



Empirical Justification for the Involvement of Athletes' Supportive Others When Conducting Sport Specific Mental Health Interventions

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Collegiate athletes experience similar severity of mental health symptoms as non-athlete peers, but lower mental health treatment engagement. Only one randomized clinical trial has occurred in collegiate athletes who have been assessed for mental health disorders. In this study collegiate athletes who received sport-specific psychological intervention that was supported by the athletes' significant others showed decreased severity of psychiatric symptoms and interferences in sport performance up to 8-months post-randomization. The influence of collegiate athletes' significant others on outcomes was not examined in this study and is the aim of the current study. Results indicated the number of significant other types involved in treatment was associated with decreased psychiatric symptoms but not interferences with sport performance. Session attendance of collegiate athletes was associated with reduced interferences in sport performance but not decreased psychiatric symptomology; suggesting collegiate athletes are more likely to improve mental health when a variety of significant others are engaged in psychological intervention.

Keywords: athlete, mental wellness, mental health, family therapy, sport performance

Collegiate students in the United States formally participate in three levels of sport competition that are affiliated with universities (National Collegiate Athletics Association/ NCAA, Club, Intramural), with each having its own culture and challenges (Marzell et al., 2015). Across these levels of competition, athletes are united in their passion for sport while responding similarly to interventions that concurrently target sport performance and mental health (Donohue et al., 2018). With growing interest in athletes' mental health, extant studies have been conducted to understand the influence support systems have on athletes' mental health (Ullrich-French & Smith, 2006). Indeed, various relationships have been shown to influence the mental health of athletes (Eisenberg et al., 2012), including parents (Hussey et al., 2019), members of the athletic system (Moreland et al., 2017), coaches (Donovan et al., 2002; Ferguson et al., 2018; Rice et al., 2016; Vaughan et al., 2004; Zourbanos et al., 2010), and teammates (Dams-O'Connor et al., 2007; Hagiwara et al., 2017; Raabe et al., 2016).

Results from the aforementioned studies suggest interventions aimed at improving the mental health of athletes may be positively augmented with the incorporation of parents, coaches, teammates and other supportive others (Gill 2008; Stillman et al., 2013). Along this vein, Zimmerman and Protinsky (1993) recommended the inclusion of coaches in family system interventions with athletes, yet until recently family-based mental health interventions have not been evaluated in collegiate athletes. Donohue et al. (2018) compared campus counseling services as usual (SAU) with a sport specific family behavior therapy (coined The Optimum Performance Program in Sports; TOPPS). Results showed greater improvements in sport performance, psychiatric symptom severity, and sport-specific relationships with teammates, coaches and family for participants who received TOPPS ($n = 36$) as compared with participants in SAU ($n = 38$) up to 8-months post-randomization. Persons who were invited by student-athletes to participate in the TOPPS sessions included parents, non-parent family members, intimate partners, coaches, teammates, and non-teammate friends. The role of these persons during sessions included brainstorming solutions to problems, developing goals, modeling skills, and providing encouragement. Attendance of supportive others varied based on availability and desire of student-athlete participants and occurred through in-person and tele- and/or video-conference technologies. Indeed, tele- and video-technologies were encouraged throughout intervention when supportive others lived remotely from campus. In this study, the influence of supportive other types (e.g., parents) on treatment outcomes was not examined.

Therefore, the current study involves an examination of data that was collected but not disseminated in in Donohue et al. (2018). The aims of this study are threefold: (a) determine if the athletes' session attendance, (b) the session attendance of athletes' supportive others (piecing out athlete session attendance), and (c) the number of supportive other types (e.g., parents, coaches, teammates) involved throughout intervention (in-person, tele-therapy, video-therapy), is positively associated with athletes' outcome improvements (reductions in psychiatric symptomology and factors reported to interfere with sport performance).

Method

Participants

Participants were 36 collegiate student-athletes from a Division I university in the United States who were interested in participating in goal-oriented programming to assist sport performance and performance in life in general. Most were NCAA athletes ($n = 22$; 61%), single ($n = 35$; 97%), male ($n = 19$; 53%), and White ($n = 15$; 42%). Participants were not required to evidence psychiatric diagnoses, although according to the results of a validated semi-structured interview for the DSM-IV¹⁸ 29 (81%) evidenced current or past psychiatric diagnoses, and 15 (42%) of the participants evidenced current psychiatric diagnoses.

Inclusionary Criteria

Inclusionary criteria for participants: (a) at least 18 years old; (b) enrolled in the university while formally participating in sports (i.e., NCAA, Club, Intramural); (c) identified as having used illicit drugs or alcohol in the past 4 months; (d) expected to be enrolled for 8 months; (e) not currently receiving psychotherapy; (f) athlete had at least one adult supportive other (e.g., parent, teammate) who could be invited to at least one of intervention sessions to assist the athlete during intervention.

Procedures

Data was obtained from a subset of participants who were randomly assigned to receive the TOPPS experimental arm in the aforementioned clinical trial; Donohue et al., 2018). Participants were recruited through the university athletic department ($n = 4$; 11%), class presentations promoting goal-oriented programming for student athletes ($n = 14$; 39%), coaches and teammates ($n = 10$; 28%), and to obtain research credit for study participation ($n = 8$; 22%). During intake examination if the athlete was interested in participating in a goal-oriented program aimed at improving sport and life performance they were screened for inclusionary/exclusionary criteria, invited to consent to the study, and scheduled for baseline assessment approximately one week later. Following baseline assessment, participants were randomly assigned to either TOPPS or campus counseling SAU. Only participants who were assigned to the TOPPS were included in this study because SAU was an individually-based treatment. The study was approved by the university's Institutional Review Board, and no adverse events were reported to occur.

Intervention

The Optimum Performance Program in Sports was developed with support from the National Institute on Drug Abuse (see Donohue et al., 2018 for a review of some of these studies). Although participants were permitted to attend sessions on practice fields, almost all sessions occurred in offices decorated to celebrate sport, culture and healthy lifestyle. During the first session, participants received an orientation, including the structure and format of meetings (e.g., 12 sessions of 60 minutes each occurring within 4 months), brainstorming goals for sport and life, participation in semi-structured interviews to address sport/ethnic culture, reviewing intervention components, determining how supportive others would be involved.

Supportive others were conceptualized to be change agents to assist participants' goal accomplishment. Supportive others were engaged during sessions through in-person contact, through telephone contact, and/or through video-conference contact based on their availability

and the desire of participating athletes. One week prior to each intervention session providers were prescribed to encourage the participating athletes to attempt to engage supportive others. They were encouraged to attempt to involve their supportive others in-person whenever possible, but when supportive others were unable to attend sessions in person (e.g., lived remotely from campus, employment, lack of transportation) the participants were encouraged to engage their supportive others through telephone or video-conferencing.

During the orientation session providers reviewed who participants would most want respect from, and who some of the people are that would most likely have the participants' back in crisis. They were informed that these supportive others (i.e., family, intimate partner, coaches, teammates, non-teammate friends) are important in assisting goal accomplishment, and that they could be involved in all or some sessions to model skills, generate solutions, reward and encourage goal accomplishment, and provide motivation. Athletes were informed that they could be involved strategically in particular exercises and might need to be excluded in some sessions, or parts of sessions. They were prompted to brainstorm how others might be valuable contributors to skill development during sessions. Guidelines and confidentiality limits were reviewed prior to participation of supportive others. Participants were assured content from providers would not reflect past events unless requested explicitly by participants. Participants were asked to sign releases of information for providers to communicate with engaged supportive others, and supportive others provided verbal consents for their role as supportive others to participants after formally reviewing the role of supportive others at the start of their first session. Supportive others and participants were prompted to review how supportive others could assist the athlete at the start of each session, and participants were prompted to indicate who, if anyone, they would like to involve during the upcoming session. Participants were also encouraged to invite supportive others with whom they may have experienced difficulties to facilitate conflict resolution. When supportive others disclosed psychopathology, a referral was provided. There were no limits on the number of supportive others participants could include during intervention sessions.

At the start of each session planned intervention components were reviewed, including expected duration and how each component was expected to optimize the participants' performance plan, and athletes engaged in cognitive and behavioral skills to prepare for upcoming supportive events.

Participants' assessment results were reviewed to determine goal worthy areas. Participants and supportive others engaged in brainstorming to determine how supportive others could assist participants in goal accomplishment. Goals were relevant to optimum sport performance enhancement, mental health, relationships, academic performance, service to others, and optimum intake. Supportive others were encouraged to support participants any time and provide rewards contingent on goal completion.

A motivation enhancement exercise involved reviewing negative consequences for not achieving goals, and positive consequences associated with goal achievement. Supportive others helped brainstorm consequences.

Participants and supportive others were taught to identify and monitor goal consistent and inconsistent stimuli in the environment. Participants identified ways to manage these environmental stimuli to enhance optimum performance in sports and in life throughout intervention. Supportive others assisted in generating solutions, modeling skills, and providing encouragement. Participants learned to identify antecedents to problem behaviors, refocus disruptive thinking, diaphragmatic breathing, solution generation, review consequences to

potential solutions, imagine optimal performance, and imagine optimal reactions from others. Supportive others assisted in modeling, solution generation and encouragement. Participants were taught to make positive requests and express appreciation. Supportive others were involved as providers or recipients of requests or portrayed the role of others to assist athletes' practice.

Standard prompts were used to generate plans to improve income and decrease expenses. Supportive others assisted brainstorming and provided support. Skills were taught to solicit and prepare for job interviews. Supportive others assisted networking and interviewing skill development. Participants were encouraged to self-generate life aspirations, and brainstorm qualifications, resources and skills necessary to accomplish their dream job. Supportive others provided encouragement and supported brainstorming exercises.

Measures

A large battery of measures was administered during baseline assessment, 4-months post-baseline assessment, and 8-months post-baseline assessment. In this study only participant and supportive other session attendance and the primary outcome measures were examined.

Session Attendance

The participants' session attendance to TOPPS meetings was examined. The supportive others' session attendance was examined for in-person, telephone, and video conference across six relationship types: (a) parent; (b) non-parent family members; (c) intimate partners; (d) teammates; (e) coaches; and (f) non-teammate peers.

Psychiatric Symptoms

The Global Severity Index of Symptom Checklist 90 – Revised (SCL-90-R GSI; Derogatis et al., 1976) consists of ninety items measuring overall psychological distress during the past seven days. Each item is rated from zero (Not at all) to four (Extremely); higher scores indicate greater severity.

Factors That Interfere with Sport Performance

The Sport Interference Checklist (SIC; Donohue, Silver et al., 2007) was used to measure factors that interfere with sport performance in training and competition (e.g., "How often does being too critical of yourself interfere with your performance in training; or in competition). Each scale (Training, Competition) includes 26 items (1 = never, 7 = always). Responses are summed to obtain total scores; higher scores indicate greater interference. Psychometric properties of the SIC are excellent (Donohue et al., 2007; Donohue et al., 2019).

Study Design

Intervention outcomes (SCL-90-R and SIC) were assessed at baseline, 4-months post-baseline, and 8-months post-baseline.

Outcome Improvement

Outcome difference scores for each measure were derived by subtracting the post-assessment score from its respective baseline score. Higher scores indicate greater symptom severity, thus positive difference scores indicate improvement.

Hypotheses

It was hypothesized that (a) session attendance of athletes, (b) session attendance of supportive others (partialling out variance due to the athletes' session attendance), and (c) number of supportive other types involved throughout intervention would be positively related to outcome improvements in SCL-90-R and SIC-Training and Competition scores.

Results

Descriptive Analyses

The average number of sessions attended by athletes was 10.33 ($SD = 3$) while supportive others attended 5.19 ($SD = 3.35$) of the athletes' sessions. The average number of supportive other types (e.g., parent, coach, teammate) involved in each of the athletes' sessions was 1.97 ($SD = 1.06$).

Table 1 shows how many athletes involved the various types of supportive others in sessions. Twenty-two athletes (61.11%) involved their parents in at least one intervention session, and all relationship types were involved in at least one intervention session. Of all sessions attended by the participants ($n = 372$), most ($n = 66$; 17.74%) were attended by a parent.

Table 1
Frequency and Percentage of Participants Who Involved Supportive Other Types in at Least One Session ($N = 36$) and Sessions Attended by at Least One Member of the Various Supportive Other Types in Sessions Throughout 4-Months of Intervention

Significant Other Types Involved Throughout 4-Months of Intervention	Participant ($N = 36$)		Participant Sessions (372 attended by participants)	
	λ	%	λ	%
Parent	22	61.11	66	17.74
Teammate	17	47.22	37	9.95
Intimate Partner	10	27.78	40	10.75
Coach	9	25.00	24	6.45
Non-Parent Family Member	8	22.22	34	9.14
Non-Teammate Friend	5	13.89	24	6.45

Table 2 shows how many athletes involved two or more supportive others in intervention. The results indicate 29 of the 36 athletes (80.56%) involved two or more supportive others in at least one intervention session, while only 3 (8.33%) failed to involve a supportive other in intervention. As seen in the bottom of Table 2, 50% of the sessions involved at least one supportive other.

Table 2
Supportive Other Involvement and Attendance Throughout the 4-months of Participants' Intervention

Supportive Other Involvement	Participant (<i>N</i> = 36)	
	λ	%
Two or more SOs involved in intervention	29	80.56
Only one SO involved in	4	11.11
No SOs involved in intervention	3	8.33
Supportive Other Attendance	Participant Sessions (372 attended by participants)	
	λ	%
# of sessions no SOs were present	186	50.00
# of sessions only one SO was present	140	37.63
# of sessions two or more SOs were present	46	12.37

Note. SO = Supportive Other.

Table 3 shows that of the 186 sessions attended by supportive others, they attended sessions in person most frequently ($n = 85$; 46%) followed by telephone ($n = 51$; 14%), and all methods of participation were used to some extent.

Table 3
Frequency and Percentage of Supportive Other Session Participation Method Throughout the 4-months of Participants' Intervention

Supportive Other Participation Type	Supportive Other Sessions (186 attended by SO)*	
	λ	%
SO engaged in person	85	45.70
SO engaged via telephone	51	27.42
SO engaged via video-conference	19	10.22
Multiple types of engagement in one session	31	16.66

Note. SO = Supportive Other. *Only includes 170 out of 186 sessions where supportive other was present for whom data was available.

Examination of Main Hypotheses

Hypothesis 1: As hypothesized, Table 4 shows the athletes' session attendance was correlated with decreased severity of factors interfering with their sport performance in training, $r(36) = .46, p = .002$, and competition, $r(36) = .36, p = .014$. However, the athletes' session attendance did not significantly correlate with improvements in their psychiatric symptomology ($p = .25$).

Hypothesis 2: Table 4 shows correlation coefficients examining the association between the supportive others' session attendance and the athletes' outcome improvements in psychiatric symptomology and sports interference in Training and Competition (partialling out participant session attendance). Contrary to hypotheses, these results were not significant ($ps. > .05$).

Table 4
Correlations between Participant Attendance and Outcome Improvements in Psychiatric Symptoms (SCL-90-R) and Factors that Interfere with Sport Performance (SIC) (N=36)

Variable	1	2	3	4	5	6
1. Participant Session Attendance	-					
2. SO Session Attendance	.66**	-				
3. # of SO Types Involved in Intervention	.58**	.67**	-			
4. SCL-90-R Baseline to Post Difference	.12	.05	.33*	-		
5. SIC Training Baseline to Post Difference	.46**	.31*	.44**	.69**	-	
6. SIC Competition Baseline to Post Difference	.36*	.28	.40*	.72**	.88**	-

Note. SO = Supportive Other, SCL-90-R = Symptom Checklist-90-Revised, SIC = Sport Interference Checklist. $N = 36$. * $p < .05$; ** $p < .01$ (1-tailed).

Hypothesis 3: As hypothesized, Table 5 shows that after controlling for the athletes' session attendance, the number of types of supportive others involved throughout intervention were associated with improvements in the athletes' psychiatric symptomology, $r(36) = .32, p = .03$. However, number of supportive other types involved in intervention was not associated with severity of factors interfering with the athletes' sport performance in Training ($p = .09$) or Competition ($p = .08$). Therefore, including a variety of supportive other types in TOPPS significantly contributes to improvements in psychiatric symptomology above and beyond the session attendance of athletes, but not improvements in factors that interfere with the sport performance of athletes.

Table 5

Correlations between Outcome Improvements and Supportive Other Session Attendance and Number of Supportive Others Involved in Intervention While Partialling out the Participants' Attendance (N=36)

Variable	Supportive Other Session Attendance	# of Supportive Other Types Involved in Intervention
1. SCL-90-R Baseline to Post Difference	-.04	.32*
2. SIC Training Baseline to Post Difference	.00	.24
3. SIC Competition Baseline to Post Difference	.05	.25

Note. SCL-90-R = Symptom Checklist-90-Revised, SIC = Sport Interference Checklist. $N = 36$.

* $p < .05$ (1-tailed).

Discussion

There is increasing evidence that support systems have a positive influence on the mental health of collegiate athletes, although the impact of these contributions has yet to be assessed within the context of athletes' mental health intervention. In the current study, the utility of one particular aspect of a sport-specific mental health intervention (the intentional engagement of student athletes' supportive others) was examined.

Given that no information is available regarding basic characteristics of supportive others in family based mental health intervention for athletes (or methods of including them in therapy sessions), the initial data analyses were focused on determining the extent to which supportive others of collegiate athletes can be successfully recruited to participate in family-based intervention. Along this vein, the vast majority (81%) of student-athletes in the examined sample engaged two or more supportive others throughout their 4 months of intervention. Only 3 (8%) of the athletes did not involve any supportive others throughout intervention. At least half of all intervention sessions were attended by one or more supportive others, most often by parents. This is encouraging because others have inferred that because collegiate athletes are likely to desire independence from their parents, it may be difficult to engage them in collegiate athletes' mental health intervention. While athletes most often engaged parents, intimate partners, non-parent family members, teammates, coaches, and non-teammate friends were substantially involved, usually in person although telephone and video-conferencing were used in 46% of the sessions. The results suggest athletes' mental health interventions are capable of engaging the supportive others of athletes, and that telephone- and video-conferencing technologies are very important methods of engagement for the supportive others of athletes who would likely be uninvolved in treatment. This finding has great implications for athletes' family-based treatment during COVID-19.

Session attendance of athletes was positively associated with improvements in factors that interfere with their sport performance in training and competition, but not improvements in

their psychiatric symptomology. The unique contribution of supportive other attendance was not associated with outcome improvements, whereas the number of supportive others involved in intervention was associated with improvements in psychiatric symptomology. Collectively these results suggest individually-based interventions may be sufficient to improve factors that interfere with athletes' sport performance whereas engagement of multiple supportive others may facilitate improvements in athletes' mental health. Moreover, although anecdotal, involving a variety of supportive others appeared to facilitate communication between these systems, and strategically improve the athletes' goals for mental health. Involving multiple supportive others also permitted strong relationships to grow across systems (e.g., between a coach and parent) so concerns could be effectively managed. Parents and intimate partners were frequent attendees and appeared to be most likely to discuss intimate issues specific to the athletes' mental health, while less often bringing in coaches or teammates complemented goals that were specific to sports; providing therapeutically natural combinations of support that were functionally related to outcomes. It is clear from the literature that supportive others, and strong social support in general, are essential in the wellbeing of athletes. The results of this study support a connection between the involvement of social support systems and improvements in mental health through family-based mental health intervention.

In conclusion, extant studies have been conducted by scientists to systematically examine mental health interventions in collegiate athletes, and to our knowledge no research has previously examined how intervention participation of athletes' teammates, coaches and family influence mental health outcomes of athletes. Therefore, the results of this study represent an advancement in sport-specific mental health intervention development, showing the incorporation of a variety of supportive others is associated with improved mental health outcomes of collegiate athletes, and providing a framework in which similar programs can be developed in controlled clinical trials.

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Family-Based Optimization Intervention Implemented through Video-Conferencing to Address Major Depressive Disorder in a Latina Adolescent Athlete During COVID-19

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Major Depressive Disorder (MDD) is a highly prevalent mental health concern impacting adolescent athletes in unique ways (McGuine et al., 2021), yet sport-specific interventions for adolescent athletes with this disorder have yet to be formally developed. The Optimum Performance Program in Sports (TOPPS) is a sport-specific evidence-supported intervention that has successfully treated depression in collegiate athletes (Donohue et al., 2018). However, evidence for this approach in youth athletes has yet to be established. Further, COVID-19 has shifted the delivery of traditional mental health services to video conferencing (Boelen, 2020), yet very few clinical trials have examined evidence-based intervention implementation in this format. This study reports the results of a case involving an adolescent girl who was formally assessed with MDD. Study results indicated significant improvements from baseline to post-treatment in severity of general mental health symptoms, depression, factors interfering with sport performance, and relationships with family, coaches, and teammates. Treatment protocol adherence was excellent, and she was highly satisfied with treatment implementation.

Keywords: Covid-19, MDD, Treatment, Clinical Trial, Athlete

Major Depressive Disorder (MDD) is a mood disorder characterized by persistent feelings of sadness and loss of interest in activities (American Psychiatric Association, 2013). The Centers for Disease Control and Prevention (2018) reported that Latina adolescents' evidence higher rates of depressive symptoms than non-Latina White and non-Latina Black adolescent girls in the United States. These high rates of depressive symptoms among Latina adolescents are associated with severe health consequences, particularly suicidality (Edmonds et al., 2021). Despite having high rates of depressive symptoms, Latina adolescents are less likely to receive treatment for depression than their White peers (Stafford et al., 2019). Evidence-based therapies exist to treat adolescent depression, such as Cognitive-Behavioral Therapy, Interpersonal Psychotherapy, and antidepressant medications (see review by Lewandowski et al., 2013). Still, very few behavioral treatments have been modified to address psychological conditions in Latina adolescents (Benuto et al., 2019; Hooper et al., 2016). Latina adolescents live within a unique socio-cultural environment that affects their mental health (Davidson et al., 2015). For example, Latina families' household inclusion of both immediate and extended family (familism) has been found to enhance health-related behaviors in Latina adolescents (Perez & Cruess, 2011). Therefore, it is recommended that family and other social supports are integrated into services to help engage Latina adolescents into mental health treatments (Gopalan et al., 2010). Ultimately, it is imperative to develop mental health services that meet the needs of this population (Chu et al., 2016).

Need to Adapt Behavioral Interventions to be Sport-Specific in Latina Adolescent Athletes

While there are currently less Latina adolescents participating in organized sports compared to girls from other ethno-racial groups, the number of Latina adolescents participating in high school sports have increased about ten percent since 2015 (Centers for Disease Control and Prevention, 2020; Sabo & Veliz 2008). Additionally, these Latina adolescents who participate in sports have shown to greatly value their identity as athletes (McGovern, 2021). Therefore, effective integration of sport into mental health interventions may be an effective method of reducing healthcare disparities in Latina adolescents, especially those from low-income households (McGovern, 2021; Fraser-Thomas & Côté, 2006)

While there are many benefits of sport participation, there are stressors associated with competitive sports for adolescent athletes (Goyen & Anshel, 1998), including pressure to perform, conflicts with coaches or opponents, fear of injury, making errors, and poor coach-athlete relationships (Holt et al., 2005). Appreciation for the importance of addressing mental health symptomology through enhanced recognition and amelioration of sport-specific stressors using evidence supported intervention is growing (Breslin et al., 2017; Donohue & Phrathep, 2020; Tamminen & Holt, 2012). Specific to Latina athletes, negative gender and racial stereotypes have been found to exacerbate stressors associated with sport participation (McGovern, 2021). For example, Lopez (2018) showed that Latina adolescents participating in sports face gender and race-based teasing that heightened their experience of insecurity and self-consciousness. Therefore, there is a great need to develop and evaluate sport-specific mental health interventions for Latina adolescent athletes.

There is one published case study evaluating the effects of a strengths-based Cognitive Behavioral Therapy (CBT) treatment approach with a collegiate athlete evidencing depression (Gabana, 2017). Although no formal outcome measures were included, Gabana (2017) indicated that the strengths-based CBT approach allowed the client to discover her strengths, challenge negative beliefs, and form more adaptive behavioral patterns and coping mechanisms to address her depression. Another study evaluated the effects of a Rational Digital Storytelling intervention for depression among adolescent athletes with special educational needs (Ofoegbu, 2020). Rational Digital Storytelling aims to help decrease clients' dysfunctional beliefs, unhealthy emotions, and problem behaviors by teaching them rational alternative beliefs to facilitate functional beliefs, healthy emotions, and adaptive behaviors through storytelling (Ofoegbu, 2020). Post-test and follow-up scores indicated that the Rational Digital Storytelling intervention had a significant reduction on the adolescent athletes' depression outcomes compared to a control group. The cognitive and behavioral components of these behaviors appear to address depressive symptoms in athletes effectively, however, these interventions were not adapted to be sport-specific, which is important for engagement, receptivity, and effectiveness in athletes (Geidne et al., 2013).

