Psychology, vol 13. Springer, Boston, MA.
- Prochaska, J.O., Velicer, W.F., Rossi, J.S., Goldstein, M.G., Marcus, B.H., Rakowski, W., Fiore, C., Harlow, L.L, Redding, C.A., Rosenbloom, D., Rossi, S.R. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology*, 13, 39-46.

- Raliance. (2017). How sport can end sexual violence in one generation: An overview report. http://www.raliance.org/sport-prevention-center/wp-content/uploads/2017/10/RALIANCE-OverviewReport_WEB.pdf
- Richardson, J.B. (2012). Beyond the playing field: Coaches as social capital for inner-city adolescent African-American males. *Journal of African American Studies*, 16(2), 171-194.
- Rice, S.M., Purcell, R., De Silva, S., Mawren, D., McGorry, P.D., & Parker, A.G. (2016). The mental health of elite athletes: A narrative systematic review. *Sports Medicine*, 46(9), 1333-1353.
- Smith, D., & Stewart, S. (2003). Sexual aggression and sports participation. *Journal of Sport Behavior*, 26(4), 384-395.
- Steinfeldt, J.A., Foltz, B.D., Mungro, J., Speight, Q.L., Wong, Y.J., & Blumberg, J. (2011). Masculinity socialization in sports: Influence of college football coaches. *Psychology of Men & Masculinity*, 12(3), 247-259.
- Tjaden, Patricia Godeke, and Nancy Thoennes. 2000. "Extent, Nature, and Consequences of Intimate Partner Violence: Findings from the National Violence Against Women Survey." Accessed 17 Feb 2019. <https://www.ncjrs.gov/pdffiles1/nij/181867.pdf>
- United Educators. (2015). "Confronting campus sexual assault: An examination of higher education claims." *EduRiskSolutions.org*. Accessed 26 January 2019. <https://www.ue.org/uploadedFiles/Confronting%20Campus%20Sexual%20Assault.pdf>
- Walsh, W.A., Banyard, V.L., Moynihan, M.M., Ward, S., & Cohn, E.S. (2010). Disclosure and service use on a college campus after an unwanted sexual experience. *Journal of Trauma & Dissociation*, 11(2), 134-151.

Young, B.R., Desmarais, S.L., Baldwin, J.A., & Chandler, R. (2017). Sexual coercion practices among undergraduate male recreational athletes, intercollegiate athletes, and non-athletes. *Violence Against Women, 23*(7), 795-812. doi: 10.1177/1077801216651339.

Yukhymenko-Lescroart, M.A., Brown, M.E., Paskus, T.S., & Martin, J.J. (2015). The relationship between ethical and abusive coaching behaviors and student-athlete well-being. *Sport, Exercise, and Performance Psychology, 4*(1), 36-49.

Chapter Five: Conclusion and Future Directions

Major Findings

This dissertation focused on several aspects of sexual assault prevention with student-athletes to expand the literature on the needs of at-risk populations. Chapter Two looked at GRC as a potential barrier for student-athletes to intervene as prosocial bystanders to post-sexual assault. It was hypothesized that male student-athletes would have higher GRC scores than female student-athletes; student-athletes with higher GRC scores would exhibit lower intentions to respond to post-sexual assault, controlling for race, ethnicity, type of sport and division; and the relation between GRC and intentions to respond to post-sexual assault would be moderated by gender such that males will experience a weaker association compared to females when controlling for race, ethnicity, type of sport, and division. In Chapter Three, the article explores how the campus climate, including participation in sexual assault prevention, perceptions of the institutional response to addressing sexual assault, and perceptions in campus staff (i.e. campus police, athletic staff, and leadership) were associated with awareness of sexual assault policies and resources. It was hypothesized that student-athletes who participated in sexual assault prevention, endorsed more positive perceptions of the institutional response, and endorsed more positive perceptions of campus staff (i.e. campus police, athletic staff, and leadership staff) would have greater awareness of sexual assault policies and resources after controlling for race, ethnicity, and gender. Finally, Chapter Four examined the role of college coaches in discussing sexual assault with their teams on student-athletes' proactive bystander opportunities to engage in sexual assault prevention on campus. It was hypothesized that college coaches who discussed sexual violence with their student-athletes would increase student-athletes' readiness to help and awareness of campus resources than coaches who did not. Additionally, male student-athletes

would have lower readiness to help and lower awareness of campus resources compared to female student-athletes.

In Chapter Two, the hypothesis that male student-athletes exhibited higher scores of GRC than female student-athletes was supported for only the full GRC scale and restrictive affectionate behavior subscale. Due to gendered norms, males expectedly conform to masculine norms more than females. Similarly, male student-athletes may have difficulty showing affection with their peers in fear of jeopardizing their masculinity and being perceived as homosexual. Contrary to the second hypothesis that student-athletes with higher scores of GRC will exhibit lower intentions to respond to post-sexual assault, student-athletes' intentions to respond to post-sexual assault increased as conflicts between work and leisure-family relations increased, which suggests that student-athletes may be proactive toward intervening in campus sexual assault despite conflicts between work and leisure-family relations. Aside from gender, most of the control variables were not significant. However, ethnicity and division approached significance as Hispanic student-athletes had lower intentions to respond to post-sexual assault than non-Hispanics and Division I student-athletes appeared to have higher intentions to respond to post-sexual assault than Division III student-athletes. Even though regression analyses indicate that female student-athletes had higher intentions to respond to post-sexual assault than male student-athletes overall, the moderated effects of gender between GRC and intentions to respond to post-sexual assault revealed that higher conflicts between work and leisure-family relations was associated with lower intentions to respond to post-sexual assault for females but not for males. Based on these findings, it is possible that there may be greater pressures for female student-athletes to succeed within the masculine sports culture, which may further prevent them from intervening as a bystander to sexual assault.