Adolescent athletes who evidence MDD are presumed to be more interested in behavioral intervention when it addresses sports performance than traditional applications (Schinke et al., 2017). Such adjustments are hypothesized to establish stronger connections between new information and encourage greater interest in practicing therapeutic skill sets in a real-world context (Brewin, 1989). The Optimum Performance Program in Sports (TOPPS) is a sport-specific intervention that was formally adapted from Family Behavioral Therapy (FBT; Azrin et al., 1994), evidence supported treatment for substance use, to concurrently address sport performance and mental health in athletes (Donohue et al., 2021). TOPPS focuses on performance optimization in both sport and life outside of sport, with athletes determining personal goals and practice scenarios to review during skills training (Donohue et al., 2018). An important feature of TOPPS is the inclusion of significant others (e.g., peers, family, coaches, and teammates) as they help athletes by sharing insights, developing goals, modelling skills, and reinforcing optimal thoughts and behaviors. TOPPS has demonstrated significant improvements in collegiate athletes' relationships, interferences with sports performance, and problems associated with mental health symptomology up to eight months post-intervention in clinical trials (Chow et al., 2015; Donohue et al., 2020; Donohue et al., 2015; Galante et al., 2017; Gavrilova et al., 2016; Pitts et al., 2015), and in one controlled trial particularly as mental health diagnostic severity increased (Donohue et al., 2018). Additionally, in an uncontrolled case trial and controlled case trial involving an Asian-American female adolescent athlete diagnosed with social anxiety disorder and a low-SES white male adolescent athlete diagnosed with attention-deficit hyperactivity disorder and oppositional defiant disorder, respectively, an adaptation of this intervention was determined to lead to similar improvements up to one-month follow-up (Donohue et al., 2021; Phrathep et al., 2021). The results of these studies suggest TOPPS may be efficacious in treating MDD in adolescents from marginalized populations. Indeed, it is important to note that social workers are especially capable of implementing and advocating TOPPS through education, research and policy development, and in doing so promote the well-being of athletes from marginalized backgrounds, such as Latina adolescent athletes (Gill et al., 2017; Moore et al., 2018; Newman et al., 2021).

The cancellation of athletic seasons and fear of contracting COVID-19 have negatively affected the psychological well-being of youth athletes (Sanderson & Brown, 2020). Further,

COVID-19 has also impacted the delivery of traditional mental health services to be adapted to telehealth modalities (Pfender, 2020). Consequently, mental health providers must be mindful of the unique stressors that consumers experience due to COVID-19 while implementing psychologically based interventions safely (Zhou *et al.*, 2020). Zoom is a video-conferencing software that has been widely used by mental health providers and has shown to be efficacious in delivering behavioral therapies (Boelen *et al.*, 2020). In addition, its integration into TOPPS implementation has been indicated previously (Donohue *et al.*, 2016; Phrathep *et al.*, 2021).

The present study aims to assess the efficacy of TOPPS in a Latina adolescent athlete evidencing MDD. Dependent measures focus on psychiatric symptoms, factors that have been found to impact the sport performance of this youth directly, and relationships with significant others.

Case Introduction

Vanessa (not her real name) is a 15-year-old Mexican-American volleyball player who presented to the TOPPS program because she was interested in improving her sports performance. At the time of the referral, Vanessa was in the off-season and recovering from an ankle injury. She said she desired to play collegiate volleyball.

Presenting Complaints

During the intake assessment, Vanessa reported low motivation, low self-esteem, and stress regarding recovering from an ankle injury. She expressed how these concerns affected her ability to recover from mistakes and errors in both school and sports, inherently adversely affecting her mood and self-efficacy. Vanessa and her mother described her low self-confidence as prevalent before competitions and affecting her mood during and after performances.

Assessment Measures and Pre-Intervention Assessment Results

Prior to receiving treatment, a comprehensive assessment was conducted that assessed client demographics, mental health symptoms, factors interfering with her sport performance, and diagnoses. A comprehensive battery of assessment measures was administered by a trained assessor one week before intervention (baseline), and 4- and 5-months post-baseline. This comprehensive assessment was designed to evaluate the efficacy of TOPPS with adolescent athletes. In typical clinical settings, providers can modify the assessment to expedite its implementation and outcome tracking (e.g., using one mental health measure and one sport performance measure). The comprehensive battery included both primary outcome measures and secondary measures, where the primary outcome measures were evaluated using the reliable change index (RCI; Jacobson & Truax, 1991) and secondary measures were evaluated using eyeballing (Byrne, 2017). Eyeballing is completed by reviewing the raw data and determining if the post-test and follow-up scores for the selected measures appear to demonstrate significant improvement from baseline based on clinical experience.

Primary Outcome Measures:

Kiddie – Schedule for Affective Disorders and Schizophrenia for School-Aged Children 6 to 18 years old DSM-5 (K-SADS) (Kaufman et al., 2000). This semi-structured interview assessed psychiatric symptoms consistent with the Diagnostic and Statistical Manual of Mental Disorders (5th ed). Inter-rater agreement of the K-SADS with similar measures is high (range: 93% to 100%). The KSADS also has demonstrated high test-retest reliability and concurrent validity (Kaufman et al., 1997). Vanessa's results on the KSADS indicated that she met DSM-5 criteria for MDD.

The Symptoms Check-List-90-Revised (SCL-90-R) (Derogatis, 1986). This 90-item measure is a widely utilized scale for general psychiatric symptoms and has been normed on adolescent populations and has demonstrated acceptable internal consistency and test-retest reliability (Preti et al., 2019). The SCL-90-R revealed that Vanessa scored above clinical thresholds on two dimensions of mental health symptomology (i.e., Obsessive-Compulsive, Interpersonal Sensitivity) and demonstrated Borderline Clinical levels on Phobic Anxiety, Depression, Somatization, Psychoticism, and the Global Severity Index.

Sport Interference Checklist (SIC) (Donohue, Silver, et al., 2007). This 40-item measure includes three inventories used to assess factors that have been indicated to interfere with sport training (Problems in Sport Training Scale; PSTS), sport competition (Problems in Sport Competition Scale; PSCS), and life outside of sports (Problems with Life Outside of Sports; PLOS). The SIC has demonstrated excellent factor structure, internal consistency and convergent validity (Donohue et al., 2007), and has predicted psychiatric symptom severity (Donohue et al., 2019), in collegiate athletes. Vanessa demonstrated elevations on the Thoughts and Stress and Team Relationships subscales on the SIC in both Training and Competition. In contrast, her Team Relationships and Motivation subscale scores reflected relative strengths

Secondary Measures:

Time-Line Follow-Back interview (TLFB) (Sobell et al., 1996). This assessment measure uses a calendar with pre-recorded anchor points (e.g., birthdays, special events) to assist retroactive reports of alcohol, non-prescribed drug use frequency, and frequency of days attending school and sport practice. The TLFB has demonstrated test-retest reliability and concurrent validity (Donohue et al., 2004). Vanessa did not report any drug or alcohol use on the TLFB.

Youth Self Report 11-18 (YSR) (Achenbach, 1991). This 112-item measure assesses adolescents' competencies and problem behaviors. The Externalizing and Internalizing Behavior Problem scales will be used in the current study. The YSR has demonstrated acceptable internal consistency, test-retest reliability, and content validity (Achenbach & Rescorla, 2001). Vanessa's YSR scores demonstrated elevations in internalizing problems, withdrawn/depressed, anxious/depressed, and affective problems.

Beck Depression Inventory-II (BDI-II) (Beck et al., 1996). This 21-item measure is one of the most widely used methods of assessing depressive symptoms. In addition, the BDI-II has

demonstrated high internal consistency, test-retest reliability, and concurrent validity (Wang & Gorenstein, 2013). Vanessa's BDI-II total score was 34, suggesting severe depressive symptoms.

Student-Athlete Relationship Instrument (SARI) (Donohue et al., 2007). This 63-item measure assesses sport-specific problems in relationships with Family, Coaches, Teammates, and Peers. The SARI has demonstrated high internal consistency and criterion-related validity (Donohue et al., 2007), and reliably predicts mental health symptom severity in collegiate athletes (Hussey et al., 2019).

Overall Happiness with Family, Coaches, Teammates and Peers (Donohue et al. 2007). This 4-item measure utilizes a 0 to 100 scale of happiness (0 = completely unhappy, 100 = completely happy). Items assess overall happiness in four relationships, e.g., coaches, teammates, family, and peers; these scales have demonstrated acceptable criterion-related validity (Hussey et al., 2019). See Table 2 for Vanessa's overall happiness ratings with her family, coaches, teammates, and peers.

Client Satisfaction Questionnaire-8. (CSQ-8) (Larsen et al., 1979). This 8-item (4-point scale) self-report questionnaire evaluates the quality of services received and has demonstrated high internal consistency and concurrent validity (Kelly et al., 2017). The CSQ-8 was implemented after the intervention and Vanessa reported total score of 32.

Child and Adolescent Services Assessment (CASA) (Ascher et al., 1996). This semi-structured interview assesses mental health service utilization, opinions about mental health services, and access/barriers to mental health services. The CASA was administered at baseline. The CASA has demonstrated high interrater reliability for items and (Schwartz et al., 2019) and concurrent validity in studies comparing CASA data to mental health centers' management information systems. No concerns were indicated by Vanessa or her mother regarding engaging in mental health services.

Suicide Probability Scale (SPS) (Cull & Gill, 1982). This measure assesses suicidal risk/ideation. The SPS has demonstrated acceptable internal consistency (Eltz et al., 2006) and has established predictive validity in suicidal attempts and self-destructive behavior (Larzelere et al., 1996). Vanessa reported a probability score of 21, which met the cutoff for safety concerns.

Case Conceptualization

At the time of intake, Vanessa was living with her father, mother, and younger brother. Her older adult brother had just moved out for college, where he played a sport at the collegiate level. Her father was employed as a skilled laborer, and her mother was an administrative assistant at a government office.

Vanessa's mother described her family culture as hardworking, connected, and disciplined. Growing up with a younger and older brother, Vanessa expressed experiencing gender-based teasing that negatively affected how she initially perceived her abilities in sports. She reported this bantering as well as constructive criticism from her mother after practices and games when she performed poorly helped to motivate her to work hard and ultimately match the

achievements of her brothers in both sports and school. However, these experiences were also reported to be associated with derogatory self-statements and anxiety.

Vanessa's experience of low self-esteem, confidence, and motivation after her ankle injury was conceptualized to be impacting her thinking patterns maladaptively (e.g., "I'm not good enough," "need" and "should" statements, "I'm letting others down,"). She also expressed maladaptive behaviors, including poor time management, procrastination, decreased engagement in pleasurable activities. Physically, she expressed low energy, sleeping less, and increased appetite. Lastly, a month before treatment, Vanessa described her depressive symptoms intensifying after learning about the recent passing of her uncle with whom she had a close relationship. Vanessa's severity of her depressive symptoms contributed to thoughts of wanting to die (she did not have any plan or intent to harm herself).

Vanessa's negative self-appraisal and expectation of punishment were reported to affect her sport performance. She expressed a lack of confidence, difficulty recovering after making mistakes, and hesitancy in asking for help from her coach. While she expressed doing well academically, Vanessa experienced increased pressure to maintain her academic performance due to challenges with time management, low motivation, and comparing herself to others. These problems resulted in her lacking reinforcement opportunities specific to social attention.

Remediation was thus aimed at improving Vanessa's automatic negative thoughts and maladaptive behaviors through cognitive and behavioral skills (e.g., objective thinking, positive outlook, focusing on the task at hand rather than outcomes, thought stopping, solution generation, positive imagery, scheduling pleasant activities with others, perspective-taking, social skills training, recognition of antecedent triggers to undesired behavior). Performance planning also involved teaching her supportive others to reinforce desired behaviors while ignoring undesired ones and generating potential solutions to problems. Given the importance of family connectedness in Mexican American families, supportive other involvement was conceptualized to be important in helping Vanessa achieve reinforcement, which was particularly important due to isolation from classmates due to COVID-19.

Intervention Components

The protocols used for TOPPS with college athletes has undergone adaptations to fit the experience of adolescent athletes (Donohue et al., 2021; Phrathep et al., 2021). The intervention principles, therapeutic style, and overarching procedures implemented in this case study were consistent with those used in Donohue *et al.* (2021). The TOPPS program consists of 10 different intervention components that are designed to optimize sport, relational, and mental well-being, among other things. The TOPPS intervention starts with a planning session where athletes and their significant others rank the intervention components based on their perceived need to each component's perceived desirability. See Table 3 to see the descriptions and order of priority that Vanessa and her mother ranked the TOPPS intervention components.

Intervention Integrity

To ensure implementation integrity, several strategies were employed, including documentation of techniques used during each session, the participant's ratings of engagement and progress towards personal and programmatic goals; ongoing clinical supervision by a licensed psychologist (i.e., review of audio-recordings, corrective feedback); structured agendas

and detailed protocol checklists to guide intervention and measure protocol adherence; reviews of audio recordings by independent raters to evaluate protocol adherence and measure inter-rater reliability; and the participant's ratings of helpfulness with each intervention component during each session.

Intervention integrity scores were calculated in a two-step process:

1. The overall percentages of intervention protocol steps completed as per the provider's self-report was computed, thus serving as validity estimates for protocol adherence.
2. Ten percent of the session audiotapes rated by the provider for intervention completion were randomly selected and reviewed by independent raters. Inter-rater agreement was computed by adding the number of steps agreed upon by the provider and independent rater and dividing this result by the number of steps agreed upon and disagreed upon by the provider and independent rater and multiplied by 100. Seventy percent protocol adherence and inter-rater agreement is considered satisfactory.

Protocol Adherence. The overall protocol adherence across 12 sessions was 98.01% ($SD = 4.26\%$, $range = 88-100\%$), according to the provider. Inter-rater agreement between the provider and independent rater was 96.88% ($range = 87.5-100\%$). Thus, the intervention components in this study were implemented with high reliability.

Consumer Satisfaction and Engagement Ratings. Following completion of TOPPS, Vanessa reported high satisfaction with the intervention components, as indicated by the Athlete Helpfulness Rating Scale with an average score of 6.82 ($SD = .41$). The provider rated Vanessa's engagement with each intervention component (based on attendance/promptness, participation, conduct, and home assignment completion) 96.36% optimal. She also reported high satisfaction with the services received, as indicated by the CSQ-8 with a total score of 32. Vanessa attended 100% of the scheduled meetings

Course of Treatment and Assessment of Progress

Vanessa completed 12 one-hour meetings. Vanessa involved multiple significant others in her meetings, including her mother, aunts, uncle, coach, and father. The following sections provide summaries of each performance meeting including who was involved.

Performance Orientation (Meeting 1; Vanessa, mother). During Meeting 1, a standardized Program Orientation was conducted to provide an overview of the program, discuss expectations, and gather information regarding the referral. Vanessa and her mother also discussed potential significant others to be involved in future sessions (e.g., her coach, aunts and uncle, and father). The Performance Timeline intervention component was subsequently implemented to build treatment engagement and teach Vanessa to identify antecedents and consequences that maintain undesired behavior. In this intervention, a sport performance scenario was identified (missing a strike during competition), and a functional analysis was performed to identify factors occurring before and after making a mistake. Relevant to antecedents, she determined anxiety symptoms were strong and her motivation was low immediately before she reached to strike the ball. The provider taught her diaphragmatic breathing to apply when anxiety symptoms (i.e., increased heart rate) were recognized. Vanessa, her mother, and the provider generated goals from the Performance Timeline, such as focusing on the task at hand, diaphragmatic breathing, and

practicing optimal motivational statements. Teaching diaphragmatic breathing and optimal motivational statements are both integrated components within TOPPS.

Performance Planning (Meeting 2; Vanessa, mother). Vanessa and her significant others (SOs) ranked each intervention in the order of importance. The provider then tailored the intervention plan to echo Vanessa's wishes, reflecting the following order from highest to least priority: Appreciation Exchange, Environmental Control, Self-Control, Positive Request, Performance Timeline, Dream Job Development, Job Getting Skills, Financial Management, Discussion about choice culture, and Goal Inspiration. The interventions were implemented successively and cumulatively, thus after interventions were implemented for the first time they were subsequently reviewed in additional meetings to an increasingly lesser amount of time as targeted skills were optimized. The order of implementation was modified slightly in Meeting Agendas based on life events that made certain interventions more relevant than others.

Dynamic Goals and Rewards (Meeting 2-12; Vanessa, mother, coach, aunts, uncle, and father). Meeting 2 involved reviewing pre-intervention assessment results for the SIC to identify Vanessa's strengths and elevated goal-worthy items in preparation for establishing goals in the Dynamic Goals and Rewards intervention. Vanessa's item elevations clustered around the program's global goals of maintaining optimum mental wellness, maintaining optimum relationships with others, and maintaining optimum effort in school-related activities. Further, Vanessa and her Mother emphasized goals surrounding optimum effort in sport-related activities, given her motivation to play volleyball at the collegiate level. Initially, specific goals for maintaining optimum mental wellness included maintaining optimum focus, maintaining a positive perspective, maintaining optimum sleep, and eating well. Specific goals that were initially developed for maintaining optimum relationships with others included being uplifting to teammates at practice, spending quality time with friends and family, and being praiseworthy to others. Specific goals that were initially developed for maintaining optimum effort in school-related activities included turning in schoolwork on time, asking teachers and peers for help if needed, utilizing a planner on scheduled days, and researching potential colleges to apply to. Finally, specific goals that were initially developed for maintaining optimum effort in sport-related activities included injury prevention, practicing breathing, and consistently working out. Vanessa and her Mother both agreed on quality time (e.g., game night) as a reward for future goal accomplishment.

Appreciation Exchange (Meeting 3; Vanessa, mother, and father). Appreciation Exchange was implemented in Meeting 3 with Vanessa's mother and father to develop Vanessa's communication skills in expressing appreciation. Notably, Vanessa's father only spoke Spanish; therefore, Vanessa and her mother acted as translators during that meeting. The family emphasized that they do not usually communicate these appreciative thoughts and expressed that it was a positive experience to directly hear appreciation from one another. Vanessa reflected that this interaction significantly improved her mood.

Self-Control (Meeting 4-5; Vanessa, mother, and coach). Self-Control (SeC) was implemented to teach Vanessa to recognize and manage triggers (e.g., thoughts, images, feelings, and behaviors) that lead to undesired, impulsive behaviors and thoughts. Vanessa learned to identify triggers of undesired behaviors through backward chaining. Backward chaining is used

to break down the steps leading up to an undesired behavior until the first instance of the trigger for the behavior is identified (Donohue & Azrin, 2012). Then, to effectively avoid the undesired impulsive behavior, she utilized strategies like thought stopping, considering the negative consequences for self and others, relaxation strategies (e.g., diaphragmatic breathing), generating alternative solutions, reviewing pros and cons of these solutions, and engaging in imagery for the selected alternative. Vanessa chose to practice SeC to assist her management of errors or mistakes in games. After a practice trial, Vanessa and the provider evaluated her skills during the trial (on a 0-100% optimization scale), discussed what was liked about each skill and what could be enhanced. Vanessa then assessed the likelihood of an undesired behavior prior to using Self-Control and immediately after performing the trial. Vanessa reported that solution generation was the most effective step in helping her recover after making a mistake, and the provider encouraged her to emphasize this step in subsequent trials. The following meeting Vanessa reported utilizing self-control in practices. She emphasized that diaphragmatic breathing was the most helpful step in recovering after making an error. The provider and the client's mother and coach descriptively praised the client for her implementation of SeC.

Performance Timeline (Meeting 6; Vanessa, mother, and coach). The performance timeline was implemented again in meeting 6. Vanessa chose the performance scenario of recovering after making mistakes in games again because she was interested in further establishing her skills. Vanessa visualized out loud in first person optimal thoughts and behaviors while recovering after making a mistake. Her coach, mother, and provider descriptively praised her for her rehearsal.

Goal inspiration (Meeting 7; Vanessa, mother, and aunt). Goal Inspiration focuses on the positive consequences of achieving specific goals to help adolescents increase their motivation to achieve those goals (Donohue & Azrin, 2012). Vanessa chose maintaining optimal hydration. Vanessa, her mother, aunt, and her provider collaboratively brainstormed immediate and delayed positive consequences that would arise from maintaining optimal hydration. For example, Vanessa initially expressed that maintaining optimum hydration would improve her overall energy. She said that having increased energy would increase her motivation to engage in training, improve her overall physical wellness, and help her focus better in school. She reported overall that the sequence of generating additional positive consequences for achieving her goal increased her overall inspiration to maintain optimum hydration. Vanessa stated that the goal inspiration approach would help her achieve other goals that she was less motivated to achieve in the future.

Environmental Control (Meeting 8; Vanessa, mother, and aunt). The Environmental Control (EnvCo) intervention involved altering Vanessa's environment to spend more time with goal-compatible cues and less time with goal-incompatible cues. During the initial meeting, the provider explained that certain environmental cues make goal attainment more or less likely to occur. Then, Vanessa, her aunt, mother, and her provider collaboratively developed a list of cues (i.e., people, places, situations, emotions) that facilitated Vanessa's goal attainment and a list of cues that inhibited her goal attainment. For example, Vanessa identified certain family members who were facilitative of her goals, while excessive social media use was identified as a cue incompatible with her time management goal. Once these cues were established, Vanessa and her significant others brainstormed strategies to spend more time with cues associated with goal

attainment and to decrease time with cues that were incompatible with goal accomplishment. Vanessa and the provider monitored these cues in subsequent meetings.

Positive request (Meeting 9; Vanessa, mother, and uncle). The Positive Request intervention was utilized to teach Vanessa how to make requests respectfully and skillfully (e.g., succinct requests for specific actions, when actions are desired, offers to assist, statements of appreciation, acceptable alternatives). The provider first modeled the Positive Request steps for Vanessa, and then Vanessa engaged in role-playing scenarios with her mother and uncle. Examples included, making requests of her mother and father, asking her coach for help, and asking college coaches about the potential for recruitment. Vanessa mentioned using the positive request outside of sessions, such as asking her coach for help after practice.

Dream job development (Meeting 10; Vanessa, mother, and aunt). The Dream Job Development (DJDev) intervention is designed to prepare athletes for their dream career. The provider, Vanessa, her aunt, and mother discussed important aspects of the most desirable career (e.g., financial situation, benefits, travel) and generated important educational prerequisites, qualifications, and people (including significant others) who could assist in achieving the dream job. Certain steps of DJDev (such as researching career options and colleges relevant to her career goals) were added to Vanessa's goal worksheet. After the meeting, Vanessa mentioned she successfully contacted family members about potential career opportunities and researched colleges that would be a good fit for achieving her career goals.

Discussion about choice culture (Pre-Intervention/Meeting 11; Vanessa, mother, and aunt). The Semi-Structured Interview for Choice Culture in Therapy Scale (CCS) Donohue et al. (2020) a modified version of the Semi-Structured Interview for Ethnic Consideration in Therapy Scale (Donohue et al., 2006), was performed pre-intervention with Vanessa. The CCS is used to facilitate engagement, inform the provider about her cultural concerns/strengths, and increase the provider's awareness of the cultural factors that may impact implementation of the intervention, which has shown to be important in treatment outcomes and engagement for ethnic/racial minorities (Whaley & Davis, 2007). The CCS was performed again during Meeting 11 with her significant others to reinforce the positive qualities of her culture. Vanessa emphasized the importance of being Latina as her choice culture, including the heavy emphasis on family values and unique culture traditions regarding food, music, and religion. The provider facilitated positive conversation, such as how admirable it is for her to use her family values as a source of inspiration for both school and sports as well as being a woman of color in athletics. Vanessa's mother and aunt also provided insight on the importance of her identity as a Latina. They mention that embodying a caretaking role is embedded in their family values as Latina women. Vanessa has explicitly taken on this role in many areas of her social support, such as taking care of her younger brother and maintaining strong bonds with her teammates. Vanessa described having conflicts with others about being Mexican and a woman in sports, where she reported having experienced both racist and sexist comments in the past. Vanessa and her significant others described Vanessa as "strong" where she disregarded these comments respectfully and continued to take pride in her identities. The provider and significant others descriptively praised Vanessa for her commitment to embracing her Latina culture.