Results from the multiple regression in Chapter Three supported the hypothesis that student-athletes who participated in sexual assault prevention education, had more positive perceptions of the institutional response, and had more positive perceptions of campus staff was associated with a greater awareness of sexual assault policies and resources after controlling for race, ethnicity, and gender. Past participation in sexual assault prevention, positive perceptions of the institutional response to handling allegations of sexual assault, and positive perceptions of the campus police and leadership were significantly associated with greater awareness of sexual assault policies and resources. These findings demonstrate the growing efforts of colleges and universities to better address sexual assault with student-athletes. While demographic factors (i.e. race, ethnicity, and gender) were not statistically significant to awareness of policies and resources, Hispanic student-athletes appeared to have a lower awareness of sexual assault policies and resources than Non-Hispanic student-athletes. Student-athletes of color may be deterred from staying abreast of current policies and resources in fear that their actions will not be taken as seriously as their White peers.

Since findings from Chapter Three highlight the importance of campus staff to engage in sexual assault prevention education, Chapter Four looks at the role of college coaches in discussing sexual violence to promote student-athlete engagement in campus sexual assault prevention. A series of independent samples t-tests in Chapter Four found that student-athletes whose coaches discussed the issue of sexual violence were significantly more likely to take action by becoming involved in prevention activities on campus, and also indicated a greater awareness of campus resources that support survivors of sexual violence. However, less than 50% of student-athletes reported that their coaches discussed the topic of campus sexual violence, which suggests that there are missed opportunities for coaches to engage in sexual

violence prevention with their teams. When assessing gender differences between student-athletes who did not have discussions regarding sexual violence with their coach and awareness of campus resources, female student-athletes were significantly less aware of campus resources than male student-athletes. These results are concerning, as females are more likely to be victims of sexual violence and must be aware of available resources in case an incident occurs.

Strengths and Limitations

This dissertation was unique in that it focused on sexual assault prevention with student-athletes who are often overlooked as an at-risk population. Student-athletes are an especially vulnerable population for research due to NCAA eligibility requirements. Institutional Review Boards (IRB) are particularly cautious with studies involving student-athletes since recruitment and compensation may affect their scholarship or athletic participation (UConn Office of the Vice President, 2009). Approval for data collection in Chapters Two and Three was successfully obtained from the host school's IRB, each participating school's IRB, as well as each school's Athletics Compliance Office (when necessary). This points to the overall support for research that informs scholarship on student-athlete welfare and development. These studies were particularly timely in light of the recent policies set forth by the NCAA to better address sexual assault and implement yearly sexual assault prevention for student-athletes.

There were several notable strengths for each chapter. First, Chapter Two expands upon 35 years of literature on GRC. Not only was this article the first to explicitly measure gender differences in GRC between male and female student-athletes, but it also linked GRC with barriers to bystander intervention. Chapters Three and Four furthers scholarship on the socio-ecological model and the importance of developing comprehensive efforts to address campus

sexual assault by improving the campus climate and engaging campus staff in sexual assault prevention.

Despite these strengths, this dissertation had several limitations. For both Chapter Two and Three, the survey did not accurately measure gender. Participants were asked to indicate whether they played for a men's or women's team. Since LGBTQI (lesbian, gay, bisexual, transgender, queer or questioning, and intersex) college students are at high-risk for sexual assault victimization (Cantor et al., 2017), future studies should allow for more inclusive gender identities to better understand bystander intentions among student-athletes who identify as LGBTQI. Given the length and topic of this web-based survey, many participants did not fully complete all of the questions. Even though the survey took 20 minutes at most, it is possible that participants experienced participant fatigue or lack of interest. Alternatively, participants may have felt uncomfortable answering some of the sensitive questions around their emotions related to GRC or sexual assault despite the fact that the survey was anonymous. Moving forward, distributing a paper survey during regularly scheduled meetings may be more advantageous to prevent attrition. While the response rate was slightly smaller for survey research, the percentage was acceptable for web-based surveys (Shih & Fan, 2009). Future studies should employ random sampling, rather than convenience sampling, to improve the research design and generalizability. Lastly, researchers should consider collecting data across different points in time to better assess whether there is a causal relationship between the variables of focus.

Chapter Four resulted in a small sample size of student-athletes from the larger online campus climate survey. To improve representativeness of the student-athlete population, future surveys could be administered to multiple schools across different NCAA division levels. Another limitation of the small sample size was the inability to test for differences among some

variables such as race or type of sport. These demographics would provide valuable insight into the level or influence of coach input. There was also a higher number of female student-athletes who filled out the survey than male student-athletes, which may be attributed to self-selection bias. Since females are generally more concerned about sexual assault on campus, they may be more likely to participate in sexual assault prevention activities on campus and thus more motivated to complete this survey. In addition, the variable that assessed whether coaches discussed sexual violence with their student-athletes was a close-ended yes or no question. Future studies could gain a better understanding of college coaches' influence on sexual assault prevention by exploring the length and depth of these conversations, if any. Studies would also benefit from more advanced statistics with other covariates to measure the impact of coach involvement in sexual assault prevention, such as student-athletes' past participation in sexual violence prevention or their own attitudes and beliefs toward sexual assault.

Implications for Social Work

Social workers are beginning to recognize student-athletes as a vulnerable population due to the pressures they face on a daily basis (Dean & Rowan, 2014). In line with social work core values and competencies, social workers can support the health and well-being of athletes through direct practice, community organizing, advocacy, policy development, education, and research (Moore & Gummelt, 2019). Social workers are uniquely positioned to address the various needs of student-athletes by working at the micro, mezzo, and macro levels. While the three articles in this dissertation primarily focused on sexual assault prevention, findings from Chapter Two also emphasize the need for increased access to mental health services for student-athletes. Therefore, this dissertation has important implications for social work practice, policy,

education, and future research as it relates to sexual assault prevention education as well as mental health.

Implications for Social Work Practice

The findings from this dissertation call attention to improving intervention and prevention with the student-athlete population. As discussed in Chapter Three, GRC emerged as a potential barrier for student-athletes to respond to post-sexual assault as prosocial bystanders. Through direct practice, social workers can strive to better address the health and wellness of student-athletes struggling with GRC. Using a more holistic perspective, social workers can address some of the attitudes that may lead to problematic behaviors. More specifically, social workers can encourage positive identity development, including healthy masculinity and healthy sexuality. Furthermore, social workers can teach effective coping strategies and time management skills for student-athletes, particularly females who may be experiencing higher conflicts between work and leisure-family relations. Social workers can also provide crisis management to address urgent matters with student-athletes. Taken together, social workers can collaborate with counseling centers on college campuses and athletic departments to properly assess the needs of student-athletes and connect them to necessary resources. Increasing access to mental health services may help normalize help-seeking behaviors, which has often been stigmatized among student-athletes (Ramaeker, 2016; Moore, 2017).

This dissertation also highlighted ethnic disparities of student-athletes as it relates to sexual assault prevention. In Chapter Two, Hispanic student-athletes displayed lower intentions to respond to post-sexual assault as compared to non-Hispanics. Hispanic student-athletes also had lower awareness of school sexual assault policies and resources than non-Hispanics in Chapter Four. Since the majority of NCAA student-athletes are White (NCAA Demographics

Database, 2018), the needs of student-athletes of color may be neglected. Student-athletes of color are also less likely to find the campus and team environments inclusive or accepting (Bernhard, 2014; Paskus & Bell, 2016). Social workers can recognize the diverse needs of the student-athlete population and incorporate cultural awareness in practice with student-athletes. By drawing from empirical, theoretical, and historical scholarship, social workers can safely discuss issues related to race and identity with student-athletes, validate their experiences, and identify social supports within the college community (Jackson & Samuels, 2011). In terms of acknowledging diversity in sexual assault prevention, social workers can encourage student-athletes to think about the ways in which their race, ethnicity, gender, or other intersectional identities influence their understanding of sexual assault (Worthen & Wallace, 2017). Therefore, building space for student-athletes of color to discuss power and privilege may better enhance their understanding and response to sexual assault.

Social workers can also tailor sexual assault prevention programs for the student-athlete population at large. Social workers could develop more intimate and relatable trainings where student-athletes could learn more about school policies to address sexual assault, where to go for help, and how to best respond if an incident occurs. Moreover, social workers could create safe spaces to facilitate engaging conversations and practice different ways to respond to sexual assault in various situations. Partnering with campus staff to lead sexual assault prevention is another way to strengthen sexual assault prevention education (Kafonek & Richards, 2017). As seen in Chapters Three and Four, involving campus staff may increase awareness of sexual assault policies and resources, and increase engagement in sexual assault prevention on campus. In addition to coaches, social workers can collaborate with other staff who have established rapport with student-athletes, such as trainers, student-athlete development coordinators, or

academic advisors. Advancing effective sexual assault prevention with student-athletes can ultimately contribute to best practices put forth by the *Sexual Assault Prevention Tool Kit* developed by the NCAA Sport Science Institute (2019).