Final Meeting Intervention (Meeting 12; Vanessa, mother, and aunt). During the final meeting, generalization was implemented to review the positive aspects of Vanessa's efforts over the last few months and assist her in looking towards the future with optimism. Generalization has been shown to solicit additional positive affect through the emphasis of skill development (Donohue & Azrin, 2012). Additionally, generalization helped Vanessa realize the extent of her improvements and competency in being able to manage potential obstacles. The generalization intervention included the following components:

1. ***Reviewing overall progress in optimizing performance in relationships, factors specific to performance, and mental health.*** First, Vanessa and her significant others commented on how she had increased frequency and consistency with family communication. Vanessa specifically expressed she felt more connected with her siblings. Second, Vanessa described feeling stronger physically by indicating that her stamina and energy had increased since the start of the program due to her consistency in maintaining optimum effort in her sport related activities (e.g., taking 10,000 steps daily, staying consistent with physical rehabilitation for her injured ankle, maintaining optimum hydration). Third, Vanessa expressed feeling more self-confidence, motivation, and enjoyment because of keeping a positive perspective (e.g., focusing on the positives, diaphragmatic breathing), increasing quality social interactions through development of social skills (e.g., assertiveness), and implementing dynamic goals.
2. ***Establishing ways Vanessa can maintain goal progress after TOPPS.*** The provider, Vanessa, and her significant others brainstormed ways Vanessa could maintain her goal progress moving forward. These methods included utilizing a planner to plan out her weekly tasks, asking for help from coaches when needed, maintaining consistency in her athletic training, and focusing on the positives and utilizing thought stopping and solution generating when triggered.
3. ***The provider and significant others offering descriptive praise for Vanessa's effort and strategies utilized and brainstormed to maintain goal progress after TOPPS.*** The provider commented on Vanessa's desire to utilize her dynamic goals worksheet to monitor and update her goals. Additionally, her mother and aunt commended Vanessa for her motivation to continue working towards optimizing her sport performance, academics, and relationships.
4. ***The provider, Vanessa, and significant others exchanging what was loved, admired, respected, or appreciated about Vanessa's optimization process.*** Vanessa's aunt and mother specifically emphasized that they admired Vanessa's commitment to developing into a "strong woman in the family." Vanessa told her mother and aunt that she appreciated them for providing motivation and helping her brainstorm in sessions, as well as helping her practice the skills she learned outside of sessions. Vanessa and her significant others told the provider that they appreciated his commitment to helping Vanessa grow and learn new skills and his continuous positivity throughout the process. The provider told Vanessa's mother and aunt how much he admired the love and commitment they have towards helping Vanessa optimize her life in every area. Lastly, the provider told Vanessa that he admired her effort and care that she has towards her family and willingness to try each week to strive for optimization in all areas of her life. Vanessa said that her participation in TOPPS "improved her mindset, skills, and motivation," by providing her skills to overcome present and future challenges. In addition, both Vanessa and her supportive others expressed gratitude for the opportunity to learn skills relevant

to sport performance and mental health optimization and increased connection with each other because of participating in TOPPS.

Post-intervention and 1-month Follow-up Assessment

The reliable change index (RCI; Jacobson & Truax, 1991) was used to consider the significance of pre-intervention to post-intervention assessment score improvements for the SCL-90-R and SIC (primary outcomes). The RCI helps determine if the clinical change is significant beyond the standard error of measurement. It considers a participant's pre-and post-test change while considering general measure reliability and standard error of measurement. RCI scores greater than 1.96 reflect changes in scores that are meaningful. As per the Reliable Change Index, the participant evidenced significant and meaningful reductions in his SIC Training and Competition total scores both pre- to post-intervention and pre- to 1-month follow-up. She also evidenced significant and reliable reductions in the SCL-90-R Global Severity Index pre- to post-intervention. Because the client had elevations on her BDI score in the pre-intervention assessment, a reliable change index was calculated for post-intervention and follow-up and demonstrated significant and meaningful reductions in her BDI scores. Reliable Change Index scores are listed in Tables 1 and 2.

A post-intervention KSADS interview was conducted to determine if the participant still evidenced current MDD criteria. The post-intervention KSADS interview indicated no indication of clinically significant current MDD symptoms. A blind rater conducted the 1-month follow-up KSADS interview. Symptom improvements were sustained. Eyeballing procedures (Byrne, 2017) were used to get a rough estimate of magnitude of effect for all secondary measures (TLFB, YSR, SPS, SARI, and Overall Happiness with Coaches, Teammates, and Family) from pre- to post-test and pre-test to 1-month follow-up. Post- and follow-up outcome measures demonstrated improvements from baseline for these measures (See Tables 1 and 2). More notably, the client was below the cutoff on the SPS, indicating no evidence of clinically significant levels of suicidal ideation post- and follow-up.

Complicating Factors

Vanessa initiated intervention with considerable motivation to improve her sports performance, motivation, and confidence. However, she initially was ambivalent to include significant others in treatment. To encourage her motivation to include significant others, the provider emphasized that Vanessa could choose the significant other that her and her mother both decided would best fit the intervention component being implemented for the day. Additionally, the provider emphasized how the research shows the more significant others involved, the increased likelihood of optimal outcomes. After each additional significant other was involved, the provider queried to Vanessa the positive consequences of involving the significant other. Overall, Vanessa emphasized that involving various significant others expanded her perspective, inherently allowing her to optimize different cognitive and behavioral skills in both sports and life outside of sports.

Vanessa's initial risk assessment warranted informing her mother about safety planning and monitoring for suicidal ideation. Vanessa was receptive to the provider letting her Mother know about her suicidal ideation and her mother expressed gratitude for being informed. In addition, both Vanessa and her mother described improved communication and connectedness

after Vanessa's suicidal ideation was reviewed and Vanessa was provided enhanced support from her family.

Access and Barriers to Care

As a method of reducing COVID-19 contraction, video-conferencing was utilized. There were benefits of video-conferencing. For instance, video-conferencing eliminated travel to attend sessions, reduced costs associated with gasoline, and permitted the participant and provider to concurrently, on separate computers, search for resources on the internet in real-time. An important barrier to care was that the participant and her family did not have printers at home. The provider addressed limited access to printers by e-mailing virtual documents before the meetings and using the screen share feature for worksheets and homework during meetings. Another barrier was that the screen occasionally froze for a few seconds.

However, the provider addressed this by having the participant's phone number as a backup if the software glitched. Despite these precautions, both the provider and participant's mother contracted COVID-19 at different points in treatment, necessitating delays in treatment provision. During this quarantine, video-conferencing permitted the provider and mother to continue meetings during respite without risk of spreading the disease to others.

Treatment Implications of the Case

This case study permitted an evaluation of the effectiveness of a sport-specific Family Behavior Therapy (FBT) with a Latina adolescent athlete diagnosed with MDD. Post and follow-up tests revealed substantial reductions in depressive symptoms and increased optimal relationships with others. These findings suggest that dynamic goal setting, increasing optimal thoughts, and monitoring, evaluating, and rewarding desired behaviors with the inclusion of significant others is effective for adolescents with MDD in developing effective skills to address depressive symptoms. Vanessa was highly engaged in treatment, as she attended 100% of her scheduled sessions, and rated the program as extremely helpful, thus TOPPS may be engaging for Latina adolescent athletes with MDD.

Additionally, TOPPS was able to be delivered fully through video-conferencing, which was consistent with recommendations from Boelen et al. (2020). This indicates that TOPPS is adaptable and effectively minimizes risks of contracting COVID-19 (Zhou et al., 2020). The lack of mental health interventions available for ethnic/racial minority and low-income youth athletes demonstrates a continued need for intervention development to address this healthcare disparity (Donohue *et al.*, 2021). As previously mentioned, mental health providers from different training backgrounds (e.g., clinical social workers, counseling psychologists, clinical psychologists, licensed mental health counselors) can implement TOPPS interventions. Therefore, creating opportunities for mental health providers from diverse backgrounds to learn TOPPS interventions may be useful in addressing the service gap for diverse youth athletes (Donohue et al., 2020). Lastly, these preliminary results support the need to examine TOPPS in randomized clinical trials (Rounsaville et al., 2009).

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Table 1
Pre-, Post- and Follow-up Assessments of Mental Health

Scale	Pre-Intervention	Post-Intervention	1-Month Follow Up	Post-Intervention Reliable Change Index	1-Month Follow Up Reliable Change Index
The Symptoms Check-List-90-Revised (SCL-90-R; Derogatis, Rickels, & Rock, 1976; T scores).					
Psychoticism	65	33	39		
Obsessive-Compulsive	72	42	39		
Paranoid Ideation	60	41	37		
Interpersonal Sensitivity	71	36	28		
Anxiety	59	32	32		
Phobic Anxiety	69	50	46		
Depression	69	45	40		
Hostility	53	39	39		
Somatization	60	47	38		
Global Severity Index	69	40	33	5.71**	6.52**
Beck Depression Inventory-II (BDI-II; Beck et al., 1996)					
Total Score	34	4	1	12.61**	13.87**
Suicide Probability Scale (SPS; Larzelere, Smith, Batenhorst, & Kelly, 1996)					
Probability Score	21	11	10		
Total T-Score	63	49	33		
Timeline Follow back	0	0	0		
Youth Self Report					
Total Problems	55	44	48		
Externalizing Problems	46	38	46		
Aggressive Behavior	50	50	50		

Rule-Breaking Behavior	52	50	51
Internalizing Problems	48	47	54
Anxious/Depressed	66	50	50
Withdrawn/Depressed	64	50	58
Somatic Complaints	54	51	57
Non-internalizing & Externalizing problems			
Social Problems	55	61	55
Thought Problems	51	50	50
Attention Problems	53	50	50
Total Competence	37	54	42
Social	35	53	50
Activities	34	50	37

Note. Reliable Change Index (RCI) > 1.96 is considered significant. Significant RCIs are signified with an asterisk*.

Table 2
Pre, Post- and Follow-up Assessments of Factors Interfering with Sport Performance

Scale	Pre-Intervention	Post-Intervention	1-Month Follow Up	Post-Intervention Reliable Change Index	1-Month Follow Up Reliable Change Index
SIC Training					
Total	111	77	63		
Thoughts and Stress	5.50	2.67	2.00	6.30**	7.78**
Academic	3.00	1.67	2.67	1.90	0.48
Injury	2.33	2.00	1.33	0.32	0.97
Team Relationships	1.00	1.00	1.50	0.00	0.69
SIC Competition					
Total	126	82	64		
Thoughts and Stress	5.38	2.88	3.62	6.44**	4.60**
Academic and Adjustment	2.33	1.33	1.33	1.60	1.60
Motivation	1.25	1.50	1.25	0.48	0.00
Overly Confident/Critical	2.00	2.00	2.50	0.00	0.65
Injury	5.50	2.50	2.00	7.02**	6.14**
Pain	2.00	1.50	1.50	0.75	0.75
SIC Outside of Sport					
Total	111	83	59		
Yes Responses to Seeing a Professional	-Difficulty thinking positively after negative thoughts have occurred. -Overly concerned or worry too much about what others think about my performance -Hard to recover mentally once errors are made -Inability to motivate or push myself -Feeling stressed out -Worrisome thoughts about past injuries -Feeling depressed Severe anxiety, panic attacks, obsessive thoughts, doing seamless behavior repeatedly -Difficulty maintaining weight at an acceptable level to me or others				
SARI Teammates					
Relationships and Support	4.17	2.17	1.33		
General Pressure	2.50	1.75	1.75		
Team Playing and Competitiveness	4.00	4.00	2.50		

Relationships	3.75	1.00	1.00
Pressure to drink& interfere during competition	2.50	2.00	1.50
Total	63	36	27
SARI Family			
Poor Relationship and Lack of Support	1.80	1.00	1.00
General Pressure	3.00	1.50	1.50
Pressure to Quit or Continue Unsafely	1.33	1.00	1.00
Comments and Negative Attitude	3.00	2.50	2.50
Total	38	25	23
SARI Coaches			
Relationships and support	2.00	1.33	1.33
Teamwork and Safety	1.00	1.00	1.00
Involvement	2.00	1.75	2.50
Experiencing Demands	4.33	2.00	2.00
Total	42	38	33
SARI Peers			
Poor Relationship and Lack of Support	3.00	1.43	1.00
Use of Recreational and Performance-enhancing Substances	1.00	1.00	1.00
Total	26	13	10
Overall Happiness with Family, Coaches, Teammates and Peers			
Family	90%	100%	100%
Coaches	80%	100%	100%
Teammates	80%	80%	80%
Peers	90%	100%	90%

Note. Reliable Change Index (RCI) > 1.96 is considered significant. Significant RCIs are signified with an asterisk*.



Practice Update: Sport as an Emerging Area of Social Work Practice: New Playmakers in the Athletic Arena

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Sport has been recognized as a setting for social work practice for decades, with social workers practicing in diverse sport systems, from community recreation to professional sport. However, as an emerging area of practice, little is known about these social workers. The current study aims to understand how social workers who work in sport understand their own role in this area of practice. Fifteen social workers – who had on average 12.7 years of experience and were employed in a variety of sport systems and settings – participated in individual semi-structured interviews. Thematic analysis revealed that although social workers viewed themselves as

distinct from other service professionals, their sense of a professional identity was still evolving. Additionally, findings indicate that other social workers and sports professionals had a general lack of understanding about their role(s). Ultimately, there is a need to expand upon research informing formalized social work education.

Keywords: social work, sport, athletics, sport social work, social work practice

As a social service profession, social workers aim to help maintain the basic human needs of all people – especially individuals, groups, and populations that are systemically oppressed within society – by upholding the profession’s values and ethics. In turn, sport has been recognized as a setting for social work practice, dating back to the Jane Addams and the Hull House (Reynolds, 2017). More recently, several organizations have begun to operate within the intersection of social work and sport. For instance, The Ohio State University’s College of Social Work and Department of Athletics created the LiFEsports Initiative in 2009, which is nationally recognized as a premier model for sport-based positive youth development (Anderson-Butcher et al., 2014; Anderson-Butcher et al., 2021). The Social Work and Sport Association at the University of Michigan’s School of Social Work hosted, *Beyond the Playing Field: The Social Impact of Sport*, the first social work and sport conference in 2013 (Newman et al., 2016). In 2017, the Alliance of Social Workers in Sport (ASWIS) became a 501(c)(3) organization and now hosts the annual *Social Work in Sports Symposium* (aswis.org). Several universities, such as the University of New Hampshire (among others), also have begun offering specialized “sport social work” courses (Newman, 2022).

Social workers are currently practicing in a variety of sport systems and settings, from youth to professional sports. However, despite this long-standing history of ‘social workers in sport’ (Lawson & Anderson-Butcher, 2000), little is known about who these social workers are and their unique contributions within sport. Further, the lines between social workers and other service providers (e.g., sport psychology) are often blurred (Beasley et al., 2021a; McHenry et al., 2021). The current study aims to understand how social workers who work in sport understand their own role in this emergent area of practice.

A Need for Social Workers in Sports

The knowledge and skills of social workers have been shown to be uniquely positioned to meet the call for holistic care in sport (Dean & Rowan, 2014). Using the code of ethics and professional values, Newman et al. (2019) proposed how social workers can leverage their education and training to support athletes, coaches, and entire sport systems. Similarly, Beasley et al. (2021b) explored the ways in which sport ‘fits’ as an area of specialized social work practice. These calls for social workers to provide services in sport has been driven by an increased understanding of athletes as a vulnerable population with unique challenges and risks.

Athletes, like all populations, have been found to experience issues with mental and behavioral health. Research has demonstrated that retired professional athletes experience higher rates of dementia and depression than the general population (Weir et al., 2009). Similarly, in addition to the sport specific pressures to perform, college athletes experience high levels of stress, depression, and anxiety, which in many cases surpass general population rates (Gavrilova & Donahue, 2018). Research also has indicated that youth athletes (ages 10-24) – because of

sport-specific factors (e.g., competition- and contact-levels) – are at risk for mental and behavioral health issues, such as aggressive and violent behaviors (Newman et al., 2021a). Due in part to additional sport-specific stressors, athletes of all ages may benefit from mental and behavioral healthcare and other social work services.

Moreover, there has been increased attention and dedication to promoting social justice throughout a variety of sport systems and settings through the use of *critical* positive youth development approaches (see Camiré et al., 2021). Athletes, coaches, and other sport stakeholders – at all levels – have been increasingly vocal and visible in promoting diversity, equity, and inclusion when advocating for social justice both within and outside of sport. For example, as a response to the changing sociopolitical culture, collegiate athletics has seen the revival of athlete activism as college student-athletes – particularly student-athletes of color – have begun to use their power and platforms to effect change on campus and throughout society (Mac Intosh et al., 2020). In alignment – guided by the National Association of Social Workers' (NASW, 2021) Code of Ethics – social workers share the commitment to promoting social justice and challenging social injustice.

An Emergent Area of Practice

Preliminary research has indicated that social workers provide a variety of roles across a diversity of sport systems and settings (Newman et al., 2021b). At the micro-level, social workers conduct biopsychosocial assessments for athletes at all levels, offer behavioral health support, and provide clinical and therapeutic services. At the mezzo-level, social workers educate athletes, families, coaches, and athletic administrators; develop and implement community-based programs; provide case management services, and foster stakeholder relationships, and coordinating systems of care. Further, at the macro-level, social workers act as advocates, social justice activists, and inform policy decisions. From a more general framework, social workers provide a range of services through three basic distinctions: (a) social workers who *use sport* as a social intervention to promote healthy development (e.g., youth development workers); (b) social workers who *work within sport systems/settings* to provide behavioral and mental health services (e.g., therapists); and (c) social workers who embody a *dual role* and use sport to promote healthy development through their work within sport systems/settings (e.g., sport coaches).

Several studies have been conducted related to the use of sport for youth development as a social work intervention (see Anderson-Butcher & Bates, 2021). For example, Newman and Anderson-Butcher (2021) explored how a community sport-based positive youth development program supported the development and transfer of life skills among youth recognized as being socially vulnerable (i.e., youth of color from economically disadvantaged areas). Designed to address the *Grand Challenge of Social Work* related to *Ensuring Healthy Development for All Youth*, the study highlighted programmatic factors (e.g., intentionally designed activities, behavioral reinforcement) and staff practice (e.g., framing, facilitating, and debriefing activities) that contributed to life skill development and transfer.

However, there has been much less research related to the roles of social workers who *work within sport systems/settings*, and there are no known studies exploring social workers with a *dual role*. One preliminary study by Newman et al. (2021b), which explored the diversity of roles and services that social workers provide when working in sport, did provide valuable insight. Findings revealed the unique values, knowledge, and skills social workers used when

practicing in sport. Social work values included the code of ethics that aimed to promote diversity and inclusion, whereas social work knowledge was related to holding a holistic, person-in-environment, and ecological systems perspectives of development. Further, findings highlighted the use of social work approaches, including a using person-centered approach and strengths-based approach when working with athletes and coaches. Even with this foundational understanding, Beasley et al. (2021b) cautioned that there is still need for additional training and educational opportunities to enhance competencies related to social work practice in sport.

Moreover, from a generalist perspective, psychology and counseling professionals have reported viewing social workers as being focused on case management, systemic issues of social justice, and social wellbeing, rather than providing the interpersonal, clinical, and/or therapy services offered by psychologists and counselors (Mellin et al., 2011). As a result, social workers within sport face challenges due to misconceptions about their profession (Beasley et al., 2021a). Such limited perceptions prompt the need for understanding the variety of diverse roles that social workers can fulfill, both in and out of sport. Differences aside, there is a general lack of understanding about what the social work profession is capable of offering. However, as outlined by Newman et al. (2019), social workers within sport not only share similar values with other service professions but are adept at working in interprofessional collaborations, while also being capable of providing unique contributes (e.g., ecological systems perspective of development, focus on holistic wellbeing, commitment to social justice, etc.).

There is much to be learned about the intersection of social work and sport as a unique area of practice. For example, there is a need to articulate the rationale for employing social workers in sport systems and settings, particularly when compared to other service providers. Additionally, as an emerging area of social work practice, how social workers view their own professional identity may provide insight into the current needs and future trajectory of this area of social work. Beginning to understand how other sport professionals may view social workers also may help to provide clarity when advocating for the unique skill set of social workers in sport systems and settings.

Method

Grounded in an interpretivist paradigm and social constructivist epistemology (Guba & Lincoln, 1994), the current study sought to explore the lived experiences of social work professionals who work within different sport systems and settings. Whereas interpretivism is concerned with context (e.g., culture, time, circumstance) and acknowledges that contexts interact dynamically leading to a variety of social realities; social constructivism emphasizes the influence of sociopolitical and sociocultural contexts when seeking to understand and construct knowledge. In alignment, the objective of the current study was to gain a holistic, yet in-depth understanding of the shared worldview of these social workers, rather than creating quantifiable dichotomies between specific social work jobs within sport.

Researchers' Positionalities

The researchers of the current study recognize that acknowledging their own lived experiences are crucial. The first author is a professor of social work with a graduate-level background in kinesiology and serves on a student-athlete mental health advisory board for a Division I athletic conference. The research team also included student researchers at various

points in their educational careers (i.e., baccalaureate, masters, doctoral students) from a range of academic disciplines, including social work, kinesiology, sport management, sport studies, and public health. Additionally, a senior scholar – with experience integrating Outdoor Behavioral Healthcare in social work research, policy, education, and practice – was engaged throughout the research process. This scholar provided critical insights into understanding nontraditional social work practices. Moreover, the research team was grounded in their lived experiences as former collegiate, high school, and youth sport participants; and several members of the team were currently serving as competitive sport coaches. Given their unique perspectives, the research team approached the current study with a transdisciplinary and applied perspective. However, recognizing the influence of their own lived experiences, the variety of methods were used to better ensure the trustworthiness of the data analysis.

Procedures

Study procedures were approved by the first author's Institutional Review Board for the Protection of Human Subjects in Research. Participants were recruited through the Alliance of Social Workers in Sports (ASWIS) email listserv. Registered as an official 501(c)(3) in 2017, ASWIS serves as the collective voice for social workers who use and/or work in sport. Currently, ASWIS hosts an annual symposium, contributes to the National Collegiate Athletic Association (NCAA) mental health resources, as well as maintains a list of telehealth providers that has been shared with the NCAA, the National Association for Intercollegiate Athletics (NAIA), and the United States Olympic & Paralympic Committee (USOPC).

A recruitment email was sent two weeks prior to the annual ASWIS symposium, and a follow-up email was sent at the beginning of the symposium. Interviews were conducted in a one-on-one format and occurred either in-person or via Zoom. A majority of the interviews were performed in-person at the annual ASWIS symposium. However, to engage participants who did not attend the symposium, interviews also were held via Zoom in the weeks leading up to and/or following the symposium. Each interview was approximately 60 minutes.

Participants

At the time of the study, there were nearly 150 members in ASWIS. As an invitation to participate in the current study, all active members were emailed a recruitment letter through the ASWIS listserv. To be included in the study, participants had to: (a) be at least a bachelor-level social worker; (b) identify professionally as a social worker; (c) currently work within a sport system or setting; and (d) use their social work education in sport. Interviews were done in-person at the annual ASWIS Symposium and via Zoom (within the same time period) and were audio recorded.

Fifteen social workers (10 women, 5 men) participated in the study (see Table 1). The self-identified race/ethnicity of participants was diverse: 7 who identified as Caucasian and/or White, 4 as Black and/or African American, 2 as Jewish, 1 as American-Asian, and 1 as Latinx. Participants ranged in age from 25 to 65 years old. All but two of the participants earned their Master of Social Work degree at the time of the interview. Additionally, eight participants earned their social work licensure, and four others were in the licensure process. These social workers

were employed in a spectrum of sport settings, including at the youth, collegiate, and professional levels. On average, participants had 12.7 years of social work practice experience.

Table 1.
Social Worker Demographics

Participant	Gender	Social Work Experience	Social Work Field (Self-Described)	Sport System / Setting
Chloe	Female	4 years	Sport Social Work	University Athletic Department
Aiden	Female	20 years	Athletic Social Work	Private Practice
Kassandra	Female	13 years	Clinical Social Work	University Sports Medicine
Linda	Female	1.5 years	Clinical Social Work	University Athletic Department
Nadine	Female	18 years	Clinical Social Work	Private Practice
Nathan	Male	6.5 years	Interpersonal Practice	Professional Sport
Luna	Female	10 years	Field Education	Academia
Jacob	Male	26 years	Clinical Social Work	University Counseling Center
Sadie	Female	5 years	Sport Social Work	University Athletics
Kate	Female	4 years	Athletics	University Athletics
Jonah	Male	9 years	Interpersonal Practice	Athletics Counseling
Travis	Male	2 years	Clinical Social Work	University Counseling
Sidney	Female	21 years	Sports Social Work	Competitive Youth Sport Club
Ben	Male	44 years	Community Organization	Higher Education
Veronica	Female	7 years	Sports Social Work	Professional Sport

Interview Guide

Data were collected through semi-structured interviews. Interview guides consisted of 10 main questions designed to explore how social workers understand their role within sport. Example questions included: What is your role as a social worker in sport? Within a sport setting, what challenges (if any) have you experienced as a social worker? Please explain any opportunities you have had to collaborate with other professionals in sport. Probing questions were paired with main questions and were used to facilitate deeper, more nuanced reflection. For example, after the main question “How do you use your social work background in sport?” participants may have been asked “How do you use your social work training and education?” and “To what extent do social work ethics and values play a part in your role within sport?” Additionally, a series of demographic questions related to their social work education and employment were asked, including: What is the work setting of your current place of employment? What best describes your primary field of social work?

Data Analysis and Trustworthiness

Interviews were transcribed verbatim and reread to verify their accuracy. The software, NVivo 12, was used to manage transcriptions and organize the interview data. An inductive thematic analysis, as outlined by Braun and Clarke (2006). The lead researcher of the project (i.e., first author) led the data collection and data analysis processes.

First, the researcher became immersed in the data by reading the transcripts and listening to the audio recordings. Initial codes were inductively constructed, representing both semantic and latent content. Codes were inductively organized in broad categories by collating related data. Within each of the categories, unique themes and subthemes were inductively developed. Themes were reviewed and revised to ensure their uniqueness and were given a specific label and definition. Finally, findings were illustrated using a thick description and vivid quotes to describe the essence of each theme and subtheme.

Multiple strategies were used to enhance the study’s trustworthiness (Lincoln & Guba, 1986). Prior to conducting interviews, as a way to identify any assumptions and/or implicit biases related to the research, the interviewer engaged in a series of bracketing interviews with other members of the research team. During data collection, the interviewer kept a notebook as a way to reflect on and process the interviews, as well as make note of any particularly relevant information that may inform the future interviews. Throughout the data analysis, peer debriefing among the entire research team was used to ensure the clarity and validity of the initial coding schema and relevance of themes. Following analysis, member checking was conducted with one study participant to help clarify and verify the description of the themes.

Results and Discussion

The results are presented in three sections (see Table 2). The first section provides an understanding of social workers who work in sport settings. The second section discusses the perceived perceptions that others hold of social workers who work within sport. Finally, future needs of social workers are highlighted. Pseudonyms were assigned to protect participants’ identities while honoring their unique lived experiences.

Table 2.

Understanding Social Workers in Sport: A Summary of Major Themes and Subthemes

Category	Theme	Subtheme
Understanding Social Workers in Sport	The Need for Social Workers	Self-Observed Need
		Growing Area of Social Work Practice
	Social Work is Transferrable	Employment Specifications
		Similar Population Needs
		Transferability of Knowledge and Skills
		Different than Sport Psychology Professionals
Professional Identity	Lack of Clear and Consistent Identity	
Perceptions of Social Workers in Sport	Perceptions of Other Social Workers	Positive Perceptions and Intrigue
		Resentment and Suspicion
	Perceptions of Sport Professionals	Positive Perceptions of Social Workers
		Lack of Understanding
Future Needs of Social Workers in Sport	Research and Literature	
	Education and Training	
	Need to Professionalize	

Understanding Social Workers in Sport Settings

Participants discussed the emerging need for social workers in a diversity of sport systems and settings, as well as explained the transferable nature of the profession. However, participants demonstrated that their own professional identity within sport is not clearly defined.

The Need for Social Workers

The need for social workers in sport was highlighted by several unique subthemes, including a self-observed need for social workers within sport, sport as a growing area of social work practice, and their ability to meet employment specification.

Self-Observed Need. Participants recognized the need for social workers through their own lived experiences as an athlete, coach, and/or parent of an athlete. Luna explained her motivation for working in youth sport through her perspective as a parent observing how coaches can impact a young athlete:

That's the final thing that prompted [working in sport] because I've seen it as a player, I've seen it as a coach, and I've seen it as an educator. But as a parent and watching a youth...one of the biggest things is, you realize how much impact a youth coach has on an individual, and when it's negative, how drastically that can change the trajectory of a student... I think that's been the biggest catalyst for wanting to dive into this.

Other participants discussed recognizing the need for social workers within sport from their previous experiences working and engaging with athletes. For instance, Ben explained:

[Some] athletes come from deprived environments where they didn't have everything they needed emotionally, financially, or educationally. When they get to college or the pros, everyone wants a piece of them...and they're not really equipped. We want to make sure they have the life skills to negotiate and communicate.

Although each participant had their own unique path to their work within sport, each expressed recognizing the need for and value of their profession within sport from lived experiences.

Growing Area of Social Work. Participants emphasized how working within sport systems and settings is a growing area of social work. For example, Chloe described her specific role within collegiate athletics administration, "I haven't seen anything like this in the country... This first year is really learning where the gaps are, and then filling them in and creating a plan to do so. I wear a lot of different hats here." Nick, who works in tandem with a professional sport league, added, "We're not built yet. And it's something like the field of social work is not built so robust that the opportunities are plentiful, because they're not." However, Nick noted the progress that has been made, "But now in comparison to 2013 when I was coming out of grad school, the landscape is totally different." Several participants also offered insight regarding getting others to buy-in to the idea of employing social workers in sport systems and settings. As Ben, who coordinates social work field placements, explained:

I think it's really growing. At first, I think people were like, 'Sports are great. We like football.' But what I did is, I would tell them why a social worker could be very important and [how they] use strengths-based social work approaches.

Employment Specifications. Many participants explained that they were hired for their current position in sport because of their social work background. Chloe described her job hiring process within collegiate athletics, "I was absolutely hired because I was a social worker. That was a big thing that they made known during the [hiring] process." She added:

They were looking for somebody who had the cultural competence around how to manage different relationships, how to understand therapy, how to understand the whole person and work with systems and also policy... Our sports psychologist really wanted to have a social worker come in and manage all the other things that were going on here.

Kassandra similarly explained, "I think that I knew that those [social work] skills were important in the work that I was doing, but I was asked about them during the interview process of interviewing for the job at the university."

However, as Veronica – who works in professional sport – explained, "We're still sort of welcoming social work to the table. There's been a lot of leg work to really have people

understand what it is that we do and that we can do, and to really sort of revere our skill set.” Ultimately, new job opportunities continue to arise as sport organizations and programs continue to understand the importance of holistic wellbeing, mental health, and social justice.

Social Work is Transferable

Participants shared that one of the key strengths of a social work education, is that the profession is as versatile as it is diverse. Specifically, participants explained how they are equipped to work with athletes, coaches, and other sport stakeholders because of similarities to other populations they have served and the transferability of their knowledge and skillset.

Similar Population Needs. The social workers who were interviewed reflected on the parallels of their previous social work experiences working with other vulnerable populations. Kassandra explained the similarities of her work as a school social worker and her job collegiate athletes, “The things that I do now are things that I used when I was working in an alternative school setting because there were students with really high emotional and mental health needs.” Kassandra went on to say, “although the performance is different than the behavior that I dealt with, it’s still a high level of anxiety and it’s still a really tender tipping point.” Linda made a similar comparison, reflecting on her internship experiences during her social work education:

In college athletic departments, [student-athletes] don’t have a lot of agency, they don’t have a lot of control. There are a lot of different entities controlling their schedule, what classes they take, what meals they take, what their financial aid looks like. So, it’s a lot of people that don’t have a lot of power... They’re much more privileged obviously, and they have so much more at their disposal, but they also are so limited.

However, participants acknowledged that many of the athletes that they work with were dealing and coping with a variety of mental and behavioral health issues, as well as oppressive forces that perpetuate social inequities. Aiden described her experiences helping to create a system of care for a young female diver, “Turned out the girl in diving was starting to exhibit symptoms of an eating disorder. It’s really common amongst women divers, and so they have their own perspective of treatment and coordination of care.” Jacob added, “The campus that I have worked on, half of the black men on the entire undergraduate population are in the athletic program;” however, the system is “not responsive to the psychological health and wellness needs of black students.” Although the system and settings may differ, many populations have similar intersectional needs and are faced with social vulnerabilities because of systemic inequities, which helps to highlight the value of social justice education received by social workers.

Transferability of Knowledge and Skills. Participants talked about the transferability of their knowledge and skills gained from their social work education. Regardless of their role within sport, their education provided a foundation to serve those with diverse needs. Sadie, who is a collegiate sport coach and operates a consulting business that works with youth athletes and teams, discussed this transferability:

I’ve been in a few different roles... I’ve had a few different experiences, like with an athletic department, with the startup company, and now I’m also back in an athletic department as the coach... I have different duties, or whatever it is, than I had at each of those positions, but I think I’m still using those same skills, those same social work skills... I’m still taking that perspective with everything that I’m doing in the profession.

Similarly, Sidney described her work as a youth sport coach, “Never in a million years thought that I was going to wind up using my clinical skills.” She went on, “When I came back down to coach, I mean it was like, ‘Oh my God, I am using textbook stuff.’ I mean, I literally went back to my textbooks and was like, ‘...this is Hepworth and Larson all over again.’”

Professional Identity

Throughout each interview, participants contemplated their professional identity. While there was not a clear consensus, several overarching characterizations were described.

Different than Sport Psychology Professionals. When describing the need for social workers in sport, participants compared and contrasted their perspectives and abilities with sport psychology professionals. Nadine, who owns her own private practice, described common reactions when working with new clients. She stated, “The assumption is always that I’m a sports psychologist, always...I look at it as an opportunity to educate.” She went on to, “I say that not only do you get the benefit of working on performance, if that is a need, but we also get to deal with things that are affecting you outside of your sport.” Similarly, Aiden added, “Psychologists have more of an individual perspective,” whereas social workers come from the “perspective of providing the best experience for that athlete and maintaining their mental and physical health within the entire system.” Cassandra also discussed the importance of holistic wellbeing when working with collegiate athletes:

The thing that I find most prevalent is just the idea that helping students connect the dots that their athletic performance impacts their academic performance, impacts their sleep cycle, impacts their relationship with their partner, impacts the way that they engage with academics. We just talk about how all those things are connected.

However, Linda explained, “I feel like we don’t really need to focus on the differences...It needs to be about collaboration and not like territorial and things like that.”

Lack of a Clear and Consistent Identity. Throughout the course of the interviews, there was a divergence related to the terminology used to describe their professional identity. For example, there was a cohort of participants who classified themselves as a *sport(s) social worker*. Nadine stated, “For me, I’m in private practice, so I market myself as a *sports social worker*... It’s who I am, it’s what I do. I love to say I practice sports social work!”

However, not everyone agreed with this term. Linda discussed this stance, “I think [the term] *sports social work* is bad...I think it has to be behavioral health. If you’re an athlete going to see a social worker, it means you have a problem... I feel like it has to be behavioral health.” Kate echoed this sentiment when discussing the term:

Not a *sport social worker*, because I do think it limits a lot of what we’re able to do, and it also doesn’t allow for as much sort of flexibility and diversity in the groups that we work with, and really, we’re just using social work skills with a different population.

Rather, some participants referred to themselves explicitly emphasizing their identity as a *social worker*. For example, Kate elaborated on her role as a *social worker* in sport:

I would say the best term we’ve been able to come up with, in my opinion, is *social worker in sport*... In my opinion, no different than being in a practice area such as children and youth, this is just a different field working with athletes, or we can even compare it to people with disabilities. There’re social workers that work with people with

disabilities...to me, is no different. We don't call those social workers, social worker that works with people with disabilities, they don't have a term or anything.

This overall lack of continuity was demonstrated by Sadie, who reflected, "It's so interesting, because what is the field of social work? Because I'm a social worker in coaching, does that make that then a social work position?" And as Sidney shared, "I have actually been saying now that I'm a coach *and* a social worker."

Perceptions of Social Workers in Sport

To gain a better initial understanding about the views of social workers in sport, participants were asked to reflect on how they believe others may perceive them and their role.

Perceptions of Other Social Workers

In general, participants believe that other social workers (not working in and/or unfamiliar with sport) viewed their work positively. However, several participants also shared that some of their social work peers seemed resentful and suspicious.

Positive Perceptions and Intrigue. Participants believed that their social work peers held positive perceptions of their unique work within sport. Moreover, they noted that other social workers were often intrigued and curious about their role. As Chloe put it, "I think people are intrigued by it...they're interested by it, and they want to learn more about it." Nick added: "When I tell them what I do, they're like, 'Oh, that's interesting. I didn't know the [professional sport] had social workers.' And they find it fascinating that there are actual social workers that are involved in sports. And I think it draws interest from them but not criticism per se. So, I think their more intrigued by it than, 'Why would they need that?' Jonah, who works in a college athletic department, responded, "Interesting question. I don't know...as long as you're serving the community, I feel like social workers are okay with that."

Resentment and Suspicion. Conversely, some participants did acknowledge that some of their social work colleagues seemed resentful. Travis, who was completing his graduate degree at the time, explained, "I think personally I'm perceived differently, cause when you think of vulnerable populations, you don't really think of athletes. It seems like they've been on the back burner. So, I think there's a little resentment." Kate talked about this sense of resentment further, "[It's] kind of polarizing...they're for it or completely shut it down." Jacob also raised the question about misperceptions that lead to negative perceptions. He posed the question, "When you go as a social worker to work in athletic systems, have you been or are you at-risk of being co-opted by that system and abandoning your social work stance? I think they're suspicious of athletic and competitive values." Thus, participants acknowledged an often-complicated relationship with their social work colleagues.

Perceptions of Sport Professionals

Similar to what they believed about their social work peers' perceptions, participants believed that their sport colleagues (e.g., other service providers, coaches, athletic administrators, etc.) held generally positive perceptions of social workers in sport. However, participants also

noted that other sport professionals had a general lack of understanding about social work education, knowledge, and skillset.

Positive Perceptions of Social Workers. When asked what she believed other sport professionals' perceptions were of social workers who work in sport, Chloe replied, "I would say actually in a more positive light than the general public." Cassandra shared an experience she had when interviewing for her job within collegiate athletics. She stated, "They asked me, 'What do I think the biggest challenge was about coming into this environment?' I said, 'My concern is being a social worker and not having a seat at the table already.'" She went on to add, "I was told the idea was like, 'People here don't care what your degree is. The kids don't care what your degree is. They just know that you're here to help them get better, and that's what matters.'"

Among coaches, Jacob noted a "generational change in coaching." He explained, "The younger generation of coaches are much more into how mental health resources can be useful. Not only for health but also for team development and for performance and just general well-being." Aiden, who runs a private practice, shared how coaches use her as a resource. She said: He brings me in to do kind of a parent training on how to be a positive sports parent... He loves that they're getting that perspective, not from him as a coach, but from someone who is considered an expert in the field.

From athletic administration to athletic coaches, sport stakeholders often consider social workers a positive resource who are capable of providing holistic support.

Lack of Understanding. Although other sport professionals are believed to view social workers in sport in a positive manner, there also was confusion. Travis explained:

I think it's intimidating for them, just on that aspect that when you think of social workers, a lot of the times people think of CPS [Child Protective Services] so they think that they associate we're going to take their kids, or a lot of people have had negative reactions with social workers through the child welfare system... Once we got past those barriers, I think they have a lot of respect for social workers once they actually find out that we're actually on their side of the team.

As Veronica explained, "I think that people want to have us involved, and I don't think people always know how to have us involved." Aiden added, "Typically I have to do a little bit of...education, around what roles a social worker fills, and how our education qualifies us to do what I do, and that tends to assuage a lot of anxiety." In the end, participants noted that they often have to advocate for themselves, just as they would the clients whom they serve.

Future Needs of Social Workers in Sport Settings

Although social workers are seeing greater opportunities to engage in a variety of sport systems and settings, continued evolution in this unique area of practice is necessary. As Jacob cautioned, "[Working in sport] is like working with the military, you have to become culturally competent." To be effective agents of change within the complex and dynamic systems of sport, the social workers who were interviewed highlighted several areas of need that would help others to become ethically responsible and culturally competent.

Research and Literature

Currently, there is a lack of research and literature related to the intersection of social work and sport. When discussing the current state of resources for social workers interested in working with and/or in sport, Ben added:

The first thing I looked for was a literature review and we couldn't find anything. We kept on looking and looking, but there really wasn't anything. When we had our first mini-conference...but there wasn't much. I would look for social work sport or social workers and sports and I found out that colleagues and other individuals were having to publish their work in other journals because it wasn't considered "sport social work." Nadine added, "Early on it wasn't a ton of books. There's still not a ton of books out... I kind of created some things [resources] myself." Travis, who is earning his graduate degree in social work, discussed how he prepared for his sport-based internship. He shared, "Research has been a huge component because, there's data, but a lot of the data seems a little outdated." He went on to explain, "So that's been the biggest thing for me right now because a lot of the research has been done on Caucasian males and females and not enough on African American males or females." As Aiden, who has been working in his area of practice for two decades, simply stated, "There's a poverty of resources."

Education and Training

Participants also believed that there is a need for specialized education and training for social workers who want to work in sport. Sadie talked about adding specific coursework within social work curriculum to prepare social workers, "There's social justice in sport...social justice applies to female athletics, minorities...mental health. There could be so many different ways that you could take that." Chloe discussed potential course topics:

I think it would be really cool to do a class on the unique challenges of student-athletes. So, transitioning out of sport is a big one... How to manage nutritionally, I think there's a whole thing that can be done about eating disorders and disordered eating. I think there's a huge piece that can be educated around when you get injured, that grief process. Also managing the relationships of student-athletes.

Additionally, participants talked about the need for specialized certifications that would help to showcase their expertise area of working in sport. Chloe stated, "I think it would be amazing if there was some sort of certification you could do with social work very similar to a sport psychologist [Certified Mental Performance Consultant certification]. That is such a gap that needs to be filled." To this point, Aiden discussed the ASWIS Certificate Program, which she recently concluded. While valuable, she did recognize several limitations:

I would say the downfall is, right now – and they're trying to work it out – the internship and access to internship. They require practicum hours, it's 300 hours to get your certificate. They don't quite have the network in place... That's severely lacking, and so it makes it difficult.

Although participants noted existing opportunities, current offerings are limited and there is a need – and market – for more specialized education and training.

Need to Professionalize

Participants articulated the need to further professionalize the work that occurs at the intersection of social work practice and sport. Similarly, the current theme reflects several previous subthemes related to having a *lack of a clear and consistent identity* and the *lack of understanding* about the services social workers are capable of providing. Sadie explained, “The field specifically for sport social workers isn’t even defined for other social workers... There’s almost a little bit of convincing that had to take place for those social workers who didn’t know about sports.” When discussing the steps necessary for professionalizing this area of practice, Chloe posited:

I think it would have to be the combination of both of NASW and [Council on Social Work Education] for it to be. I think it would be really hard if an outside group tried to create that. I think we need the people who create the social work degree to be on board with this. I think it would create a lot more legitimacy around it as well.

Aiden added, “I would love it if the NASW would actually spend more time than they already have focusing on it and highlighting it... I think it’d be really great if our national association would start advocating for the actual profession.” In the end, as Nadine reflected, “I think from when I first started, of course it’s much better. We’re in a better position, but we are nowhere where we need to be...our work is not even close to being done.”

Limitations and Areas for Future Research

Findings notwithstanding, several methodological limitations must be acknowledged. Grounded in interpretivism and social constructivism, the objective of the current exploratory study is not to generalize the study findings. Further, because an atheoretical lens was used to analyze the data, the study did not aim to examine distinctions and/or similarities among social workers related to their professional experiences, the sport systems and settings in which they work, or the populations whom they serve. However, as there is value in understanding the nuances of specific social work roles, future research should examine the unique positions social workers hold within sport (e.g., social work sport coaches) and with more in-depth analytical methods (e.g., multiple interviews, narrative analysis). Another limitation was only the ASWIS listserv was used to recruit participants. Research should expand past ASWIS membership and utilize more generalizable methods. Future research also should engage other sport stakeholders themselves, such as sport psychologists, athletic trainers, coaches, and athletic administrators.

Findings from the current study highlight a continuously growing area of social work practice. Moreover, building on previous research (Beasley et al., 2021b; Magier et al., 2021; Newman et al., 2021b), the current study provides additional evidence that there is a need for further educational opportunities for social workers who wish to work in sport. Because of the transferability of social work knowledge and skills, social workers are capable of servicing the diverse needs of athletes and other sport stakeholders throughout a variety of sport systems and settings. For instance, while the specific sport system and/or setting may differ, sport participants have many similar intersectional needs and are faced with social vulnerabilities because of systemic inequities and injustices. Additionally, among the social workers who were interviewed for the current study, they themselves as distinct from other service professionals; however, their sense of a unified professional identity was still evolving. Finally, the study concluded by exploring areas of need. In addition to expanding upon available research and literature,

participants expressed a need for formalized education (e.g., social work curricula) and training opportunities (e.g., specialized certifications). By meeting these needs, the social work profession may be able to facilitate the recognized need of professionalizing the role(s) of social workers in sport. In the end, more research needs to be conducted to explicitly examine how social workers can be meaningful playmakers within sport; however, findings from the current study can be used to initially inform future social workers who intend to pursue a career in sport, as well as social work educators considering educational training programs.

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Teaching Note - Sport Social Work: The Maize & Blueprint

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The systematic development of sport social work at the University of Michigan School of Social Work (UM-SSW) began in 2012 and continues to grow. The use of sport as an intervention taught in social work curricula and field education is becoming more available for students interested in training as sport social workers. This article will review and discuss key ways that social work and sport intersect. Utilizing a social justice lens, we will describe the innovative approaches used to create and build social work and sport field placements for master social work students at the University of Michigan and identify possible future directions for sport social work areas of training and practice.

Keywords: social work, social work education, field education, sport

In the article, “Jane Addams’ Forgotten Legacy: Recreation and Sport”, Reynolds (2017) detailed how Jane Addams recognized the potential benefits of integrating social work and sport, and her work as a sport social worker. As early as 1910, Addams concluded that participation in sport provided many protective factors, including an opportunity to enhance personal growth, facilitate relationship building and establish a positive direction for individuals, families, and the community. A variety of sports were offered at Hull House including many that were culturally important to immigrant populations. Through weekly competitive clubs for children and adults, organized sports were available regardless of any ability to pay-to-play. Furthermore, Addams created a youth sport social work certificate, and what may have been the first sport social work

field training program. Today, Addams' visionary work can be viewed through the lens of Diversity, Equity and Inclusion (DE&I), which is now integral to social work education and practice. The principles of DE&I were influential in building the UM-SSW sport social work program.

Like Addams, Nelson Mandela also recognized the power of sport as an intervention that could positively impact millions of lives. He used rugby, a sport loved by both Black and White South Africans, as one way to unite a racially divided country. The successful collaboration between Mandela and the elite, all White rugby team, resulted in major progress in uniting the population, and began the process for Black citizens to realize DE&I and access full participation in South African society. Mandela famously said:

Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand. Sport can create hope where once there was only despair. It is more powerful than governments in breaking down racial barriers. It laughs in the face of all types of discrimination. (Fraser, 2021)

The Intersection of Social Work Values and Ethics and Sport

As a profession based on values, ethics, knowledge and skills while using a holistic approach, social workers are uniquely positioned to provide counseling and support to athletes, coaches, families, and other sport staff. Social workers may also use their knowledge and skills to develop programs utilizing sport as an intervention to facilitate resilience, emotional well-being, and equity of access to sport programs. The ethical principles of the social work profession are based on the core values of service, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence, which are the cornerstones of the profession’s ethical standards (NASW, 2021). In their book *Sport Social Work: Promoting the functioning and well-being of college and professional athletes*, Moore and Gummelt (2018) described these six core values in relation to sport and coaching. We provide further examination of the intersection between the values, skills and ethics of social work and sport, and why sport social work should be an essential element of social work curriculum (see Table 1).

Table 1.
Intersection of social work values and sport

Social Work Value	Social Work Ethical Principles	Social Work Skills	Social Justice Skill Developed through Sport
Service	A social workers primary goal is to help people in need and to address social problems.	Social workers must see the bigger picture. Success is measured by what they do for others, including communities and society. The ability to effectively collaborate with others is essential.	Provides enhanced opportunities to engage and support marginalized individuals, groups and communities. Stresses the importance of teamwork and collaboration.

Social Justice	Social workers challenge social injustice.	Social workers need to be able to effectively function with uncertainty and discomfort. Social workers must persist in challenging social injustice at the micro, mezzo and macro levels.	Provides social workers the opportunity to address systemic injustice, develops resilience in the face of challenges and the importance of never giving up. Teaches how to respond to failure, learn from mistakes, and to function within discomfort/anxiety.
Dignity and Worth of the Person	Social workers respect the inherent dignity and worth of the person.	Social workers see the value and strengths in every person, every community.	Sport can provide access to everyone. Teaches how to value and respect what each member of the team is able to contribute. Recognizes that everyone’s contributions determine success. Teaches respect for opponents, referees, coaches, etc.
Importance of human relationships	Social Workers recognize the central importance of human relationships.	Social workers consider multiple perspectives, engage and build rapport with clients and communities. Social workers operate from a strengths-based perspective and must be willing to have difficult conversations. They see the value and importance of every person.	Sport is all about relationships, working together, and learning from and with people from diverse backgrounds. The best teams create a common goal, and learn to value and depend on each other. The best coaches build a team using a strengths-based approach and constructive feedback to enhance skills, and invest in their players.
Integrity	Social workers behave in a trustworthy manner.	Social workers often have the lives of others in their hands and must act with integrity, follow through, and maintain appropriate boundaries to protect their clients.	Teaches integrity, the importance of fair play, and to play within the rules. Teaches the importance of DE&I. Emphasizes team/community as the “noble cause.”
Competence	Social Workers practice within their areas of competence and develop and enhance their professional expertise.	Social workers must continually self-reflect and think critically. They must be integrative and lifelong learners.	Teaches us to always work to improve even when we have success. It teaches us to adapt, adjust and reflect. It involves integrative and lifelong

learning.