Implications for Social Work Education

Social work education is essential to prepare students to address the various needs of student-athletes. Incorporating sports social work into curricula for undergraduate and graduate programs will provide useful insight should social workers encounter student-athletes in their respective roles. Student-athletes are at-risk for a number of issues such as mental health, alcohol or substance use, eating disorders, unaddressed emotions during or after an injury, pressure to perform, or racial discrimination (Dean & Rowan, 2014; Moore & Gummelt, 2019). Foundation level classes could introduce student-athletes as an at-risk population. Advanced level classes could focus on implementing clinical interventions with student-athletes, using sport as a platform for social change, and advocating for policies to better protect the health and wellness of student-athletes. Electives may also be advantageous for those students interested in working directly with this population where they can have the opportunity to hone in on student-athlete welfare and development. Social work students could also gain professional experience working with student-athletes in field education by being placed in sports settings (i.e. university athletic departments, sports-based youth organizations, local school districts, etc.).

This study mainly showcases the importance of addressing campus sexual assault with student-athletes. Aside from organizing sexual assault prevention, social work students can be informed by evidence-based practice to work with survivors of sexual assault and rehabilitate perpetrators of sexual assault (Moore & Gummelt, 2019). Through social work education, social work students can address the trauma and co-occurring disorders for student-athletes who were

victimized by sexual assault. On the other hand, students can learn therapeutic techniques to reduce risks for maladaptive behaviors that may lead to sexual aggression among student-athletes. On a macro level, social workers will be prepared to support sexual assault prevention and increase transparency for reporting procedures (Moore & Gummelt, 2019). In terms of advocacy, students can strategize how to build more staff positions for social workers within athletic departments to support the diverse needs of student-athletes.

Implications for Social Work Policy

Social workers are committed to building policies that support student-athlete well-being (Moore & Gummelt, 2019). The overall findings from this study have important policy implications for NCAA governance and institutions of higher education to increase student-athletes' access to mental health services, adopt a more comprehensive approach to sexual assault prevention, and improve the health and wellness of student-athletes involved in sexual assault.

Results from Chapter Two highlight GRC as a potential concern among student-athletes which warrants increased access to mental health services for student-athletes. High rates of GRC has been linked to maladaptive behaviors (i.e. violence and abuse), mental illness (i.e. depression and anxiety), and lower help-seeking (O'Neil, 2015). Social workers can support athletic departments as they implement NCAA policies and best practices for mental health. The mental health of student-athletes has been a major priority in the last few years. The NCAA formed the Mental Health Task Force in 2013 and published the *Inter-Association Consensus Document: Best Practices for Understanding and Supporting Student-Athlete Mental Wellness to promote the health and well-being of student-athletes* (NCAA Sport Science Institute, 2016). According to NCAA's Mental Health Best Practices (2016), athletic departments should seek

licensed counselors to provide mental health services, develop policies and procedures in the event that a student-athlete experiences a mental health challenge, develop and apply mental health screening tools and referral plans prior to student-athlete's participation in athletics, and promote a culture in the athletics department that encourages mental well-being and resilience (NCAA Sport Science Institute, 2016). Social workers can assist athletic departments through the process of assessing and connecting student-athletes to effective mental health services. Due to knowledge of clinical practice, social workers would also be a valuable resource to the task force to further develop best practices and policies.

Similarly, social workers can support athletic departments maintain in compliance with NCAA's policies around sexual assault and prevention. The NCAA Board of Governors (2018) requires athletic departments to be informed on campus policies to address sexual assault; provide comprehensive sexual assault prevention to student-athletes, coaches, and athletic administrators; and engage in campus-wide sexual assault prevention efforts. NCAA membership institutions must annually report they are maintaining compliance with these policies every year. Social workers can support the athletic departments in preparing for their annual report to the NCAA by reviewing institutional policies, processes, and adjudications for sexual assault; providing information on institutional policies and resources that are available to student-athletes, and educating coaches, athletics administrators and student-athletes on different prevention, intervention, and response. The findings from Chapters Three and Four underscore the importance of adopting a comprehensive approach to sexual assault prevention and delivering consistent messaging regarding sexual assault policy between the NCAA, university, and athletic department. Moreover, enlisting the help of influential leaders who have existing relationships with student-athletes would be useful for promoting knowledge and attitudes

toward sexual assault. This, as a result, may shift community norms that further encourage student-athletes to engage in sexual assault prevention along the continuum of sexual assault.

Social workers can also connect members of the athletic department to various sexual assault prevention professionals and resources. The NCAA Sport Science Institute developed the *Sexual Violence Prevention Toolkit* (2019) as a resource for athletic departments to maintain in compliance with NCAA regulations and engage student-athletes in sexual assault prevention efforts. Social workers may have the knowledge and understanding to identify a sexual assault prevention program that fits with the needs of the athletic department and their student-athletes. Moreover, social workers can work closely with the Title IX coordinator to organize effective sexual assault prevention campaigns for the athletic department and better enforce Title IX regulations. In doing so, student-athletes may have greater awareness of sexual assault policies and resources, as well as greater confidence in campus staff to respond appropriately to allegations of sexual assault.