Social justice is the lens through which all aspects of social work is conducted. Social workers are taught to consistently challenge social injustice at micro, mezzo, and macro levels. At the community level, this includes working to create equal access and inclusion in organized sports in geographic areas where programs and resources may not exist. In order to be effective, social workers need to build skills in resiliency, persistence, and the ability to function effectively in the face of opposition and discomfort. The opportunity for social work influence in sport can be seen in what we learn from sports. This includes building skills in resiliency to face challenges even when those challenges seem insurmountable. Like social work, sports teaches us how to respond to failure, learn from mistakes, and perform in uncomfortable situations. Sport gives social workers the opportunity to both build their own skills to challenge social injustice, and also provides a mechanism to enter communities and build these same skills in youth and young adults. Sport is a logical connection where the skill sets, mindsets, and heart sets of social workers can influence players, coaches, families, and communities to work toward enhancing wellness, building unity and trust, and producing socially just change.

Sport Social Work Program Development: The Blueprint

The sport social work initiative at the UM-SSW was influenced by the work of Jane Addams and the work and words of Nelson Mandela. Through a series of discussions, faculty teachers of field education (field faculty) identified how their work intersected seamlessly with social work values, ethics, knowledge and skills, and offered an opportunity to develop sport social work as a deliberate intervention to be used with individuals, teams, families, and the community. Field faculty concluded that in order to bring sport social work training to the classroom and internships, integration of the Council on Social Work Education (CSWE) competencies would be essential. While all CSWE competencies need to be addressed in a sport social work internship and were included in program development, the following competencies were emphasized in developing the blueprint. These included: Advance Human Rights and Social and Economic Justice (#3), Assessment of Individuals, Families, Groups, Organizations, and Communities (#7), Evaluate Practice With Individuals, Families, Groups, Organizations and Communities (#9), Engage in Practice-Informed Research and Research-Informed Practice (#4), Intervene with individuals, Families, Groups, Organizations and Communities (#8), Engagement With Individuals, Families, and Communities (#6). Integration of Social Work Values and Ethics as noted above, were also at the core of blueprint, course and internship development.

The **SOCIAL JUSTICE** inspiration for the UM-SSW sport social work program came from the work of Jane Addams and Nelson Mandela and became a cornerstone in developing sport social work education, including internships. In determining agencies for potential internship sites, the following criteria was emphasized: A commitment to teaching participants about the importance of Diversity, Equity and Inclusion (DE&I) through their sport programs; having the capacity to provide appropriate social work supervision; and having available learning activities to help students develop competency-based, sport related knowledge, skills, values and attitudes to meet CSWE and UM-SSW educational requirements.

Initial **ASSESSMENT** of student interest in sport social work consisted of sending a survey email to 900 UM-SSW students. Field faculty received 120 responses (13.3% of the student body) expressed interest in sport social work. Follow up meetings with field faculty and students were held to discuss opportunities for sport social work training. Students formed a

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faculty study group to assess overall faculty interest. Discussions with the study group served as an opportunity to educate senior faculty about the potential benefits and relevance of sport social work. As a result, faculty and students determined using sport as an intervention could be incorporated into the curriculum and meet CSWE, and UM-SSW educational requirements.

EVALUATION for the sport social work program development included field faculty and students reviewing the results of the assessment of email responses and the feedback from the student/faculty study group. With 120 students interested in sport social work and with a key faculty suggestion that students plan a sport social work educational event, students formed the Social Work and Sport Association (SWAS) and developed the first educational sport social work workshop. Feedback from those attending the event was positive, indicating interest in additional educational programs.

The initial social work and sport educational event was the first **INTERVENTION** and included students and field faculty assembling a panel of experts in the area using sport as an intervention. Panelists included SSW faculty, a psychology professor, SSW field faculty, a community sport social work practitioner, and a student who had a background in college-level and professional sports. Based on the positive participant feedback from this two-hour panel presentation, the SWAS group developed a national, half-day conference, with presenters from four universities around the country. Participant feedback was positive and field faculty focused on ways to incorporate sport social work into the UM-SSW curriculum. Field faculty created a proposal, which was accepted by UM-SSW administration, to develop a two-day, sport social work course within the SSW Continuing Education Department for practicing social workers. The course was then modified to create a one-credit introductory sport social work class for incoming UM-SSW students. Both courses focused on how sport could be integrated into social work and lead to careers in this emerging practice area. Furthermore, the continuing education course provided an opportunity to promote the creation of sport social work field placements to practicing social work professionals who could serve as field instructors. The UM-SSW has continued to support sport social work by offering in-person, synchronous and asynchronous presentations and outreach to agencies in order to develop and maintain sport social work field placements.

Several evidenced-based **RESEARCH** studies, addressing both protective and risk factors associated with participation in organized sports, were important to program development. A comprehensive report from the LifeSport program at The Ohio State University, examined protective aspects of youth sport participation. The Aspen Institute *Project Play* has provided data and information on youth participation in sports since 2013 (Aspen Institute, Project Play, 2013). Finally, from a more recent presentation titled, “Foundation of Sport Social Work”, the presenters asserted that athletes can be considered a vulnerable population, and subject to increased risk of developing behavioral and other mental health issues as a result of sport participation (Driesenga et al., 2021). It is important research in the area of sport social work continues, expanding the body of knowledge and enhancing education in the classroom and internships.

ENGAGEMENT was a key component at every stage of development of the practice area. The sport social work development team applied social work competencies of assessment, intervention and evaluation creating a feedback and engagement loop for field faculty and students. Engagement with other UM-SSW faculty, the Office of Student Services, and administrative leaders was essential to attain full integration of sport social work into the UM-SSW curriculum.

With the blueprint established and with sport recognized within the UM-SSW as a viable intervention, field faculty intensified outreach to agencies and programs that were possible internship sites. Field faculty used the standard UM-SSW agency internship approval process in developing sport social work internships.

Challenges

Many challenges emerged during the process of developing sport social work as a practice area. First, despite considerable anecdotal evidence, there was limited empirical literature available to support the efficacy of sport as an intervention in social work practice, nor was there evidence that students would want to train using sport as an intervention. Recognizing the limited availability of practicum sites to train students in sport social work was another challenge. Additionally, the student-led Social Work and Sport Association (SWAS) struggled to raise funds to cover costs associated with developing the first national conference on sport social work. Finally, accreditation standards requiring social work interns to receive supervision from licensed social workers (LMSW) hampered collaborations between the UM-SSW and sport organizations without an LMSW on staff.

From a social justice perspective, we also recognized that significant barriers exist with regard to access to sport participation. Access to facilities, playing fields, sports leagues, coaching, and competition are heavily influenced by systemic racism and other socioeconomic factors. In a nutshell, participating in sports in today's world is expensive and time consuming. Creating equitable access to opportunity for participation must be a critical focus of sport social workers to optimally use sport as an intervention.

Overall, field faculty applied the processes of assessment, intervention and evaluation as a way to address challenges and develop plans to problem solve. In this way, challenges created opportunity and had a positive effect on program development. We believe it is critical for champions of sport social work to continue efforts to collaborate with students, faculty, administrators, researchers, and community partners to develop internship opportunities for social work student training. Through these efforts, sport social work has the potential to further develop integrative practice approaches that become essential components of social work curriculum.

Future Directions

Sport Social Work offers a timely and unique approach to address wellbeing among youth, adults, and older adults, as well as opportunities for applying strength-based interventions in coaching and for parents of athletes. As the field of sport social work continues to evolve, social workers and social work students will be able to expand the reach and scope of their practice to include settings and challenges that are unique to coaches, parents, and athletes. Furthermore, social workers can use sports as an avenue to address inequity and social injustices by building community partnerships and engaging with underserved, marginalized, oppressed communities thereby leveling the playing field in terms of accessing organized sport opportunities. This may include outreach and collaboration with agencies working with youth; seniors; collegiate; and professional athletic teams; sports-focused training camps; community centers; adventure therapy; and leadership training with coaches and athletic departments.

In moving in this direction, it is important to grow community partnerships which allows social workers to increase their engagement in sport program development and mental health support for coaches and athletes. This includes working in marginalized communities to address stigma associated with mental health problems and traditional therapeutic approaches, as well as to restore interest and create sport opportunities. Furthermore, it is important to integrate sport social work into the SSW curriculum by developing field placement internships and additional sport social work courses to support students in developing advanced competency in this practice area. Social work students must also develop collaborative practice skills needed to effectively work with coaches, parents, and communities to support their efforts to assist athletes in managing stress levels, addressing grief and loss after injuries, and transitioning at the end of their careers.

Schools of social work interested in developing sport social work programs may conduct assessments of student and faculty interest and the extent to which their local communities can offer sport and recreational programs for youth, adults and seniors as well as those that can offer student internships. Furthermore, at agencies not having appropriate MSW supervision, it is essential that SSW field faculty and agency staff identify a MSW to be part of the required weekly supervision. Additionally, SSW programs can support students in developing student-led sport social work organizations.

Since the inception of the sport social work practice area in 2012, many graduates have gone on to work as sport social workers from urban to rural areas and from college campuses to community centers. It is hoped that the synergistic process among faculty, students and community agencies that led to the development of the UM-SSW sport social work program can be replicated at other schools of social work, adding to the growing body of knowledge of sport social work and in the tradition of Jane Addams and Nelson Mandela.

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Book Review - Sport Social Work: Promoting the Functioning and Well-being of College and Professional Athletes

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Pioneers of the Sport Social Work movement, Dr. Matt Moore and Dr. Ginger Gummelt, have once again taken their place as front runners in the field by providing a textbook for use in social work education and academic development. As a former NCAA athlete, current professor and collegiate tennis coach, Dr. Matt Moore's background influences his research, which focuses on the macro perspective of sport social work policy, research, and practice. When this textbook was written, Dr. Matt Moore was serving as President of the Alliance of Social Workers in Sports (ASWIS). While serving as Secretary for ASWIS, Dr. Ginger Gummelt brings expertise in clinical and direct practice with athletes. A former NCAA gymnast, gymnastics coach, judge, and parent of middle and high school athletes, Dr. Gummelt currently teaches social work direct practice and uses her various perspectives to explain how to best engage and assess athletes in a clinical setting.

Keywords: sport social work, social work education, textbook development

The overall theme and intention of the textbook is to raise awareness of athletes' needs and establish how social workers can enhance the well-being and effective functioning of athletes. This textbook is intended to grow the sport social work movement as this specialty gains momentum and attention from mainstream social workers. The authors have collected an abundance of references from a variety of professional journals including Exercise Science, Psychiatry, Sports Medicine, Sports Management, Athletic Training, Social Work Education, Sociology of Sport, College Counseling, Sports Psychology, and many others. By compiling empirically based research from multiple disciplines, the authors show respect to the professions that work in partnership with sport social workers while also demonstrating the uniqueness and necessity for sport social workers on the collaborative team for athletes.

Content Outline

The Sport Social Work textbook is divided into seven chapters and provides a foundation for social workers from micro, mezzo, and macro perspectives. The content is a must read for every social worker who plans to work with athletes at any level. With Dr. Matt Moore and Dr. Ginger Gummelt serving as co-authors, Dr. Moore lays the foundation and presents the mezzo and macro perspectives while Dr. Gummelt tackles the micro perspective.

The book begins with a definition of sport social work and explores how sport social work relates closely with the National Association of Social Workers (NASW) Code of Ethics and Council on Social Work Education (CSWE) competencies. This is followed by a chapter on interprofessional collaboration. This chapter outlines the challenges of interprofessional communication along with opportunities for sport social workers to collaborate with sport and exercise psychologists, mental health professionals, athletic trainers, administrators, coaches, and others. In chapter three, Dr. Moore covers the challenge of understanding the health and well-being of athletes. Additionally, Dr. Moore defines athlete identity and explores behavioral and psychosocial health risks athletes may face including some of the causes of those risks. In chapter four, Dr. Moore provides a theoretical framework for sport social work. Using an ecological framework, Dr. Moore discusses how social workers can take an individualized approach to working with athletes and provides a sample review. He also highlights systems theory, empowerment, social learning theory, resiliency, and human development considerations for sport social workers. The chapter wraps up with the process of change model and includes a figure of the transtheoretical model of change with athletes as well as how to apply theory to the process of change.

In chapters five and six, Dr. Ginger Gummelt discusses direct practice and clinical interventions with athletes. Dr. Gummelt lays the foundation for engagement and building relationships, which she categorizes into respect, empathy, and genuineness. She follows with assessment and planning, recommending a systems-ecological framework for assessment while highlighting the importance of utilizing culturally competent assessments. She finishes chapter five with a section on the change-oriented process which outlines the importance of a collaborative goal setting process that includes active athlete participation. In chapter six, Dr. Gummelt intentionally highlights some of the most critical issues that athletes face and helps to identify several ways social workers can intervene. Specifically, Dr. Gummelt looks at injuries, sexual assault, eating disorders, substance use and abuse, retirement, and mental health. While the list is not all-encompassing, it is; however, a strong prelude for some of the issues that athletes commonly encounter.

Dr. Moore returns for chapter seven to address sport social work policy. Social work policy plays a crucial role in the lives of athletes as each sport has its own governing body. In this chapter, he outlines the importance of establishing a policy platform for sport social work and provides several examples. He further examines existing organizational policies of sports entities, the social work profession, governmental policies, laws, and recommendations. The chapter concludes with ways social workers can influence sport policy.

The content from both authors has multiple practical uses for sport social workers and instructors. Social workers in college athletics will be able to apply many of the theories and practices outlined in this textbook with their athletes. Athletic departments and professional leagues employ staff who have developed perceptions of athletes based on their personal

experiences and education; however, this textbook provides a framework for social workers and other professionals to approach and serve athletes in an effective, holistic way. Dr. Gummelt's section is particularly important for those interested in direct practice with athletes. The textbook reinforces the unique needs of the athlete population and the attributes, skills, and knowledge one must consider when supporting athletes and the systems they operate within.

Evaluation

From an instructor's standpoint, the textbook is user-friendly and very effective. The content is easily digestible and the chapters can be read in a relatively short span of time. Along with the text itself, the authors have developed quizzes and tests through Cognella that can be used to measure student learning. Some of the most practical aspects of the book are the activities, figures, and tables in each chapter. The activities strategically engage students and encourages them to practice the material they are learning.

As a result of the textbook's design and applicability, instructors have chosen this as the primary book and structure for several accredited elective courses in sport social work courses at both the MSW and BSW level. Because many social work students are unaware of the specialty of sport social work it is beneficial that the text starts with the history of Jane Addams and her emphasis on free play and vigorous activity on playgrounds or gymnasiums during the 1900s. This allows readers to understand the correlation of sport social work to the origination of the social work profession. Throughout the textbook, Drs. Moore and Gummelt use social work ethics, values, and theories, and provide an in-depth analysis of their application to serving athletes. The text is organized in a way that allows the reader to understand why athletes are a vulnerable population, barriers they encounter when seeking help, as well as the role of athlete identity on development and perception of self. The authors present sport social work with a lens that explores how social workers can meet the needs, identify strengths, and empower athletes to achieve overall well-being and optimal functioning.

As for the implementation of the textbook, the discussions, activities, assignments, and case studies, are very useful and applicable in the classroom. The discussion topics are relevant and facilitate conversations about the topic of each chapter. The case studies give imagery and application to clinical social work practices and theories for addressing the specific risks and behaviors related to athletes. By including policy analysis, implementation, and development, the readers explore how formal rules, regulatory powers, and governing bodies influence the policies that affect the rights and justice of athletes. The textbook encompasses micro, mezzo and macro implications for sport social work, which is very useful for gaining the perspective of the whole athlete and athlete-in-environment.

Implications for Future Editions

One opportunity for improvement is the length of the book. While this is a great start, the textbook does not provide enough content for a 14-16-week semester. In order to extend the course, instructors will need to research and develop additional material based on the foundation laid by the authors. In-depth sections about youth and high school sports, collegiate athletics, and professional sports, and how certain aspects of each level have implications for sport social workers could be added to strengthen content and understanding. Expanding the career opportunities section of the epilogue is suggested to explain how each level of sport has different

employability considerations. In the undergraduate class, even though only a handful of students expressed a true interest in sport social work, the text was used to provide perspective and explain how social workers view athletes as a vulnerable population.

For the first edition of *Sport Social Work*, the authors primarily focused on collegiate and professional athletes. The authors also maintained a generalist approach to make the information more understandable, relatable, and less intimidating for curious students and those interested in learning more about sport social work. However, the authors do not specifically address the risks, behaviors and specific culture and environment surrounding youth sports. Further implications could include the role of parental involvement in youth development in sports and the transition from high school to collegiate sports. Also, a section could be added about researching sport across the lifespan to the role of recreational sport with adults and the elderly. Other special topics such as gender equality, LGBTQ athletes, race equality, cultural competency, athletes with disabilities, and the coach-athlete relationship and the influence of abusive coaching styles versus forming healthy relationships within teams and athletic departments could be included. Broadening the social work lens to international sport to promote sport for development of peace and social justice, especially in areas of conflict in the world, would also be beneficial for discussion. Additions of the aforementioned topics are recommended for future editions of the textbook.



Beyond Xs and Os: The Role of an Athletic Trainer in Supporting Disordered Eating in College Athletes

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One subset of the college population that is at-risk of developing an eating disorder or signs of disordered eating are college athletes. College athletes face both internal and external pressures to remain fit. Of particular importance for this study is the role of the athletic trainer (ATs) in helping college athletes with a diagnosed eating disorder or patterns of disordered eating. This study followed a logical, systematic, and multiphase phenomenological approach to capturing reflections of athletic trainers' (n = 7) subjective experiences related to managing student-athletes who have a diagnosed eating disorder. Using an open-ended interview guide, athletic trainers participated in an intensive interview with one of the researchers. Researchers categorized statements into one of three themes: (1) AT and college athlete relationship, (2) barriers to care, and (3) opportunities for improvement. These results provide insight concerning the intersection of ATs and their role in addressing eating disorders with college athletes. ATs play an important role in providing both support to aid physical recovery from ailments and injuries and also serve as a source of psychosocial referral and support.

Keywords: eating disorders, sport social work, athletic training, qualitative research

Eating disorders are serious and sometimes fatal illnesses that cause severe disturbances to a person's eating behaviors (National Institute of Mental Health, NIMH, 2017). There are a variety of different types of eating disorders including binge eating disorder, bulimia nervosa, and anorexia nervosa. These disorders often include an obsession with food and body figure (NIMH, 2017). These eating disorders are diagnosable conditions within the *Diagnosics and Statistical Manual for Mental Disorders (DSM-5)*. Disordered eating includes a spectrum of different behaviors surrounding food and weight (Bonci et al., 2008; Wollenberg et al., 2015) including excessive exercise (Flatt et al., 2021). Patterns of disordered eating are related to eating disorders, but they are not synonymous, disordered eating does not meet the full DSM-5 criteria for clinical diagnosis (McArdle, 2016; Thompson, 2014).

In the United States, it is estimated that 9% of the population will experience an eating disorder in their lifetime (Deloitte Access Economics, 2020). However, the onset of both bulimia nervosa and anorexia nervosa commonly occurs around the median age of 18-years old, while binge eating disorder commonly occurs around 21-years of age (NIMH, 2017). Given the median age of onset, college students are an at-risk population for these types of eating disorders. In addition to the aforementioned eating disorders, patterns of disordered eating are also a common concern in the college student population (McArdle, 2016; Thompson, 2014; Wollenberg et al., 2015).

College Athletes and Eating Disorders

One subset of the college population that is at-risk of developing an eating disorder or disordered eating are college athletes (Ahlich et al., 2019; Martin et al., 2020). College athletes face both internal and external pressures to remain fit (Greenleaf et al., 2009). Internal and external pressures might include negative mood states, low self-esteem, desire for weight control, involvement in a hurtful relationship outside of athletics and perfectionism (Ahlich et al., 2019; Arthur-Cameselle & Quatromoni, 2011). Researchers believe patterns of disordered eating are common in college athletes as a way to enhance performance (Bonci et al., 2008; Chatterton & Petrie, 2013; Greenleaf et al., 2009). However, eating disorders and disordered eating can have grave consequences for college athletes. Individuals with an eating disorder are at an increased risk for suicide (Flatt et al., 2021; Lipson & Sonnerville, 2020) and co-occurring mental illnesses including anxiety and depression (Sander et al., 2021). Additionally, lack of nutrients and prolonged disordered eating can lead to physical ailments including organ damage, musculoskeletal damage, and electrolyte imbalances (NIMH, n.d).

Female college athletes are more at risk for disordered eating and eating disorders than male athletes. Greenleaf and colleagues (2009) found 19% of female college athletes showed partial symptoms of a clinical eating disorder. McLester et al. (2014) found 8% of college athletes were susceptible to an eating disorder, 10% had low self-esteem, and 12% were dissatisfied with their current body image. Research suggests strong competitive pressures, a lack of financial resources, and underdeveloped life skills may lead to eating disorders among female college athletes (McLester et al., 2014).

Male college athletes are less likely to develop an eating disorder than female college athletes (Ahlich et al., 2019; Baum, 2006). In a study by Sanford-Martens et al. (2005), 2% of male college athletes had a diagnosed eating disorder, while 22.2% of male college athletes met subclinical characteristics for bulimia, anorexia, and body dysmorphia. More specifically, college wrestlers as compared to other male college athletes are more than twice as likely to

develop an eating disorder, despite the fact cutting weight does not always lead to enhanced performance (Bratland-Sanda & Sundgot-Borgen, 2013). Male college athletes are most likely to develop an eating disorder to address coach/teammate pressure, lose or gain weight for weigh-in, enhance sport performance, or because of their internal association that more fit college athletes receive more playing time (Ahlich et al., 2019; Baum, 2006; Chatterton & Petrie, 2013; Galli et al., 2011).

Eating disorders and patterns of disordered eating are more common among college athletes who participate in a sport where body weight receives an emphasis (e.g., distance running, swimming/diving, and wrestling) (Baum, 2006; Wells, 2015). Furthermore, eating disorders are less common in sports that use referees (e.g., football and basketball) as opposed to sports that use judges (e.g., gymnastics and diving) to gauge competition (Baum, 2006).

While athletic participation increases certain risk factors for both developing an eating disorder and patterns of disordered eating, athletic participation also has positive effects on a college athlete's overall health (Thompson, 2014). Physical activity is necessary for a healthy lifestyle, and can even help decrease mental health conditions in certain populations (Lester, 2017). Within the athletic setting, college athletes also have access to a variety of resources and services both within and outside the athletic department. These often fall under the label of sport medicine. Sport medicine is a broad umbrella term encompassing a variety of professionals involved in supporting performance enhancement and injury care and management aspects of an athlete's health and well-being (Prentice, 2014). This holistic approach to care can include exercise physiologists, nutrition consultants, sport psychologists, social workers, strength and conditioning coaches, medical doctors, or athletic training staff. Of particular importance for this study is the role of the athletic trainer (ATs) in helping college athletes with a diagnosed eating disorder or patterns of disordered eating. ATs are often the college athletes first point of contact in the sport medicine team (Chapa et al., 2018).

Role of Athletic Trainers

ATs are unique healthcare professionals, they perform a variety of roles for their patients, including following the college athlete from initial injury to full return to participation (Clement & Shannon, 2011; National Athletic Trainers' Association, NATA, 2021). The newest education standards for ATs is to ensure preparation to identify, refer, and give support to patients with behavioral health conditions. ATs understand their role is not to treat behavioral health conditions; rather, to work with other healthcare professionals to monitor these patients' treatment, compliance, progress, and readiness to participate (Commission on Accreditation of Athletic Training Education, 2020).

Despite the treatment of mental health conditions, such as eating disorders, residing outside the scope of practice for ATs, it is still very important for ATs to be knowledgeable in this aspect of a college athlete's overall health and well-being (Neal et al., 2013). The close relationship many ATs develop with college athletes affords them a unique opportunity to get to know their college athletes and to recognize any behavior warranting referral to a mental health professional (Cormier & Zizzi, 2015). Researchers recommend all individuals who are involved in the health and preparation of college athletes understand the warning signs for psychological conditions, such as eating disorders or disordered eating behaviors (Bonci et al., 2008).

In regard to recognition and referral skills, ATs have demonstrated great accuracy in identifying and referring college athletes experiencing a variety of mental health concerns

(Cormier & Zizzi, 2015). In addition to the recognition of disordered eating and potential eating disorders, ATs also provide social support to college athletes in a variety of different contexts (Covassin, 2014; Yang, 2010; 2014). While ATs are viewed as a source of social support for college athletes, their role in providing support to college athletes with an eating disorder or patterns of disordered eating is largely unknown.

Importance of the Current Study

It is important for ATs to understand how mental health, specifically eating disorders, correlate with the overall health and safety of college athletes (Bonci, 2008; NATA, 2021). While ATs will work with a team of qualified providers to ensure holistic care of an eating disorder or disordered eating, they play a large role in supporting college athletes as they work through the psychological, behavioral, and physical characteristics of an eating disorder (NATA, 2021). In order to provide this support, an AT must work with an assembled team of healthcare professionals who will diagnosis, formulate, and implement a comprehensive plan for treatment and ongoing detection of concerns (NATA, 2021). Therefore, the purpose of this study is to provide a deeper understanding of athletic training practices that help support college athletes experiencing an eating disorder and the role ATs believe they can play in the holistic care of their athletes.

In a study by McLester et al. (2014), only 33% of ATs thought they could identify a college athlete with an eating disorder and 50% believe they could offer effective support. Research of this nature can help ATs better analyze and explore how best to approach their relationship with a college athlete experiencing an eating disorder or patterns of disordered eating.

Previous research by Zakrajsek and colleagues (2016) found ATs are capable of helping college athletes manage their emotions, improve coping techniques, and build confidence. It is important to understand whether these current capabilities of ATs are transferable to enhancing biopsychosocial skills necessary for a college athlete to overcome challenges with an eating disorder or patterns of disordered eating.

Method

Descriptive phenomenology is a qualitative research method within the human science research paradigm designed to understand and explain the meaning of human experiences (Fitzpatrick & Watkinson, 2003). Similar to phenomenology, descriptive phenomenology focuses on the lived human experience, but differs by illuminating trivial details that might otherwise be taken for granted (Wilson & Hutchison, 1991). Phenomenology research concentrates on the development and culminations of historical meanings regarding the experience (Lavery, 2003). This approach has a history of being used within athletics and sport (Kristiansen et al., 2017; Ryba, 2008), which includes helping to illuminate specific perceptions of those working with college athletes.

This study followed a logical, systematic, and multiphase methodological approach to capturing reflections of athletic trainers' subjective experiences related to managing student-athletes who have a diagnosed eating disorder. More specifically, the study followed principles of inductive reasoning, where observations and interviews led to the development of patterns, hypotheses, and theory. The use of phenomenology in this study included gathering information

from athletic trainers, personal reflections from the researchers on the topic (a tenant of descriptive phenomenology), and information gathered from outside the context of the research project (e.g., website biographies of the athletic trainers).

Study Participants

Researchers used purposive sampling to recruit currently practicing athletic trainers from NCAA Division I institutions in a mid-major conference. Researchers sought Division I athletic trainers who could speak freely about recent experiences involving college athletes with a diagnosed eating disorder. The researchers selected Division I programs as there are higher rates of diagnosed eating disorders or patterns of disorder eating among these college athletes (Kato et al., 2011). Researchers contacted athletic training staff at all schools affiliated with the conference. Ten athletic trainers identified with the study inclusion criteria. Each athletic trainer ($n = 10$) received a pseudonym to protect their true identity. The researchers had a challenging time identifying ATs who either worked with a college athlete with an eating disorder or were willing to discuss their experiences. However, research suggests a sample of between six (6) and 20 individuals is sufficient for a phenomenological study (Ellis, 2016). These athletic trainers provided vivid descriptions of their experiences working with student-athletes that had a diagnosed eating disorder. See Table 1 for information about each study participant.

Table 1

Study Participants

Pseudonym (Gender)	Age	Race/Ethnicity
Allison (Female)	27	White
Arlene (Female)	30	White
Brianna (Female)	32	White
Frank (Male)	28	White
Grace (Female)	40	White
Margaret (Female)	36	White
Sol (Male)	29	Black
Jill	34	White
Marcus	38	Black
Jason	44	Asian American

Study Procedures

Interview guide. The semi-structured interview guide had a total of six (6) prompts. The prompts asked participants to: (1) talk about their collegiate athletic training experience, (2) describe their athletic training philosophy, (3) discuss experience with college athletes with a diagnosed eating disorder, (4) discuss the role of an athletic trainer in working with these college athletes, (5) discuss effective and ineffective athletic training services for a college athlete with a diagnosed eating disorder, and (6) suggest tools or skills athletic trainers need to strengthen their impact when supporting college athletes with a diagnosed eating disorder. The research team developed the interview guide by first defining the larger research question and outline broad areas of knowledge that was relevant to answering this question. The research team piloted the questions with a group ($n = 3$) of local athletic trainers.

Intensive interviews. All ten athletic trainers participated in an intensive interview with one of the researchers. The interviews took place virtually via a video conferencing system. Researchers made this decision to support health and safety protocols related to the COVID 19 pandemic. The researcher conducting the interviews used the interview guide to engage the participants in open-ended conversation about their experiences working with college athletes that have a diagnosed eating disorder. All follow-up prompts flowed from participant responses to the open-ended questions.

The researcher interviewed each athletic trainer until data saturation occurred. Saturation meant the addition of no new information from participants with the use of prompts (Hennink & Kaiser, 2019). The research team believed the sample provided a robust and valid understanding of the study phenomenon. Thus, the researchers did not feel extending the interview, conducting a second interview, or adding participants was necessary (Hennink & Kaiser, 2019). The duration of the interviews ranged between 45 and 80 minutes. The researcher only interviewed each athletic trainer one time. The researchers recorded each interview with a digital recorder. Additionally, the researcher took field notes (e.g., written observations about non-verbal cues and scratch notes containing keywords) during the interview and used each athletic trainer's current biography on the corresponding university website. These were short paragraphs about each athletic trainer's educational and professional careers. The biographies of the athletic trainers were the historical documents reviewed by the research team to explore their time in the field and any specific mentions of knowledge about eating disorders or disordered eating.

Thematic Analysis

Following transcription of the narratives, completed by the interviewer, the researchers conducted a thematic analysis of the text independently. The researchers considered the detailed notes taken during the interviews, recorded notes taken while listening to and reading the interviews, and the historical contexts into account (Tessier, 2012). Specifically, the biographies provided background information on each athletic trainer that might not have been mentioned in the interview (Laverty, 2003). This detailed approach of listening to and reading the transcriptions and relevant documents provided a systematic process for independently identifying emerging themes. It was possible for more than one theme to exist in each sentence, researchers independently considered each phrase, statement, or sentence in isolation so not to miss the meaning or essence of an athletic trainer's experience (Fitzpatrick & Watkinson, 2003). Each researcher used an Excel file to organize potential inductive coding themes. Researchers use this inductive coding method when they know little about the research subject and researchers are conducting heuristic or exploratory research (Laverty, 2003).

Researchers then shared their findings and worked to mutually code their independent findings into meaning units (Laverty, 2003). These meaning units ranged in magnitude from a single word to a full sentence to capture salient ideas. At this point, the researchers did not have sophisticated codes for the data, but rather, just an idea of what the overall data looked like. Researchers collaboratively reviewed these meaning units line-by-line to help establish initial codes. Researchers used categorization of these codes to generate final themes (Guest et al., 2012). Data not combined in the first round of theme generation was set aside as miscellaneous, then reviewed to see if the code fit into an existing theme, could be combined with other miscellaneous data to create a new theme, or remained miscellaneous (Guest et al., 2012; Maguire & Delahunt, 2017). During the analysis process, the researchers constantly debated in

order to reach an agreement on the descriptions and interpretations of the athletic trainers' experiences (Wilson & Hutchison, 1991). These debates helped the researchers avoid potential confirmation bias.

To promote the quality control of this study, the researchers used member checking, peer debriefing, and prolonged engagement. The research team provided copies of the transcripts to each ATs for their feedback and validation. By debating findings amongst the research team, peer debriefing occurred naturally. Members of the research team have prolonged engagement in athletics as former student-athletes, current college coaches, and sport social work scholars. These individuals spent sufficient time in the field to learn or understand the culture, social setting, or phenomenon occurring in college sports.

Results

This section expounds on various themes constructed from the analysis of transcripts and other supporting documentation. The researchers intend for each participants' voices to be heard through examples used as illustrations for themes. In addition, the relationship between ATs and college athletes with a diagnosed eating disorders or identified disordered eating was expressed through these statements to describe the college athlete's experiences with ATs. Researchers categorized statements into one of three themes: (1) AT and college athlete relationship, (2) barriers to care, and (3) opportunities for improvement. Each of these larger themes included multiple subthemes. These themes emerged from initial coding/surface content analysis (first iteration of thematic analysis), identification of pattern variables (second iteration, subthemes), and application to the data set (third iteration, primary themes) (Anfara et al., 2002).

AT and College Athlete Relationship

ATs understand the importance of providing care and support to college athletes. At the heart of this care and support is the ability to establish trust-based relationships with those in their care and the ability to serve as a primary contact for help. Brianna acknowledged, "I am a primary point of contact for a lot of the student athletes." Sol added, "I know athletes deal with a variety of challenges. I am always here to talk if they want to." Allison explained, "We are always encouraging athletes with any mental health condition to reach out for more specialized or appropriate resources." Frank insisted that college athletes will "come to the athletic trainer first." and Arlene shared, "Athletes trust me. They understand I will do all I can to help them be successful."

Through the development of these trust-based relationships, ATs reported a likelihood that college athletes would confide in them during moments of difficulty. Grace shared, "Athletes know they can come and tell me anything - no matter what the case may be." Margaret added, "Athletes come in and confide in me about a variety of situations." Sol reported, "I try my best to actually talk to them and get them to understand that I know what they are feeling. We then try to solve the problems together."

Patient-Centered Approach. Each AT reported their own personalized approach to working with college athletes. A common subtheme was the use of a "patient-centered approach" when working with college athletes. Grace promised to, "Provide the best care to each athlete by making them the center of our attention." Marcus agreed, "I am very patient centered. The athlete is the priority and I must help them meet their needs." Arlene added, "A patient-centered

approach definitely embraces a holistic review of each athlete.” Jill reported, “My approach looks at both the mind and the body when working with an athlete. This allows me to understand the total of who they are as a patient.” Frank summarized the conversation by saying, “Our goal is to guide and facilitate each athlete’s unexpected journey with compassion and understanding. We have to keep their long-term health in mind.”

Transparency. There are numerous benefits to having an AT on staff. ATs have a large amount of exposure to college athletes and are paramount in identifying their needs. Therefore, communication between the AT and the college athlete should be transparent. Allison stated, “I think transparent communication has been the key to my success with athletes.” Sol added, “I try to always be honest with the athlete. This helps to keep everything out in the open.” Jason shared, “You have to be able to get to know your athletes and forms bonds, which only comes when you are honest with them.”

Barriers to Care

Coaching Staff. There are coaches that have adopted unpleasant tendencies for approaching and addressing their players body image. Frank shared, “Some coaching staff did not necessarily have the most body positive mindset.” Grace recalled, “I had a meeting with the coach and was told the athlete had to lose five pounds leading up to the season for no reason.” Arlene illustrated, “I had a coach that wanted their players to work all of their food off.” Brianna shared, “Athletes were trying to lose weight throughout season because of their coaches.”

Discussing Red Flags. ATs reported not always feeling comfortable discussing red flags about possible eating disorder. Sol disclosed that, “I had an athlete come in with a stress fracture and was vegetarian. I knew the athlete was not getting proper nutrition, but was not sure the best path forward.” Allison portrayed, “I have athletes that will not take the necessary nutrition steps, but I do not always know how to have the conversation with an athlete.” Jill stated, “I know the reoccurrence of an athlete’s injuries is often related back to disordered eating. It is just challenging to approach that topic with an athlete.” Frank described a story where, “An athlete not only had really low bone density but they also were taking laxatives before weigh ins. Trying to help the athlete understand the risks of these actions was challenging.”

Referral Process. ATs reported a lack of clarity in procedures and policies for referring college athletes to specialized services for eating disorders. Jason testified, “I do not think it is a set policy or procedure at any school.” Grace admitted, “There was never a training or established step laid out with anyone...it was even difficult to get answers when we had questions about eating disorders.” Marcus described the procedures as, “a cloudy process because I did not have direct contact specialists.” Participants shared there are multiple referral contacts depending upon their athletic department. These individuals included: “psychiatrists, head athletic trainer, dieticians, physicians, and mental health professionals.”

Athlete Response. Unfortunately, our mood has the ability to determine appetite and food intake. Some people unintentionally associate their emotions with food intake because they have not established coping mechanisms. Allison exclaimed, “As much as you can tell someone not to over-exercise or not to punish themselves by exercise or have unhealthy relationships with food, they are not going to listen to you.” Frank observed, “She neither understood what was going on nor did she think there was a correlation between her nutrition and her injuries.” Brianna stated, “Eating does not mean you are going to gain weight or get too big to run. That is what they are

afraid of.” Grace noted, “Some athletes do not understand that they do not have to kill themselves to stay in shape.”

Opportunities to Improve

AT Role. The roles of ATs vary by organization, but they are significant to the development and health of each athlete. Arlene stated, “It is my personal belief and philosophy that athletic trainers should have an intricate role in handling eating disorders.” Jill emphasized, “ATs must help facilitate the healthcare of student-athletes and ensure each patient is getting the best treatment. However, this is something we all need to learn more about.” Sol declared, “Beyond facilitation we must grow an overall awareness for what is going on with each individual athlete, which includes understanding possible eating disorders.” Allison insisted, “I treat more mental health issues than muscular-skeletal issues in a week. There is a need for more training in this area knowing our role in the mental health process.” Sol cautioned, “I have some background in nutrition, but that is not my specialty and there has to be someone much more trained to provide that than me.” Brianna further stated, “We are always encouraging patients with a mental health condition to reach out to more specialized or appropriate resources.”

Communication and Education. All sports organizations have specific areas that might need improvement. Communication is an area that will have limitations, but it should not have an effect on the student-athlete. Jason noted, “We must be able to communicate to each coach or staff or member so they can understand the impact of an eating disorder too.” Frank reassured, “I think communication could be better for one. Not everyone is on the same page when it comes to athletes with an eating disorder.” Allison urged, “We need to receive more continuing education on things such as eating disorders.” Arlene volunteered, “Continuing education with your coworkers on these topics is essential. We need more of that.” Brianna responded, “We need more education on eating disorders, which could enhance our understanding.” Frank suggested, “By learning more about eating disorders, we can teach life skills to student-athletes.” This has prompted further consideration of the important role ATs have in addressing eating disorders.

Discussion

The purpose of this study was to provide insight concerning the intersection of ATs and their role in addressing eating disorders with college athletes. ATs play an important role in providing both aid to injury recovery and also serve as a source of psychosocial referral and support (Cormier & Zizzi, 2015; NATA, 2021). The research aimed to better describe the role of ATs in recognizing and referring athletes to appropriate resources to address eating disorders and disordered eating. The study is also timely, emerging as the newest education standards for ATs also require the ability to identify, refer, and give support to patients with behavioral health conditions (Commission on Accreditation of Athletic Training Education, 2020). Several themes emerged from the data, which allowed the research team to suggest ATs have both an important and varied role in addressing conditions such as eating disorders.

AT-Athlete Relationship

The AT-athlete relationship is unique and centers around the ability to provide support to athletes in multiple arenas. Past studies involving ATs confirmed limited abilities to identify and

offer support to athletes with an eating disorder (McLester et al., 2014). The first step in addressing this gap is considering how to generate a trust-based AT-athlete relationship. The relationship between the athlete and AT can take many forms. ATs view themselves as collaborators, extensions of a parental figure, and that of a “first responder” for athletes with an eating disorder. They act as a hub for the athlete, especially in terms of referring them to appropriate resources, even if they are beyond the scope of their immediate capacity to treat the athlete (Bonci, 2008; NATA, 2021). While it is clear ATs believe they are a primary point of contact and can provide trust-based care to athletes, this relationship only strengthens if ATs have knowledge about eating disorders. This study found participants did not feel comfortable in working with athletes diagnosed with an eating disorder. This lack of comfort relates to the limited education provided to ATs on this topic. These limitations pose serious risk for connecting athletes with the necessary holistic care (Ahlich et al., 2019; Martin et al., 2020).

Harnessing the unique relationships that ATs have with athletes may provide opportunities for early or preventative interventions. Some participants in this study reported regularly providing support and guidance to athletes with mental health and eating disorder behaviors, while others felt uncomfortable addressing such topics without adequate training. While the recommended core multidisciplinary team for treatment of athletes with disordered eating and eating disorders includes a doctor, sports dietitian, and psychologist (Wells et al., 2020), it is important for ATs to be aware of the risk factors and warning signs of eating disorders so that they can work effectively within the sport system to best support outcomes for athletes. Early identification and treatment of disordered eating improves the speed of recovery, reduces symptoms, and improves the likelihood of better health outcomes (Bratland-Sanda & Sundgot-Borgen, 2013). This is of particular importance as Flatt et al.’s research found that college athletes underutilized supports for eating disorders and disordered eating. The underutilization may, in part, be contributed to stigma and shame, general access and knowledge of services, and/or the perceived expectations of the sport (Flatt et al., 2021). However, professional awareness by ATs may lead to greater resource acquisition. Furthermore, it is crucial that sports organizations develop well-defined roles and clear communication strategies across relevant stakeholders to address mental health and behavioral concerns as they arise.

Education is the best evidence-based method for primary prevention of disordered eating and eating disorders (Coelho et al., 2014), and may include elements related to increasing awareness of risk factors, symptoms, improving body image, and raising nutritional literacy (Wells et al., 2020). Some ATs in this study suggested that athletes’ disordered eating behaviors may be particularly influenced by their coaches. Other studies (Currie, 2010; Turk et al., 1999) have suggested that the environment created by sports coaches, potentially due to poor awareness and knowledge of eating disorders, can either reduce or increase the risk of these negative health outcomes. Therefore, educational efforts should be developed and delivered with buy-in from coaches whenever possible. This suggestion is supported by NATA (2021), which recommends that the entire sports support staff, along with athletes and coaches, undergo an initial comprehensive educational program on eating disorders and disordered eating and regular follow-up training sessions.

Philosophy of AT

ATs have the opportunity to be an essential factor in the progression of care with athletes (Zakrajsek et al., 2016). Much of this progression of care centers around a consistent referral

process for athletes with an eating disorder (Commission on Accreditation of Athletic Training Education, 2020). ATs consistently shared how a lack of education and an inconsistent referral process hampered their ability to work with athletes with an eating disorder. This extended to ATs doubting their ability to serve as a positive role model that helps athletes focus upon their treatment (Chapa et al., 2018). This doubt could prevent ATs from teaching athletes how to process their eating disorder, linking the mind-body connection, and taking appropriate steps for supporting athletes in the maintenance of treatment protocols associated with their eating disorders.

To further support their athletes, ATs also made it clear they desire ongoing education on evidenced-based services for treating eating disorders and how they can support these evidence-based approaches in the training room. For instance, how can ATs help athletes maintain balanced nutrition, address concerns about body image, and provide assurance and confidence in an athlete's recovery. The intrinsic motivation from ATs to support their athletes can help serve as potential protective factors and lead to sustained mental health treatment by recognizing potential barriers, supporting treatment, and normalizing communication surrounding eating disorders as social (both professional and personal) supports can lead to improved outcomes (Cockell et al., 2004).

Sports have a responsibility to athletes to foster a culture of health, both in their environment and in their policy. The ATs in this study reported a lack of clarity on roles, guidelines, and policies for referring athletes for mental health and eating disorder issues. To address these challenges, sporting organizations are encouraged to create guidelines on prevention and early identification of disordered eating within the specific context of their sport, create a coordinated flow of reporting and information to relevant sport staff, and maintain the principle of "first do no harm" (Wells et al., 2020).

Limitations

A limitation of this study was the use of a single, interview with each participant. This approach could make it difficult to get a truly in-depth look at this phenomenon. Researchers could expand their overall engagement with these willing ATs through a prolonged single interview or multiple shorter interviews. A second limitation of this study is potential bias from the research team. While the researchers took clear steps to avoid personal and confirmation bias, past and current experiences related to athletics are difficult to fully avoid.

Future Directions

The study contributes to the literature through providing in depth descriptions of the ATs role in both providing services and being part of a treatment team that addresses eating disorders or disordered eating in collegiate athletics. The study sheds light on some of the philosophies and actions that guide ATs in this environment. Future research and practice should include additional training for ATs about eating disorders, examination of the service referral process for an athlete with a potential eating disorder or disordered eating, and the role ATs play in supporting the evidence-based care of athletes. Additionally, given AT's work in collaboration with other professionals, it may be beneficial to interview other professionals who interact with ATs to better understand perceptions of their role, especially in relation to the treatment of serious mental health conditions, such as eating disorders. ATs serve an important role in this

space and one that through enhanced understanding can be further confirmed, especially in treating athletes beyond traditional understandings of their knowledge, skills, and abilities.

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Social Skill Transfer from a Sport-Based Positive Youth Development Program to the School Setting

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The present study examined the development of self-control skills at one sport-based positive youth development (PYD) camp and the transfer of self-control skills to the school context. Specifically, the degree of transfer and the influence of contextual and personal factors on transfer were both explored. The sample included 176 who participated in the 2017 LiFEsports camp and then returned in 2018. Significant ($p < .05$) increases in self-control from the beginning ($M=3.56$) to the end of the 2017 camp ($M=3.77$) were found. Survey responses in 2018 found that 91 percent reported using self-control at school during the academic year post-camp participation. Open-ended responses revealed youths' application of self-control at school to avoid problematic confrontations (e.g., walking away from a fight) and approach academics (e.g., working quietly by oneself). The frequency of self-control transfer to school was significantly predicted by a set of contextual and personal factors, ($R^2 = .48$) including reflection on learning, personal importance, perceived autonomy, confidence in transferring self-control, and peers value of their use of self-control at school. Results suggest youth participating in sport-based PYD programs report transfer of self-control to school and point to important contextual and personal processes affecting life skills transfer.

Keywords: sport-based positive youth development, youth sport, life skill transfer, self-control, school, social skills

Social workers and other helping professionals often highlight the power of sport for increasing protective factors and decreasing risk factors among socially vulnerable youth (Anderson-Butcher & Bates, 2021). Often positive youth development (PYD) interventions focus on improving life skills, or the intrapersonal and interpersonal skills that enable youth to manage challenges of everyday life (Danish et al., 2005). As approximately 20 percent of youth lack age-appropriate life and social skills (Blumberg et al., 2008), the intentional integration of life skill development and transfer into youth programming becomes a social imperative. Programs serving youth from socially vulnerable backgrounds are especially important given lack of supports and limited access to resources, both of which may contribute to limited life skill development and other personal and social risk factors (Hermens et al., 2017; Super et al., 2018).

Sport is one setting where life skills can be developed (Gould & Carson, 2008). When sport is integrated with PYD practices, sport-based PYD programs have the potential to foster both the development and transfer of life skills (Anderson-Butcher et al., 2014, 2018; Eime et al., 2013; Gould & Carson, 2008; Bean et al., 2016; Jacobs & Wright, 2019; Lubans et al., 2012; Newman, 2020a). Scholars agree that sport-based PYD is even more critical for those from diverse backgrounds given research suggests these youth gain most from their participation (Anderson-Butcher et al., 2014, 2018; Hermens et al., 2017; Newman et al., 2018). As such, researchers have begun to distill the factors contributing to sport-based PYD, as well as life skill development and transfer in sport. From a programmatic perspective, features related to program climate, sport type and setting, quality of relationships, and curriculum usage are often believed to be most pertinent for life skill development (Anderson-Butcher et al., 2014; Bean et al., 2016; Camiré et al., 2012; Lower-Hoppe et al., 2020; Newman & Anderson-Butcher, 2021). Assessing and mapping out the developmental process of life skill transfer and the long-term impact of sport-based PYD programs has proven to be more complicated (Holt et al., 2017). To address this challenge, this study examined the development of self-control skills at one sport-based PYD camp and transfer of self-control skills to the school context.

Literature Review and Conceptual Framework

Life skill transfer is defined as the process where an individual “internalizes a personal asset in sport and then experiences personal change through the application of the asset in one or more life domains” (Pierce et al., 2017, p. 194). Research on life skill transfer in sport has predominately focused on outcomes (i.e., successful application of the asset) more so than the factors contributing (i.e., personal factors such as motivation; contextual factors such as social support) to the development and transfer of life skills (e.g., Anderson-Butcher et al., 2018; Gould & Carson, 2008; Weiss et al., 2016). Using a qualitative lens, researchers have primarily interviewed youth post-participation to examine the degree to which they report the outcomes of life skills being transferred outside of sport (e.g., Pierce et al., 2016; Newman & Anderson-Butcher, 2021). In these studies, youth report believing the life skills learned in sport can be transferred and applied in other social settings such as at home, other sports, video games, church, and school (Bean et al., 2016; Camiré et al., 2012; Newman, 2020). Some quantitative research also has examined life skill transfer outcomes. For instance, Weiss and colleagues (2016) found that youth who participated in a golf-based PYD program used life skills in different areas of their lives and displayed greater life skill transfer than youth who participated in other activities.