Finally, social workers can aid athletic departments in analyzing and revising departmental policies to maintain NCAA compliance, particularly as it relates to incidents of sexual assault involving student-athletes. For example, several schools implemented their own policy to ban student-athletes with a history of sexual assault from playing at their institution (Indiana University, 2017; Set the Expectation, 2019). In response to public and congressional pressure, the NCAA is reviewing their current policies on sexual assault (Jacoby, 2020). To date, there have not been any changes to the existing policy. This is an opportune for social workers to weigh in on how to improve the NCAA's sexual assault policy. Social workers can offer insight on how to improve protocols that better protect student-athletes when they disclose incidents of sexual assault to campus staff. From a proactive standpoint, social workers can also encourage

policy reform to expand funding to provide additional services for student-athletes who may be victims or perpetrators of sexual assault. Not only can social workers to engage in victim advocacy, but they can recommend offering rehabilitation programs for student-athlete perpetrators. For the reasons listed above, social workers play an instrumental role in developing, implementing, and analyzing organizational policies to support the health and wellness of student-athletes.

Future Research

This dissertation has a number of implications for social work research. First, findings from Chapter Two suggest that social workers should continue to explore vulnerabilities of student-athletes, such as GRC, and how that may be associated with their personal and interpersonal experiences. More specifically, GRC needs to be further contextualized in sport to understand student-athlete bystander intentions to respond to sexual assault. Since the GRC subscale for conflicts between work and leisure-family relations was significantly moderated by gender, research should examine more complexities perceived by female student-athletes that may hinder their bystander intentions to respond to post-sexual assault. In addition to female student-athletes, studies should aim to better understand barriers among student-athletes of color to better improve sexual assault prevention with diverse populations. Furthermore, studies should consider examining a wider range of bystander attitudes and behaviors along the continuum of sexual assault, including before, after, or during an incident occurs.

The results from Chapter Three demonstrate the powerful impact of building a positive campus climate on student-athlete awareness of sexual assault policies and resources. Researchers should continue assessing how institutions of higher education are addressing sexual assault and transforming the overall campus climate to increase student awareness of their

school's sexual assault policies and resources. One way to assess the campus climate is by implementing campus climate surveys. As recommended by the White House Task Force to Protect Students From Sexual Assault (2014), campus climate surveys are useful for assessing student experiences, attitudes, and behaviors, which will ultimately inform research, practice, and policy to better address sexual assault (Klein et al., 2018). Campus climate surveys will also provide insight into demographic factors as potential predictors of student-athlete awareness and response to sexual assault in the context of the campus climate.

Next, it is important to engage campus staff in sexual assault prevention efforts. Chapter Three revealed that positive perceptions of campus staff were associated with greater awareness of sexual assault policies and resources. Similarly, Chapter Four found that student-athletes whose coach discussed sexual violence with their teams were more likely to take action as proactive bystanders to prevent sexual violence and more familiar with campus resources than those who did not. Despite these findings, more research is needed to determine how athletic staff influence student-athlete awareness of sexual assault policies and resources. In particular, studies should evaluate how student-athletes may respond to sexual assault prevention programs with athletic directors, trainers, coordinators of student-athlete development, or academic advisors. More generally, research would benefit by studying the role of campus staff in promoting knowledge, attitudes, and behaviors of sexual assault and response among at-risk student populations.

Lastly, these studies focused on improving sexual assault prevention with student-athletes. Moving forward, researchers should consider replicating these studies with other intercollegiate organizations, such as National Association of Intercollegiate Athletics (NAIA), to better assess the needs of the collegiate student-athlete population at large. Studies should also

consider building efficacy and transfer of knowledge with student-athletes to promote prosocial and proactive behaviors to prevent campus sexual assault. Thus, studies should evaluate different strategies for implementing sexual assault prevention education including the length of exposure, method of delivery, and content focus.

Conclusions

By and large, this dissertation supports the need for sexual assault prevention with student-athletes. Social workers are integral to promoting social justice and social change by focusing on the unique needs of athletes at both an individual and environmental level (Moore & Gummelt, 2019). These studies help build the intersection between social work and sports to promote student-athlete welfare and development in relation to sexual assault. Not only do these studies pinpoint specific barriers perceived by student-athletes as it relates to responding to situations involving sexual assault as prosocial bystanders, but they also illustrate the profound influence of the campus climate and campus staff to engage students in sexual assault prevention. Therefore, implementing sexual assault prevention with student-athletes is vital to promoting student-athlete safety and reducing campus sexual assault.

References

- Bernhard, L.M. (2014). “Nowhere for me to go:” Black female student-athlete experiences on a predominantly white campus. *Journal for the Study of Sports and Athletes in Education*, 8(2), 67–76. doi: 10.1179/1935739714Z.00000000019
- Cantor, D., Fisher, B., Chibnall, S., Townsend, R., Lee, H., Bruce, C., & Thomas, G. (2017). *Report on the AAU campus climate survey on sexual assault and sexual misconduct*. Rockville, MD: The Association of American Universities.
- Dean, C., & Rowan, D. (2014). The social worker's role in serving vulnerable athletes. *Journal of Social Work Practice*, 28(2), 219-227.
- Indiana University. (2017). *Indiana University Athletics policy disqualifying prospective student-athletes with records of sexual violence*. https://iuhoosiers.com/documents/2017/4/19/Indiana_University_Athletics_Policy_Disqualifying_Prospective_Student_Athletes_with_Records_of_Sexual_Violence_4_5_2017_3_.pdf?id=22782
- Jacoby, K. (2020, Jan 16). *NCAA Board of Governors to review policies regarding sexual assault amid congressional pressure on 'predator pipeline.'* <https://www.usatoday.com/story/sports/college/2020/01/16/ncaa-predator-pipeline-focus-congressional-bill-athletes-sexual-assault/4492088002/>
- Kafonek, K. & Richards, T.N. (2017) An examination of strategies for the prevention of gender-based violence at four-year institutions of higher education, *Journal of School Violence*, 16(3), 271-285, doi: 10.1080/15388220.2017.1318576
- Klein, L., Graham, L.M., Treves-Kagan, S., Deck, P.G., DeLong, S.M., & Martin, S.L. (2018). Leveraging data to strengthen campus sexual assault policies. *Journal of Interpersonal Violence*, 32(21), 3298-3314.

- Moore, M. (2017). Stepping outside of their comfort zone: Perceptions of seeking behavioral health services amongst college athletes. *Journal of Issues in Intercollegiate Athletics, Special Issue*, 130-144.
- Moore, M. & Gummelt, G. (2019). *Sport social work: Promote the functioning and well-being of college and professional athletes*. Cognella, Inc.
- NCAA Board of Governors. (2018). *NCAA policy to combat campus sexual violence*. Retrieved from: http://www.ncaa.org/sites/default/files/Aug2018SSI_UpdatedCampusSexualViolencePolicy_20180905.pdf
- NCAA Sport Science Institute. (2016). *Inter-association consensus document: Best practices for understanding and supporting student-athlete mental wellness*.
https://ncaaorg.s3.amazonaws.com/ssi/mental/SSI_MentalHealthBestPractices.pdf
- NCAA Sport Science Institute. (2019). *Sexual Violence Prevention Toolkit: An Athletics Toolkit for a Healthy and Safe Culture Second Edition*. Retrieved from: https://ncaaorg.s3.amazonaws.com/ssi/violence/SSI_SexualViolencePreventionToolkit.pdf
- Paskus, T., & Bell, L. (2016, January). *NCAA GOALS study of the student-athlete experience: Initial summary of findings*. Retrieved from: http://www.ncaa.org/sites/default/files/GOALS_2015_summary_jan2016_final_20160627.pdf
- Ramaeker, J., & Petrie, T. (2019). "Man Up!": Exploring intersections of sport participation, masculinity, psychological distress, and help-seeking attitudes and intentions. *Psychology of Men & Masculinities*, 20(4), 515-527.
- Set the Expectation. (2019). *The Tracy Rule*. https://www.utsa.edu/today2019/images/The_Tracy_Rule.pdf

Shih, T., & Fan, X. (2009). Comparing response rates in e-mail and paper surveys: A meta-analysis. *Educational Research Review*, 4(1), 26-40.

UConn Office of the Vice President for Research. (2009). *Student-Athletes*. Retrieved from: <https://ovpr.uconn.edu/services/rics/irb/researcher-guide/student-athletes/>

White House Task Force to Protect Students From Sexual Assault (U.S.). (2014). *Not alone: The first report of the white house task force to protect students from sexual assault*.

Appendix
Survey for Chapters Two and Three

Section 1. The first set of questions will ask about your experience playing a National Collegiate Athletic Association (NCAA) sport.

1. Are you currently enrolled as a National Collegiate Athletic Association (NCAA) student-athlete? (If no, skip to end of survey.)

- Yes
- No

2. Which category below includes your age? (If 17 or younger, skip to end of survey.)

- 17 or younger
- 18-24
- 25 or older

3. What is your level in college?

4. Please write in the name of the primary sport you participate in during college.

5. Did you receive an athletic scholarship?

- Yes
- No

6. Which NCAA Division do you play for?

- Division I
- Division II
- Division III

7. Are you a member of a men's team or women's team? (If male, skip to GRCS- Male form in Section 2A. If female, skip to GRCS-female form in Section 2B).

- Male
- Female

Section 2A. In the space to the left of each sentence below, write the number that most closely represents the degree that you Agree or Disagree with the statement. There is no right or wrong answer to each statement; your own reaction is what is asked for.