Providing a heuristic understanding of the factors influencing the life skills transfer process, the *Life Skills Transfer Model* (Pierce et al., 2017) posits that autobiographical experiences (e.g., lived experiences), internal assets or personal factors (e.g., confidence, motivation); and external assets or contextual factors (e.g., staffing, adult support) interact continuously to help or hinder skill application. The propositions of this model have received recent empirical attention with studies examining life skill transfer from sport to the school setting, one of the most socially valid contexts for youth. For instance, Pierce et al. (2019) focused on teacher-coach perceptions of how youth transfer life skills from high school sport to the classroom. Teacher-coaches made the distinction that personal (e.g., intrinsic motivation to learn) and contextual factors (e.g., teacher support) facilitate the transfer of life skills from sport to the classroom, while other personal (e.g., lack of confidence to transfer) and contextual factors (e.g., lack of support from teachers) hinder the transfer of life skills from sport to the classroom. Martin et al. (2021), more recently, created an intervention with a high school teacher-coach to facilitate student-athlete life skills transfer from sport to the classroom. The action research approach allowed the teacher-coach to influence both contextual (e.g., increase opportunities to use skills) and psychological factors (e.g., increase skill awareness) to support life skills development and transfer.

The model also has been used as a guiding framework for qualitative studies that have examined youth perspectives of life skills transfer. For instance, Bean et al. (2020) found that youth hockey and volleyball players believed confidence and awareness of transfer possibilities were important personal factors, while coach support and contextual similarities (e.g., group tasks in school and sport) were factors in the environment that facilitated transfer. Newman and Anderson (2021) used the *Life Skills Transfer Model* as a framework and photo-elicitation methods to understand how and why socially vulnerable youth involved in a sport-based PYD program transfer life skills. Findings demonstrate the role of psychological processes in life skill transfer and showcase the importance of context similarity during transfer. Further, Pierce et al. (2020) explored high school student-athlete perceptions of leadership as a life skill, identifying experiences of personal and contextual factors interacting to support the transfer of leadership from sport to the classroom. For example, increased awareness of leadership capabilities helped youth identify opportunities to transfer leadership; and greater support from coaches and teachers for transferring leadership helped to enhance self-expectations for leading across contexts.

Although these recent studies help to illuminate the factors influencing life skill development and transfer, limitations and knowledge gaps still exist. Perspectives of teachers and coaches are limited in that they do not necessarily represent the lived experiences of the youth as the active producer of their own development (Larson, 2000; Pierce et al., 2020), and retrospective interviews with youth participants provide only static, and possibly distorted depictions of life skill learning and transfer (Kendellen & Camiré, 2020). There also is a need for more rigorous studies to explore predictors of transfer and examine how life skills learned in sport and sport-based PYD can be used to target school climate and related outcomes as an effort to strengthen healthy development and influence systemic change in the community (Anderson-Butcher & Bates, 2021). For these reasons, longitudinal research following youth through both life skill development and life skill transfer experiences over time is needed, especially studies examining the factors youth attribute as the reasons for life skill transfer (Anderson-Butcher et al., 2018; Kendellen & Camiré, 2020).

Research Context: LiFEsports

To effectively examine life skills in sport, learning and transfer should be viewed as interconnected developmental processes where the analytic spot-light in on both learning in the sport context *and* application in a different domain (Kendellen & Camiré, 2020; Pierce et al., 2017). For this reason, the present study was conducted in a context that has been systematically designed to promote life skill development and transfer among socially vulnerable youth. LiFEsports (www.osulifesports.org) is a university-based program designed to foster social competence through sport. Each year LiFEsports serves over 600 youth aged 9-15 through its four-week summer day camp. Participants, primarily African-American urban youth living at or below the federal poverty level, are provided the camp free of cost, as well as receive free transportation to/from camp and daily breakfast and lunch. At LiFEsports, youth receive 5 hours of instruction in 9 different sport activities (e.g., basketball, football, lacrosse, soccer), and engage in 15 hours of play-based social skill instruction called *Chalk Talk*. All activities promote the development of four key life skills related to social competence: Self-Control, Effort, Teamwork, and Social Responsibility (S.E.T.S.).

Overtime, evidence has grown related to the value of LiFEsports toward PYD. Most research on LiFEsports has examined life skill development over the course of the program, consistently demonstrating improvements in S.E.T.S. after participating in the program (e.g., Anderson-Butcher et al., 2014, 2018; McDonough et al., 2013; Riley et al., 2017). Initial studies specifically found significant group-level differences in perceptions of S.E.T.S., especially among youth who entered the program with the poorest social skills compared to their peers (e.g., Anderson-Butcher et al., 2014; 2018). LiFEsports research then continued investigating other key factors such as a sense of belonging (e.g., Anderson-Butcher et al., 2014; McDonough et al., 2013), feedback and support from adults (e.g., Anderson-Butcher et al., 2019; 2021; Newman et al., 2018; Riley et al., 2017), behavioral incentives as token economies (Anderson-Butcher et al., 2021), positive counselor-youth relationships (e.g., Anderson-Butcher et al., 2019; McDonough et al., 2013; Newman et al., 2020a; Riley et al., 2017), opportunities for positive and diverse peer-interactions (e.g., McDonough et al., 2013; Lower-Hoppe et al., 2021), implementation fidelity and quality instruction (e.g., Lower-Hoppe et al., 2020; 2021), and the exposure of youth to new, safe experiences and environments (e.g., Kimiecik et al., 2021; Lower-Hoppe et al., 2020; Riley & Anderson-Butcher, 2012).

The evolution of LiFEsports evaluative research has followed a similar trajectory to that of the wider life skills development and transfer literature. Until recently, a majority of studies have explored life skill development and factors contributing to PYD, with less examining life skill transfer from the program to other settings. Two recent qualitative studies have explored the factors that contribute to life skill development and transfer among socially vulnerable youth. For example, Newman (2020) illustrated that youth transferred life skills that were both explicitly taught by the program (e.g., S.E.T.S.) and others not intentionally taught (e.g., grit, communication, respect) to other areas such as home, church, other sports, and school. While this qualitative research has just recently found that youth transfer skills learned in LiFEsports to school settings (Newman, 2020; Newman & Anderson-Butcher, 2021), an examination of the long-term transfer outcomes and the factors influencing contributing transfer for a greater sample of campers is warranted.

Purpose of this Study

As the foundation of the LiFEsports S.E.T.S., self-control skills involving the ability to regulate one's emotions and self-manage behaviors (Gresham & Elliott, 1990) were the focus on this study. Specifically, we examined the development of self-control skills at the LiFEsports camp and transfer of self-control skills to the school context using a mixed-methods approach. This study, first, examined the degree to which participants learned self-control skills in the LiFEsports program and transferred self-control skills to school during the year after participation. Second, the study uses the *Life Skills Transfer Model* (Pierce et al., 2017) to examine the influence of personal factors (perceived importance, autonomy, confidence, awareness of transfer possibilities, and reflection on learning) and contextual factors (perceived importance from adults and peers, and positive feedback from adults and peers) and their influence on the transfer of self-control from the LiFEsports context to the school context.

Methods

Research Design

The degree of camp participants development of self-control and transfer of these skills to school was examined using an exploratory sequential design with a QUANT-qual relative emphasis (Morgan, 1998). Specifically, this mixed methods study commenced with a post-positivist (QUANT) worldview to examine the degree of life skill development and transfer and specific factors involved in the developmental process and moved toward a naturalistic (qual) worldview to explore lived experiences of self-control transfer (Cresswell & Plano Clark, 2011).

Participants and Procedure

This study included the 176 youth who participated in the 2017 LiFEsports camp and then returned to the camp in 2018. This represented 40.65 percent of the campers from 2017 who were eligible to return. During registration for LiFEsports in 2017, parents/caregivers of youth were provided information regarding the study's purpose and asked to provide consent for their child's participation. Participation in the study was voluntary and was not a requirement for program registration. Youth completed a battery of instruments on the last day of camp in 2017 and on the first day of camp in 2018. This sample included 110 males (63.1%) and 65 females (36.9%), with a mean age of 11.75 ($SD = 1.33$) years. The participants included 148 African American youth (84.7%), 10 Multi-racial youth (i.e., identification of two or more options; 5.7%), five African youth (2.8), two White Caucasian youth (1.1%); and two Asian or Pacific Islander youth (1.1%). The remaining participants did not report race/ethnicity. The majority of youth were considered low-income, with 102 participants (58.5%) reporting the receipt of free or reduced lunch. The instrument and measures described below reflect only those specific to the research questions of this current study. All methods were approved by the researchers' Institutional Review Board.

Instrument

Learning Self-Control in the LiFEsports Camp

In the 2017 survey, participants completed the Perceived Self-Control Scale (Anderson-Butcher, Amorose, Newman, & Lower, 2016) at the beginning and end of the LiFEsports camp. This scale measures the degree to which youth perceive their ability to control and manage their reactions and emotions. The scale consists of 8 items and measured on a 5-point Likert scale (1 = Not at all true and 5 = Really true). An example item on the Perceived Self-Control Scale is “I am good at controlling my emotions.” Scores on this measure have demonstrated adequate reliability and validity in past research with youth (see Anderson-Butcher et al., 2016). The internal consistency estimates on the measure used in current study were acceptable ($\alpha=.88$ at pre-test; $\alpha=.92$ at post-test).

Transferring Self-Control to School

In the 2018 survey, participants were asked to respond to the questions, “How often were you able to show self-control while you were at SCHOOL this past year?” Response options were scored on a 5-point Likert-type scale, ranging from not often at all to very often, with higher scores reflecting a greater frequency of self-control transfer in the school setting. The campers also were asked to “think of a time over the past year where you used self-control in a situation at school” and to describe what happen using an open-ended response format.

Predictors of Self-Control Transfer

Personal Factors. The 2018 survey also included single-item questions developed specifically for this study assessing various factors identified in Pierce et al.’s (2017) model as potential predictors of life skill transfer. Specifically, items tapped personal predictors of self-control usage at school, including: the importance they placed on using self-control (“It is important to me that I show self-control at school”), their autonomy for using self-control (“I show self-control at school because I want to not because I have to”), and their confidence (“I am confident that I can show self-control when I am at school”). Participants were also asked to reflect on what they learned at LiFEsports by answering the question: “When I am at school, I remember what I learned from LiFEsports camp about self-control.” All these questions used a 5-point Likert-Type response format, ranging from not at all true (1) to really true (5).

Contextual Factors. Items also tapped contextual predictors identified in Pierce et al.’s (2017) model, including: the importance that adults and peers place on them exerting self-control at school (“It is important to adults (teachers) that I show self-control at school” and “It is important to my friends that I show self-control at school”), and the degree of positive feedback their others give them for exerting self-control (“Adults (teachers) give me positive feedback when I show self-control at school” and “My friends give me positive feedback when I show self-control at school”). All these questions used a 5-point Likert-Type response format, ranging from not at all true (1) to really true (5).

Data Analysis

Descriptive Statistics

To examine the first purpose of the study, the degree to which camp participants learned and transferred self-control skills to school during the year after participation, two steps were taken. First, paired t-tests were used to explore changes in self-control from the beginning to end of camp in 2017. Then the percent of youth reporting at the beginning of the 2018 camp that they used self-control at school during the past year was examined. Second, descriptive statistics on the frequency of self-control transfer.

Categorical Content Analysis

To understand participant experiences of self-control transfer, a categorical content analysis was conducted. The open-ended question was analyzed using a post-positivist approach to, initially, deductively categorize each response based on four interpretive criteria: (1) Extent of transfer; (2) degree of reflection; (3) situations and contexts of transfer; and (4) valence of transfer. Extent of transfer assessed whether (or not) the response qualified as life skills transfer, based on the definition of “experiencing personal change through the application of self-control beyond the context where it was originally learning” (i.e., the school context; Pierce et al., 2017, p. 194). The degree of self-reflection was based on Mezirow’s (1991) model of reflective thinking, each journal was scored on its degree of self-reflection using a criteria of: non-reflective; reflective; or critical reflection. “Non-reflective” responses included examples describing habitual actions, a select review of prior learning and contained no evidence of reflective thinking. “Reflective” responses contained sufficient and descriptive examples as well as an application of self-control and additional ways to interpret the experience. “Critical reflection” journal responses incorporated in-depth examples, superior application of self-control, and displayed a transformation of the meaning of the experience. Each response was assessed in relation to the situation and contexts of transfer, identified as either social, academic, or other school-based interactions. Finally, following the initial review of each response on the degree of transfer, reflection, and situations, differences were inductively identified related to how self-control transfer was being described and defined. For this reason, the valence of transfer criteria was created. Each response was categorized based on the description of transferring self-control, referring to negative situations where youth used self-control to avoid confrontation or problems and positive situations where youth used self-control to approach success.

The coding related to the degree of self-reflection was performed by two primary coders. Each coder reviewed the open-ended responses and categorized each response using the rubric described above. Then, in line with the post-positivist approach, the two coders reviewed the categorizations/scores to establish inter-rater reliability. Inter-rater reliability between the two coders was assessed throughout the study using adjacent percent agreement, meaning the degree to which independent scores were agreeable (Murrah, Kosovich & Hulleman, 2016). Scores from both coders were compared to ensure there was at least 80 percent agreement among the scores. In all case of disagreements, coders reviewed and discussed the scores until an agreement was reached.

Multiple Regression Analysis

To explore the second purpose of the study, examining the influence of contextual and personal factors on transfer, a multiple regression analysis was conducted using Version 23 of

the Statistical Package for the Social Sciences (SPSS). Frequency of using self-control at school over the year was regressed on the contextual factors (adult importance, adult feedback, peer importance, peer feedback), personal factors (importance, autonomy, confidence) and reflections on what they learned at *LiFEsports*.

Results

Degree of Self-Control Learning and Transfer

First the study examined the degree to which camp participants learned self-control skills in the camp and transferred self-control skills to school during the year after participation. The findings below present the extent of self-control learning and transfer, variations in the context and situations where self-control was transferred, and identification of differences in the affective quality or valence of self-control transfer.

Extent of Self-Control Learning and Transfer

A total of 125 youth completed the Perceived Self-Control Scale at the beginning and end of the *LiFEsports* camp in 2017. A paired *t*-test showed that there was a small (Cohen's $d = .24$) yet significant ($p < .05$) increase in self-control from the beginning ($M = 3.56$, $SD = .92$) to the end of camp. When asked at the beginning of the 2018 camp how often they were able to show self-control while you were at school this past year, youth reported using self-control at school frequently. In fact, 37.5 percent indicated they used self-control "often," and 90.9 percent reported using self-control "sometimes," "pretty often," or "often." Of the 164 responses to the open-ended question, 131 of participants (79.9%) depicted clear experiences and evidence of self-control transfer. Collectively, these examples provide evidence of self-control transfer as personal development through the application of the skill in the school context (i.e., new approaches to avoiding altercations out of sport). For example, one youth reported that "somebody was talking 'that talk' and I wanted to slap them, but I used self-control to avoid that," while another stated, "at school a boy stepped on my group member and his project. Instead of flipping out on him, I just asked him if he could please walk away."

When examining the degree of reflection in the youth responses, the majority of participants provided clear reflections on their experiences of self-control transfer, with 29 examples being classified as reflective (17.7%) and 102 examples classified as critically reflective (62.2%). These findings indicated that most youth were able to describe self-control transfer with specificity and depth and links to the developmental outcomes.

Situations and Contexts of Self-Control Transfer

The majority of participants ($n = 104$; 63.4%) described examples of applying the self-control skills in social interactions or altercations with friends, peers, or teachers in the school setting. For example, one youth stated:

My friends and I were playing a game and a lot of people came over and started playing but this girl I was arguing with came with the group so me and my friends left so it wouldn't be a fight.

Self-control skills also were transferred in the classroom ($n = 12$; 7.3%) in response to situations of academic performance challenges (e.g., “I got almost straight A's and I got a little frustrated at myself but I stayed calm and didn't do anything”), teacher-student relationships (e.g., “my teacher pushed me, I didn't hit them but I went to the office”), and classroom dynamics (e.g., “my math teacher left the room and said be quiet everybody was talking, but I was doing my work”). Finally, youth described transferring self-control while participating in every-day interactions (e.g., walking in the hallway) or extra-curricular activities (e.g., physical education games and activities) at school ($n = 17$; 10.4%).

Valence of Self-Control Transfer

Examples of self-control transfer were identified that represented skill application in negative situations to help them avoid problems, or positive situations to help them approach success. A total of 111 examples (67.7%) focused on negative situations where youth transferred self-control skills to avoid confrontation or personal problems. Participants described physical and verbal altercations with peers and friends as the most common situation to apply the self-control skills learned from the LiFEsports camp. Physical altercations were directly mentioned in 40 responses, with youth describing how they controlled their response to physical abuse or harassment. One girl stated, “one time a girl kicked me for no reason. I was about to hit her back, but I just told the teacher” while a male youth reflected, “I showed self-control when a guy pushed me and I walked away.” Verbal altercations were directly identified in 22 responses. One student stated, “at school other kids were calling me fat and ugly. I got really mad at them but used self-control and walked away I used what they said and tried to make myself better.” When these confrontations and altercations were described, youth explained or implied that applying self-control skills helped them avoid getting into trouble from others for fighting or being physically or psychologically harmed from the incident. The specific application of self-control skills referred to “walking away” or physically removing oneself from the situations, as highlighted in the following quote, “somebody was talking that talk and I wanted to slap them, but I used self-control to avoid that.” Finally, some youth described their reflection and application of self-control skills as purposeful to remain calm to avoid the potentially negative situation. For example, “I have used self-control in a situation at school when a girl keeps messing with me and I calmed myself down because I know now my temper can get.”

A smaller number of participants ($n = 19$; 11.6%) described situations where they transferred self-control skills in positive situations to help them approach success. For example, participants applied self-control in a test-taking situation, “when we had a math test and I got the hardest test I told my teacher I couldn't do, but I remained calm and gave it my best shot.”

Factors Influencing Self-Control Transfer

Table 1 presents the basic descriptive statistics of the study variables. The mean scores on all variables were above the scale midpoints, suggesting that the youth believed others supported their use of self-control at school as well as thought it was personally important, within their control, and were confident in their ability to do so. Table 1 also shows the bivariate correlations among the study variables. All the contextual and personal factors as well as the reflection of learning at LiFEsports were positively and significantly ($p < .01$) related to the frequency in which the youth reported using self-control at school the year following camp.

Table 1*Descriptive Statistics and Correlations Between Study Variables*

Variable	1	2	3	4	5	6	7	8	9
Personal Factors									
1. Frequency of self-control at school	--								
2. Importance	.56	--							
3. Autonomy	.55	.66	--						
4. Confidence	.51	.56	.42	--					
5. Reflecting on LIFE <i>sports</i> learning	.47	.34	.35	.43	--				
Contextual Factors									
6. Adult importance	.47	.57	.50	.57	.39	--			
7. Peer importance	.47	.41	.44	.39	.42	.43	--		
8. Adult feedback	.35	.42	.43	.45	.48	.42	.47	--	
9. Peer feedback	.38	.31	.53	.33	.48	.32	.61	.56	--
Mean	3.90	4.23	3.96	3.99	3.83	4.31	4.05	3.95	3.72
SD	1.07	.94	1.07	1.04	1.16	.85	1.05	1.10	1.30

Notes. All correlations significant at $p < .01$. Variables scores range from 1-5.

Table 2 presents a summary of the regression analysis used to predict the transfer of self-control at school. Overall, the set of variables significantly predicted the use of self-control, $F(8, 175) = 19.15, p < .01$, accounting for 48 percent of the variation in the self-control scores ($R^2 = .48$). All three of the personal factors were significant positive predictors of self-control at school, as was the youth's reflections of learning at LIFE*sports*. Of the contextual factors, however, only peer importance of self-control was a significant predictor. Based on the squared semi-partial correlations, the predictor explaining the highest amount of unique variance was reflections on what the campers learned about self-control at LIFE*sports* followed by autonomy. It should be noted, though, that the majority of the variance explained was a result of the shared set of predictors (27% of the total 48%).

Table 2*Summary of Regression Analysis Predicting Frequency of Self-Control at School*

Predictor	<i>B</i>	<i>p</i> =	<i>sr</i> ²
Personal Factors			

Importance	.18	.04	.03
Autonomy	.25	.00	.05
Confidence	.18	.02	.03
Reflection on LiFEsports learning	.22	.00	.06
Contextual Factors			
Adult importance	.03	.71	.00
Peer importance	.17	.02	.03
Adult feedback	-.09	.23	.01
Peer feedback	-.05	.58	.00

Note. Overall regression results, $F(8, 175) = 19.15$, $p < .01$, $R^2 = .48$. sr^2 = squared semi-partial correlation.

Discussion

Research has explored the ability for sport-based PYD programs to promote life skill development and transfer (e.g., Anderson-Butcher et al., 2018; Newman et al., 2020a). The current study employed a longitudinal, mixed-methods approach to examine life skill development and transfer as interconnected processes; and was the first study, to our knowledge, to quantitatively examine the heuristic model of life skill development and transfer, as well as explore contextual and psychological processes related to life skill transfer. First and foremost, the findings lend specific support for the effectiveness of LiFEsports to successfully promote the transfer of self-control to other settings outside the program (see also Anderson-Butcher et al., 2018), and general support for the notion that youth sport participants can transfer life skills from sport to other contexts (e.g., Bean et al., 2016). The longitudinal quantitative findings show that youth, who were found to learn self-control in the LiFEsports summer camp, believed that they were able to transfer and apply the skill in the school context in the year following the camp. In doing so, they affirmed that self-control was a life skill that they perceived as important and within their control and abilities. In addition, the ability of participants to critically reflect helped to reveal clear examples of using self-control at school within social interactions with friends, peers, and teachers during academic performances (e.g., assignments, grades, group activities) in the hallway and the classroom, and corroborated quantitative results of frequent self-control use and successful transfer to school.

A novel contribution of this study was the quantitative examination of contextual and personal factors influencing the transfer of self-control from the sport camp to the school setting. In recent years, researchers have recognized the interactive nature of these contextual and youth psychological factors influencing life skills transfer, with studies predominately employing qualitative approaches to represent such factors through thematic (e.g., Bean et al., 2020; Pierce et al; 2020) and narrative analyses (e.g., Kendellen & Camire, 2018). This study provided a unique quantitative examination of the factors presented in the heuristic *Life Skills Transfer Model* (Pierce et al., 2017) across a larger sample of PYD program participants. This study found that conscious reflection on the LiFEsports camp, a range of personal factors (i.e., importance of self-control, autonomy to use self-control, confidence to use self-control) and one contextual factor (i.e., peer importance) predicted self-control transfer at school. In fact, the personal factors were more predictive of self-control transfer to school than peer importance. These findings support previously studied perceptions of youth athletes who emphasized the importance of

awareness (i.e., reflection on learning) and confidence for transfer (Bean et al., 2020; Martin et al., 2021; Pierce et al., 2020), but do not go as far to reinforce adult support and feedback (e.g., coaches) as a facilitator of transfer (Bean et al., 2020; Pierce et al., 2020). These findings emphasize the particularly important role of the individual learner and their conscious psychological processes as the driver of life skill transfer (Pierce et al., 2017). That is, for a life skill to be transferred from sport to school, reflection on skill learning, feeling autonomous in skill application, valuing the skill, and having confidence to use the skill may be more important than external support in the transfer contexts (e.g., from teachers in school).

Based on the general elements of the heuristic models (Pierce et al., 2017) and recent research (Bean et al., 2020), we hypothesized support from significant others (i.e., adults, peers) would be significant predictors of self-control transfer. Peer importance, however, was the only contextual factor to significantly predict self-control transfer to school. These results are supported by other recent research. For instance, Newman and Anderson-Butcher (2021) previously found that peers were influential for life skill transfer, but not life skill development. The current findings lend further support for the role of peers in the process of life skills transfer and highlight friends, teammates, and classmates as a population whose roles are often overlooked in conceptions of life skills development and transfer (cf., Bean et al., 2018; Pierce et al., 2017) and understudied in sport-based PYD research (Lower-Loppe et al., 2021).

In this study, peer importance may have been symbolic of the perceived norms among peers at school. The findings suggest that youth may have been more likely to apply self-control in a confrontational situation in the classroom or schoolyard if they perceived that their friends/peers believed self-control was important. The idea that youth utilize skills and align their behaviors to conform to what their peers' value, aligns with the proposed influence of peers in models of social development. Specifically, Hawkins and Weis (1985) suggest that bonds to peers, whether prosocial or delinquent, will develop to the extent that youths have opportunities for involvement with those peers. Subsequently, youth will use and apply skills to perform as expected by their peers with rewards forthcoming from interactions and actions that are valued by peers. For youth in this study, in addition to their personal agency, the desire to fit in with peers and follow the rules may have fueled the application of self-control at school.

Participants reported lower levels of peer feedback than all other variables, and the factor was not found to significantly predict self-control transfer. In this case, youth may have interpreted feedback to only include explicit forms of verbal feedback, which youth may not be sharing with each other often. Indeed, peer nonverbal feedback (i.e., body language), which may have been captured by the peer importance variable, may be more common than peer verbal feedback, and may be more significant when predicting self-control transfer. Peer feedback, though, may simply not be an important variable influencing self-control transfer to schools. Nonetheless, findings from this study provide further support for the role of peers in facilitating life skill transfer and highlight an important avenue for future research.