Strongly Agree						Strongly Disagree
6	5	4	3	2	1	

8. ____ Moving up the career ladder is important to me.
9. ____ I have difficulty telling others I care about them.
10. ____ Verbally expressing my love to another man is difficult for me.
11. ____ I feel torn between my hectic work schedule and caring for my health.
12. ____ Making money is part of my idea of being a successful man.
13. ____ Strong emotions are difficult for me to understand.
14. ____ Affection with other men makes me tense.
15. ____ I sometimes define my personal value by my career success.
16. ____ Expressing feelings makes me feel open to attack by other people.
17. ____ Expressing my emotions to other men is risky.
18. ____ My career, job, or school affects the quality of my leisure or family life.
19. ____ I evaluate other people's value by their level of achievement and success.
20. ____ Talking about my feelings during sexual relations is difficult for me.
21. ____ I worry about failing and how it affects my doing well as a man.
22. ____ I have difficulty expressing my emotional needs to my partner.
23. ____ Men who touch other men make me uncomfortable.
24. ____ Finding time to relax is difficult for me.
25. ____ Doing well all the time is important to me.
26. ____ I have difficulty expressing my tender feelings.
27. ____ Hugging other men is difficult for me.
28. ____ I often feel that I need to be in charge of those around me.
29. ____ Telling others of my strong feelings is not part of my sexual behavior.
30. ____ Competing with others is the best way to succeed.
31. ____ Winning is a measure of my value and personal worth.
32. ____ I often have trouble finding words that describe how I am feeling.
33. ____ I am sometimes hesitant to show my affection to men because of how others might perceive me.
34. ____ My needs to work or study keep me from my family or leisure more than would like.
35. ____ I strive to be more successful than others.
36. ____ I do not like to show my emotions to other people.
37. ____ Telling my partner my feelings about him/her during sex is difficult for me.
38. ____ My work or school often disrupts other parts of my life (home, family, health leisure).
39. ____ I am often concerned about how others evaluate my performance at work or school.
40. ____ Being very personal with other men makes me feel uncomfortable.

41. ___ Being smarter or physically stronger than other men is important to me.
 42. ___ Men who are overly friendly to me make me wonder about their sexual preference (men or women).
 43. ___ Overwork and stress caused by a need to achieve on the job or in school, affects/hurts my life.
 44. ___ I like to feel superior to other people.

Section 2B. In the space to the left of each sentence below, write the number which most closely represents the degree that you Agree or Disagree with the statement. There is no right or wrong answer to each statement; your own reaction is what is asked for.

Strongly Agree 6	5	4	3	2	1 Strongly Disagree
------------------------	---	---	---	---	---------------------------

8. ___ Moving up the career ladder is important to me.
 9. ___ I have difficulty telling others I care about them.
 10. ___ Verbally expressing my love to another woman is difficult for me.
 11. ___ I feel torn between my hectic work schedule and caring for my health.
 12. ___ Making money is part of my idea of being a successful woman.
 13. ___ Strong emotions are difficult for me to understand.
 14. ___ Affection with other women makes me tense.
 15. ___ I sometimes define my personal value by my career success.
 16. ___ Expressing feelings makes me feel open to attack by other people.
 17. ___ Expressing my emotions to other women is risky.
 18. ___ My career, job or school affects the quality of my leisure or family life.
 19. ___ I evaluate other people's value by their level of achievement and success.
 20. ___ Talking (about my feelings) during sexual relations is difficult for me.
 21. ___ I worry about failing and how it affects my doing well as a woman.
 22. ___ I have difficulty expressing my emotional needs to my partner.
 23. ___ Women who touch other women make me uncomfortable.
 24. ___ Finding time to relax is difficult for me.
 25. ___ Doing well all the time is important for me.
 26. ___ I have difficulty expressing my tender feelings.
 27. ___ Hugging other women is difficult for me.
 28. ___ I often feel that I need to be in charge of those around me.
 29. ___ Telling others of my strong feelings is not part of my sexual behavior.
 30. ___ Competing with others is the best way to succeed.
 31. ___ Winning is a measure of my value and personal worth.
 32. ___ I often have trouble finding words that describe how I am feeling.
 33. ___ I am sometimes hesitant to show my affection to women because of how others might perceive me.
 34. ___ My needs to work or study keep me from my family or leisure more than I would like.

35. ____ I strive to be more successful than others.
36. ____ I do not like to show my emotions to other people.
37. ____ Telling my partner my feelings about him/her during sex is difficult for me.
38. ____ My work or school often disrupts other parts of my life (home, family, health, leisure).
39. ____ I am often concerned about how others evaluate my performance at work or school.
40. ____ Being very personal with other women makes me feel uncomfortable.
41. ____ Being smarter or physically stronger than other women is important to me.
42. ____ Women who are overly friendly to me make me wonder about their sexual preference (men or women).
43. ____ Overwork and stress, caused by a need to achieve on the job or in school, affects/hurts my life.
44. ____ I like to feel superior to other people.

Section 3. The following items are about your perception of your team's development during your time in college. Rate each item on the four-point scale provided below. Remember that there are no right or wrong answers. We are interested in your perception of the team's functioning.

Strongly Disagree			Strongly Agree
1	2	3	4

45. Team members are accepting of variations in each other's culture, customs, habits, and traditions.
46. There are positive relationships among the team members.
47. There is a feeling of unity and togetherness among team members.
48. Team members usually feel free to share information.
49. Problem solving processes would be disrupted if one or two team members are absent.
50. The team members feel comfortable in expressing disagreements in the group.
51. Problem solving in this group is truly a team effort.
52. Team members influence one another.
53. I dislike going to this team's meetings.
54. The team members seem to be aware of the team's unspoken rules.
55. Discussions appear to be unrelated to the concerns of the team members.
56. Most team members contribute to decision making in this team.
57. Team members are receptive to feedback and criticism.
58. Despite group tensions, team members tend to stick together.
59. It appears that the individual and team goals are inconsistent.
60. An unhealthy competitive attitude appears to be present among team members.
61. Team members usually feel free to share their opinions.
62. Minimal attempts are made to include quieter members of this team.

- 63. Team members respect the agreement of confidentiality.
- 64. People would be concerned when a team member is absent from the team's members.
- 65. Team members would not like to postpone team meetings.
- 66. Many members engage in "back-stabbing" in this team.
- 67. Team members usually feel free to share their feelings.
- 68. If a team with the same goals is formed, I would prefer to shift to that team.
- 69. I feel vulnerable on this team.

The following sections will discuss your knowledge and attitudes of campus sexual assault. The term sexual assault is defined as any type of sexual contact or behavior that occurs without the explicit consent of the recipient including forced sexual intercourse, forcible sodomy, fondling, and attempted rape.

Section 4. This section will ask about your perceptions of the campus climate while attending school.

Please indicate how much you agree or disagree with each of the following statements. Please answer as best as you can when thinking about your school.

Strongly Agree			Strongly Disagree
1	2	3	4

- 70. Sexual harassment is not tolerated at this school
- 71. This school takes training in sexual assault prevention seriously
- 72. This school is doing a good job of educating students about sexual assault (e.g., what consent means, how to define sexual assault, how to look out for one another)
- 73. This school is doing a good job of trying to prevent sexual assault from happening
- 74. This school is doing a good job of providing needed services to victims of sexual assault
- 75. This school is doing a good job of investigating incidents of sexual assault
- 76. This school is doing a good job of holding people accountable for committing sexual assault

The next questions ask your views about three groups at this school: 1) Campus police/security, 2) Athletic staff, and 3) School Leadership. Please indicate how much you agree with each of the following statements, and answer as best as you can.

Strongly Agree			Strongly Disagree
1	2	3	4

77. Overall, the **campus police/security** at this school...

- a. Are genuinely concerned about my well-being.
- b. Are doing all they can to protect students from harm
- c. Treat students fairly
- d. Are more interested in protecting the reputation of this school than the students they serve

78. Overall, the **athletic staff** at this school...

- a. Are genuinely concerned about my well-being.
- b. Are doing all they can to protect students from harm
- c. Treat students fairly
- d. Are more interested in protecting the reputation of this school than the students they serve

79. Overall, the **President/Chancellor, Deans, and other leadership staff** at this school...

- a. Are genuinely concerned about my well-being.
- b. Are doing all they can to protect students from harm
- c. Treat students fairly
- d. Are more interested in protecting the reputation of this school than the students they serve

Section 5. The next series of questions will ask about your knowledge and attitudes about sexual assault on campus. As a reminder, the term sexual assault is defined as any type of sexual contact or behavior that occurs without the explicit consent of the recipient including forced sexual intercourse, forcible sodomy, fondling, and attempted rape.”

80. During your time in college, have you ever participated in training or education on sexual assault?

- Yes
- No
- Not sure

Please indicate how much you agree or disagree with each of the following statements, answering as best as you can when thinking about your school.

Strongly Agree 1	2	3	Strongly Disagree 4
------------------------	---	---	---------------------------

81. I am aware of and understand this school's procedures for dealing with reported incidents of sexual assault
82. I know what services are available for people who experience sexual assault
83. If a friend of mine were sexually assaulted, I know where to take my friend to get help
84. At this school, students who are accused of perpetrating a sexual assault are treated fairly
85. At this school, when it is determined that sexual assault has happened, the perpetrator gets punished appropriately

Section 6. Please read the following list of behaviors and check how likely you are to engage in these behaviors using the following scale:

Not At All Likely	1	2	3	4	Extremely Likely 5
----------------------	---	---	---	---	--------------------------

86. I would call 911 because of a suspicion that my friend has been drugged.
87. I would call 911 or authorities when I heard sounds of yelling and fighting.
88. I would accompany a friend to a local crisis center.
89. I would call a crisis center or community resource for help when a friend told me they experienced sexual or intimate partner abuse.
90. I would call 911 or authorities because someone was yelling for help.
91. I would call 911 or authorities when a friend needed help because of being hurt sexually or physically.
92. When I heard that a friend was accused of sexual abuse or intimate abuse, I came forward with what I knew rather than keeping silent.
93. I would refuse to remain silent when a friend asked me to keep quiet about an instance of sexual abuse or intimate partner abuse that I knew about
94. I would go with a friend to talk with someone (community resource, police, crisis center, etc.) about an unwanted sexual experience or intimate partner abuse.

Section 7. In the last part of the survey, choose the answer that best describes your demographic information.

95. How would you best describe your race?

- White
- Black or African American
- Native American or American Indian
- Asian or Pacific Islander
- Other

96. Are you Hispanic or Latino?

- Yes
- No

97. What is the total combined family income in your household over the past 12 months?

- Less than \$5,000
- \$5,000 through \$11,999
- \$12,000 through \$15,999
- \$16,000 through \$24,999
- \$25,000 through \$34,999
- \$35,000 through \$49,999
- \$50,000 through \$74,999
- \$75,000 through \$99,999
- \$100,000 and greater
- Don't know

Section 8. Thank you for participating! If you would like to receive your gift card, please provide your “.edu.” student email address. Your survey responses will NOT be connected to your email address. You will receive your gift card within one week of completing this survey.

98. Email address: _____