Although youth did report scores above the item mid-points for adult importance and adult feedback, these variables did not significantly predict self-control transfer. These findings are surprising and contradict previous research which indicated that parents/caregivers and friends were influential figures in life skill transfer (Newman & Anderson-Butcher, 2020). These findings suggest that adult figures may pose greater influence during life skill development, whereas peers may be more influential during life skill transfer. Notably, adults in school (i.e., teachers) were not engaged in the *LiFEsports* program and therefore not primed to promote the congruence of messages between contexts (Jacobs & Wright, 2018). Perhaps, adult importance

and feedback would have been of greater significance if teachers promoted congruence by explicitly connecting youths' use of self-control to the learning context (i.e., *LiFEsports*) and making the similarities between the learning and transfer contexts (i.e., school) more apparent to learning and application. More direct methods of adult support may be more effective at promoting transfer than demonstrating importance and providing feedback, such as facilitating individual and group discussions about self-control transfer (e.g., Newman & Anderson-Butcher, 2021) and providing concrete opportunities for self-control application (e.g., Allen et al., 2015).

Furthermore, these findings must be interpreted with the sample demographics in mind. The present study assesses the applicability of the heuristic model with a sample of mostly African American boys living below the federal poverty line. Although this is not a representative sample of all youth who engage in sport, findings suggest the heuristic model can be applied to those who experience marginalization. Results extend upon prior qualitative examinations that also have supported use of the *Life Skills Transfer Model* to encourage the transfer of S.E.T.S. to other settings outside sport (Newman, 2020; Newman & Anderson-Butcher, 2021). Indeed, the model provides a framework to increase the protective factors and decrease risk factors among socially vulnerable youth who may need programs such as *LiFEsports* the most. Further examinations are needed to understand the influence of sociocultural differences on the efficacy of the *Life Skills Transfer Model*.

Practical Implications

Sport-based PYD is important to address social inequities that make some youth vulnerable to various problem behaviors, yet practitioners should not merely assume that prosocial behaviors will be repeated, and life skills consciously applied after youth leave their program. Results support the use of sport-based PYD to promote life skills, such as self-control, for vulnerable youth and highlight the need to deliberately align program goals, instruction, and youth experiences to promote and support both life skill development and transfer. Particular implications for promoting life skills transfer align with recent studies and recommendations (e.g., Bean et al., 2016; Bean et al., 2018; Hodge et al., 2013; Pierce et al., 2018). First, youth should be encouraged to continually reflect on their learning and application experiences through debriefing and journaling. Second, they should be provided with opportunities to practice self-control in both PYD and school settings and receive explicit instruction and feedback on how they can personally apply skills in and out of sport. These explicit life skill teaching approaches appear to be valuable to support the growth of perceived autonomy, confidence, and importance for using and transferring life skills. Third, as a novel finding from this study, youth should also be informed about their valuable role as a peer in supporting the personal development of others. They should be prompted to support their peers, communicate the importance of life skills transfer to their friends, teammates, and classmates, and be provided with opportunities to practice using and reflecting about life skills with their peers. Finally, program organizers should collaborate and communicate with individuals across the youths' lives (e.g., teachers, coaches, parents, peers) to support and reinforce life skill transfer across domains. Doing so, social workers and other helping professionals will be able to strengthen the design and delivery of other sport-based PYD programs.

Limitations & Future Directions

Although the present study provided a novel methodological contribution to the literature, certain limitations should be considered when drawing implications and conclusions. First, the present study examined the lived experiences of youth from one sport-based PYD program where youth and their families self-selected registering for the program. Relatedly, no control group was studied. This makes the findings from the present study less generalizable to other populations. Nonetheless, the present study involved diverse youth participants who have historically received little attention in sport research (e.g., Bejar et al., 2021). Another limitation pertains to the exploratory measures used. Specifically, adult and peer importance and feedback are more nuanced than the present study considered them. Additionally, adult importance and feedback could have been more specific and have youth reflect on teacher importance and feedback instead. The present study also only explored factors contributing to life skill transfer and not life skill development, an important step in life skill transfer. The ability of youths to recall learning self-control at *LiFEsports*, though, suggests youth acquired self-control skills at the program. Additionally, there were limitations in relation to how life skill transfer was measured. Future research should expand on these methods to provide a more comprehensive view of application to other social settings. Finally, the present study is limited in that it focused solely on self-control in a discrete and linear fashion, and no other life skill explicitly taught at *LiFEsports*. While we recognize that this narrow focus was unable to fully encompass the bi-directional (i.e., learning from school transferred to sport) and holistic nature of youth development through sport (i.e., learning multiple skills may contribute to transformational or existential change), findings still provide a unique and concentrated snapshot of life skill transfer as a key developmental process.

Future research, therefore, should consider engaging youth from multiple PYD sites and incorporate more rigorous experimental designs to study the factors of life skill transfer. To do so, measurement can and should be improved. In addition to validated scales such as the Life Skills in Sport (LSSS; Cronin & Allen, 2017) and the Life Skills Scale for Sport – Transfer Scale (LSSS-TS; Mossman et al., 2021) being utilized, researchers should also consider validating measures to examine the processes influencing life skills transfer. Researchers should also further examine adult and peer importance and feedback, along with other contextual factors outside of the sport context. Specifically, future research should examine adult and peer importance and feedback using different measurement techniques. Relatedly, other research is needed to further examine other personal factors and autobiographical experiences affecting life skill transfer. To do this, future research should not only consider studying the transfer of specific life skills and how these skills can be used to engage in prosocial acts and/or disengage from problem behaviors but explore youth sport experiences through transformational and/or existential learning lens.

This final suggestion builds off recent valuable critiques of the life skills research have highlighted the decontextualized, narrow focus on functional and teachable outcomes for youth in sport (Ronkainen et al., 2021). While the limited scope of learning in this study must be recognized (i.e., self-control as one positive developmental outcome), the interpretive findings of the youth experiences of self-control transfer do help to reveal the nuance of the developmental experiences of these youth. Specifically, findings suggest that youth perceive self-control to involve emotional regulation, yet emergent examples of self-control application possessed mostly negative valences. Youth, in other words, predominately recalled using self-control to avoid problems and confrontations rather than to approach success, often with the greater intention for decreasing retaliation. These findings highlight the contextualized nature of the

transfer of self-control and recognize that the value of subjective, affective lived experiences of youth as they develop over time. Perhaps the youth from socially vulnerable backgrounds in this study had less opportunities for prosocial engagement, as compared to youth from more privileged backgrounds (as suggested by Flett et al., 2012), and thereby may be more prone to use self-control to prevent engagement in problem behaviors than partake in prosocial ones. These findings, aligning with the primary aims of PYD (i.e., promoting positive outcomes and minimizing negative outcomes, Catalano et al., 2004), should be viewed as more than the decontextualized and disembodied movement of discrete skills across contexts. To continue to critically examine the role of sport-based PYD and youth sport programs, non-instrumental, existential conceptions of learning should be employed to complement this skill-focused understanding youth development through sport (Ronkainen et al., 2021).

Conclusions

The findings from the present study add to the growing body of literature supporting the use of explicitly designed sport-based PYD programs to facilitate the transfer of life skills to school settings. Specifically, youth, who had developed self-control in the LiFEsports camp, transferred the skill to avoid problems and approach success at school. The results continue to provide empirical evidence to consolidated heuristic propositions (e.g., Pierce et al., 2017) about the importance of personal factors (e.g., perceived autonomy) and contextual factors (e.g., peer importance) as key contributors to life skill transfer. As personal factors were stronger predictors of self-control transfer than contextual factors, sport-based PYD settings should provide opportunities for youth to use self-control to avoid certain confrontations and approach success and should then encourage youth to take agency in their own development by promoting reflection on the importance, use, and transfer of self-control in sport and other settings.

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Practice Update: Virtual Spaces and Emotional Places: Parent Spectator Behaviors & Sport Social Work Practice Implications

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The COVID-19 pandemic warranted modifications to spectating experiences of parents whose children participated in youth sports. Arguably, this time period is the first where parent attendance (physical presence) was (a) prohibited due to the shutdown of sports activities (b) required modifications such as mask wearing and social distancing in accordance with local regulations and/or (c) parents were forced to watch their children virtually, rather than out of convenience. Parent participants had varied lived spectating experiences tied to a plethora of emotions, ranging from detachment to gratitude. Within this practice note, the author discusses both an exploratory research study and practice implications for sport social workers seeking to better understand how parenting within the youth sport environment was influenced by the pandemic. Provided is a practice guide, rooted in family systems theory to help sport social workers evaluate spectating experiences and their influence upon the family system. This tool can be used both within and outside the context of the pandemic.

Keywords: spectator behavior, sport social work practice, family dynamics in sport, parent behaviors

The COVID-19 pandemic prompted significant changes to youth sports settings and inspired a new platform for research in the sport social work domain. Sport social work is a burgeoning area of social work practice and research focused upon the unique needs of athletes and those engaged in the sport system (Dean & Rowan, 2014; Gill, 2008; Lawson & Anderson-Butcher, 2000, Moore & Gummelt, 2018). Furthermore, the aim of such efforts is to promote health and well-being through activities such as direct practice, community organizing, advocacy, policy development, and research, all of which are among the core competences of the social work profession (Moore & Gummelt, 2018). The emergence of sport social work has sparked scholarship in several areas from those within the social work such as youth development (Anderson-Butcher et al., 2011, 2016), athlete transitions across the life span (Kidd

et al., 2018), and interventions in sport-based settings (Moore & Gummelt, 2018). More recently, authors have focused upon spectator behaviors (Reynolds, 2020; Reynolds, 2021) and suggested therapists delve into these behaviors to explore broader family dynamics (Jeanfreau et al., 2020). Because of health concerns and restrictions to spectator attendance, COVID-19 caused parents consider other forms of engagement to promote the continuity of youth sports and parent spectating. This practice note provides a tool for sport social work practitioners to use in therapeutic settings, and validates how assessing spectator behaviors provide insight into broader family dynamics.

Research Background

In sport social work practice, practitioners should expect to interface and work collaboratively with various stakeholders and this includes parents of youth sport athletes (Moore & Gummelt, 2018). Within this capacity, they serve four key functions, which are to assess, engage, plan, and use appropriate interventions informed by evidence. Research on spectating interactions is plentiful (Goldstein & Iso-Ahola, 2008; Omli & Lavoie, 2009, 2012; Reynolds, 2020, 2021), yet existing studies on virtual spectating is limited to the experiences of pubgoers and soccer fans in England and exterior to the COVID-19 pandemic. (Weed, 2007, 2008, 2020). Practice guidance with respect to the implications of spectator behaviors is limited (Jeanfreau et al. 2020).

The escalation of the global COVID-19 pandemic disrupted youth sports activities, a mainstay of American culture for approximately millions of children. Youth sports were shut down to protect youth and vulnerable adults from contracting the virus. Long term interruptions, it was estimated would exacerbate current youth sport dropout rates by 30% (Aspen Institute, 2020). This was coupled with staggering, pre-pandemic dropout rates of 70% by the age of twelve and increased disparities for low income and minority youth (Aspen Institute, 2015, 2019). Youth sport venue managers were challenged to navigate fluid federal, local, and state regulations (i.e., mask wearing and distancing) and the desires of parents to be physically present at their child's events (Kelly et al., 2020; Pierce et al., 2020). As a result of shut downs, youth participants lost on average 6.5 hours of sports participation per week (Solomon, 2020). In some states, sports were canceled entirely, whereas in other states and regions, sport leaders and coaches offered virtual spectating opportunities to parents and family members to meet social distancing requirements. Parents also missed out on spectator interactions, which represent a source of cultural continuity and stability for families (Dixon, 2014).

Allowing parents of youth athletes and their spectating family members to safely engage in sport-based activities also meant a transition to virtual spectating platforms. This created an unfamiliar and at times, unsettling experience for parents and caregivers exacerbated by uncertainties of the pandemic. Consequently, this new spectating platform offered an opportunity to examine the psychosocial aspects of spectating differently, largely due to circumstances not seen for multiple generations (pandemic) in the United States. In these instances, youth sports spectating came through live streaming services and other online platforms.

Relevant Practice Literature

Jeanfreau et al. (2020) recommended therapists take a more active role in assessing family spectating behaviors in the sport environment. While the true scope and frequency of inappropriate

spectator behaviors is unknown and hard to measure (Block & Lesneskie, 2018), these types of actions which stem from disagreements with coaches, referees, and other spectators are common and influencing the desire of young people to participate in sports activities. These actions are comparable to road rage, short emotional outbursts lasting only a few minutes, then subsiding (Goldstein & Iso-Ahola, 2008). These spectator actions leave the athlete in a vulnerable position, especially when the athlete is participating in games on the field, responding to the immediate guidance of their coach, and simultaneously receiving instructions from or witnessing inappropriate behaviors of their parents or other spectators (Omli & Lavoie, 2009, 2012). Parental actions too are believed to be drivers of youth quitting sports activities, mitigating an avenue for positive youth development experiences (Aspen Institute, 2015, 2019). Given the risk factors associated with spectator actions both within and outside the COVID-19 pandemic, sport social workers have an important opportunity to explore these dynamics with families. Areas of exploration as recommended by Jeanfreau et al. (2020):

- Time and financial commitments to youth sports
- Level of family involvement
- Evaluating both the positive and challenging aspects of sports participation for both children and adults
- Motivations behind sports participation
- Family sacrifices made to participate in sports
- Experiences associated with performance expectations and pressure

Theoretical Framework

Given the youth sports activities involve multiple interactions between various stakeholders, family systems theory is an appropriate framework to evaluate spectator behaviors and understand interactions within the sport system (Reynolds, 2021; Stainback & Lamarche, 1998; Zimmerman & Protinsky, 1993). Important assessment areas include an individual's functioning within their family system and factors such as emotional demands, role definitions and expectations, boundary issues, culture, and belief systems emerging as a result of participation in sports (Dorsch et al., 2020; Hellstedt, 2005; Watson, 2012). Important to evaluate are boundaries and stressors (Bremer, 2012). Boundaries are shaped by the family's level of involvement in sport, represented at extremes either by disengagement or enmeshment (Hellstedt, 1987, 2005). Disengaged families are represented by parents who do not support sport participation and have limited attendance at games or practices as spectators. In contrast, enmeshed families are heavily involved and attached to the sport experience. Parent spectating is also an important component of involvement altered by sport the pandemic, and research on virtual spectating is limited. Weed (2008) found sport spectators value the ability to gather, watch, and engage with virtual sporting events in close proximity.

Youth sport spectating is an emotional experience for parents. Parents may encounter joy and rewards from watching their children learn new skills or enjoy the sport environment. However, recent study by Legg & Rose (2021) found parents often experience more negative, rather than positive emotions as spectators. Observational studies have noted parent aggression and anger exhibited in this context (Goldstein & Iso-Ahola, 2008), linked parent behaviors in the sports setting to broader parenting practices (Trussell & Shaw, 2012), measuring the frequency parent spectating behaviors (Omli & LaVoi, 2009; Reynolds, 2020, 2021), and developing

educational initiatives and interventions to address spectating behaviors (Dorsch et al., 2019; Reynolds, 2021). This is also timely, given the fluidity and long-term changes to the sport environment as a result of the pandemic (Kelly et al., 2020). Changes to spectator interactions cannot be ignored, given their central role to family experiences in the sport setting.

While the overall prevalence during the pandemic is unknown, virtual spectating was an avenue for parents to view their child's participation in sports. Participants within our sample reported using apps such as Facebook Live, GameChanger, or YouTube to view games. Some used these applications as a result of efforts initiated by sports organizations (or schools). At times, parents are required to subscribe to a smartphone-based application or use a streaming service. GameChanger, one of the applications cited by participants in the study, has been around since 2010 and is a free used in several youth sports to keep score, run analytics, and allow participants to follow games either in real time or through video. In 2017, the ten millionth game was broadcasted and in 2018, GameChanger announced an official partnership with the National Federation of High School Sports after being acquired by Dick's Sporting Goods in 2016 (Sanderson & Baerg, 2020). Conversely, informal broadcasts took place when a parent used their personal cell phone in an on-demand capacity. In such cases, the user activated applications such as Facebook live to stream games and view the happenings of the event in real time.

Research Methods

Two main questions guided this research study:

- What were lived experiences of parents who participated in virtual spectating?
- What are some practice implications for social workers in therapeutic settings?

This exploratory and qualitative study was approved by the author's institutional review board. To best capture the experiences of parents during the pandemic, the research team developed a secure online Qualtrics survey, hosted by the author's sponsoring institution. Participant recruitment occurred through posting information a link to the study through the sponsoring institution's internal communications page and through social media for a two-week period in March 2021. To further preserve confidentiality, no identifiers, such as emails or participant names were collected and participants signed an electronic consent to participate in advance of answering questions. The Qualtrics survey asked parents about how they observed their child's sporting events during COVID-19: (a) in-person, (b) virtually, or (c) unable to observe. Then, among parents who reported virtual spectating, were asked to explore the psychosocial experiences associated with this activity. Response length was not character restricted within the Qualtrics software. Participants were asked to answer an open-ended prompt modeled after Omli and Lavoie's (2012) study about parental anger. The open-ended prompt read:

The past year and the COVID-19 pandemic presented challenges for families whose children participate in sports. One of the most notable challenges is the inability for parents to attend events in person. Instead, many parents had to watch their children virtually through various streaming platforms. Recall your experience as a spectator over the past year (even if it was a one-time occurrence). Describe your experience with as much detail as possible. Feel free to include any thoughts regarding what you liked or disliked about the experience.

Approach to Data Analysis

Because the topic of virtual spectating is novel, researchers employed an exploratory design and used grounded theory procedures in data analysis. A grounded theory procedure (Oktay, 2012; Oliver, 2012; Pulla 2016), charges researchers to formulate a theory “grounded in data” (Creswell, 2003), to guide data analysis. Grounded theory is different than typical theories in the social sciences and does not seek to establish causal relationships between variables (Corbin & Strauss, 1990). Grounded theory procedures are ideal for analyzing responses when there are thirty or more participants (Oktay, 2012; Oliver, 2012; Pulla, 2016) and limited research precedent for the topic (Creswell, 2003). Additionally, the research team employed triangulation “to ensure greater veracity of interpretations than would have been possible if a single investigator had developed the theory alone” (Omli and Lavoie 2012, p.14). To establish greater trustworthiness of the findings, researchers engaged an additional individual with experience in qualitative methodology to review the themes.

Results

The study sample involved 112 participants who identified as parents of youth sports athletes. The median age of parent participants was 43.1 years (SD=6.56). The mean age of their child was 13.10 (SD=3.03). The participant sample was predominantly female (81%). Indiana was the state of residence for more than half of the participants (57%) and the second most represented state was Louisiana (17%). In total, 85% of participants identified as White or Caucasian. In total, participants from 18 states responded to the survey. Our sample revealed important spectating experiences impacted by three circumstances:

- **Youth Sports Did Not Resume:** In some areas of the country, there were complete shut downs of youth sports activities and this was consistent across 4% of our sample.
- **Youth Sports Participation With Modifications:** Within our sample, about 2/3 of parents reported being able to attend youth sporting events in person, but with social distancing and masking protocols in place.
- **Youth Sports Viewed Through Virtual Platforms:** About 1/3 of our sample reported participating in some form of virtual spectating over the past year. Due to venue restrictions or limits placed on the number of spectators able to attend events, these individuals reported participating in virtual spectating at least once over the past year.

The open-ended question, which the research team developed allowed for thick description of emotional experiences within the setting of youth sports (Gray, 2004; Omli & LaVoi, 2012).

Important Findings

Thirty-four (30% of participants) parents shared their experiences related to virtual spectating. The spectating experiences and perceptions of changes/modifications to these parent spectating experiences evoked many emotions and emergence of subthemes related to:

- The role youth sports play in shaping parent-child interactions
- Equating physical presence at events with involvement
- Modified perceptions of identity and role as a parent in the sport context
- Convenience from virtual experiences and increased ability to manage family responsibilities exterior to sports activities
- Feelings of detachment and removal from communal bonds prompted by sports spectating
- Feelings of gratitude prompted by the continuation of sports
- Concerns about how the parent-child role would change as a result of spectating experiences
- Frustration when technology interfered with or interrupted viewing

These findings building upon the assessment framework provided by Jeanfreau et al. (2020) in light of both virtual spectating experiences and the ongoing COVID-19 pandemic. Some suggested questions can include, but are not limited to:

- Tell me about some of your family sports experiences of the pandemic? Did you experience any differences? How were they different?
- What were the emotions associated with spectating? Enjoyment? Feelings of Detachment? Gratitude?
- What were some of the positive aspects of changes in sports participation? How, if at all, was this experience challenging for individual members of the family?
- What types of interactions did you have with other spectators? Were you able to build new or maintain old relationships with other families?
- How, if at all, did the pandemic modify your spectating role? Were all members of the family allowed to attend or did you have to negotiate new roles when limits were placed on spectating?
- What were their experiences as a result of not having sports activities available or only available virtually?
- Do you anticipate spectating roles will change in the future? If so, how do you plan to adapt to these changes? What will be challenging for you?

Conclusion

The referenced study captured the in-person and virtual spectating experiences of parents during the COVID-pandemic and here, the author provides assessment guidance to explore the impact of spectator experiences in therapeutic settings. Over 95% of percent of participants reported their children were able to participate in sports and there were minimal long-term shutdowns. The majority of our study participants were able to attend their child's sporting events with modifications and approximately one-third of participants reported spectating virtually in the past year. The study also revealed a plethora of emotional experiences associated with spectating that were both positive and negative, regardless of spectating modality.

The study is not without limitations. These include a small sample size, a recruitment strategy limited to social media and a university communications portal, and a predominantly White response pool. The aforementioned study provides an impetus for sport-based social workers to ask new questions about the role of sports in families, especially since virtual and

modified spectating modalities revealed both strong connections to the activities and emotions associated with this time period. Consistent with family systems theory (Bremer, 2012; Watson, 2012), it is important to note that during this time, the family system experienced much disruption, often for reasons beyond the immediate control of the family. The ability to be present and spectate at youth sporting events proved to be a source of both disappointment and gratitude, especially as youth sports continued in uncertain times. Future research and practice notes can diversify sport social work practitioner guidance by further delving into spectator experiences. Important to explore is the relationship between spectating behaviors and other demographic factors, such as geographic location, local sports culture, and race. This practice note provides a preliminary evidence-based framework for sport social workers and a new lens for sport social workers to examine family behaviors in a timely context. This is important to consider, also given the uncertainty of an ongoing pandemic which has at the publication of this article lasted almost two years.

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Eating Disorder Behaviors and Psychological Characteristics: A Comparison Between Athletes and Nonathletes in a Partial Hospitalization Program

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Although athletes and nonathletes have been compared across different measures of disordered eating and psychological characteristics, such comparisons are very limited when both groups are seeking higher levels of care. Thus, we compared collegiate athletes ($n = 18$) to a matched group of nonathletes ($n = 18$), all of whom were patients in a partial hospitalization program (PHP) for eating disorders (EDs). At admission, all patients completed the Temperament and Character Inventory (TCI) and Eating Disorder Inventory-3, and comparisons were made across subscales from these measures. Through a series of t -tests, we found that athletes and nonathletes did not differ on the three behavioral subscales from the EDI; however, they did differ significantly on six subscales assessing temperament or psychological characteristics (e.g., harm avoidance, perfectionism). Across all subscales, athletes scored in the healthier direction, with effect sizes being large. Our findings suggest that, although athletes are similar to nonathletes at admission in terms of behavioral ED indicators, they are healthier on a number of other characteristics that may assist them in successfully completing treatment. Future research should evaluate the impact that demographic differences, cultural standards of sport, and athletic and gender identity have on the expression of ED pathology in athletes.

Keywords: assessment, athlete, behavior, eating disorder, sport, temperament.

Due to their generally prolonged duration and severity of symptoms, eating disorders (EDs) can have profound negative effects on individuals' lives, including their physical health and psychological well-being (American Psychiatric Association [APA], 2013). Of all psychiatric disorders, EDs have the second-highest mortality rates (APA, 2013). Further, although not as prevalent as depression or anxiety, EDs occur with some regularity, particularly among young adult women (American Psychiatric Association [APA], 2016). In fact, girls and women represent the majority of patients in residential/ partial residential ED treatment centers (Pedram et al., 2021).

Among young adult women, athletes have been identified as a subpopulation who may be at increased risk for EDs (Petrie, 2020). Indeed, across multiple studies with female collegiate athletes, the prevalence of clinical ED classification can range up to 6% (e.g., Anderson & Petrie, 2011); subclinical classification rates are even higher. The sport environment/culture, and its related expectations and pressures, has been central to understanding athletes' risk for body image concerns and ED symptoms. For example, one study suggests that athletes are at greater risk for EDs and related psychopathology due to the unique stressors of their performance domains, such as pressures to perform, maintain a certain weight, wear revealing uniforms, etc. (Goodwin et al., 2016), whereas another study suggests that the culture and expectations of organized sport may lead athletes to underreport ED symptoms and body image concerns (Fewell et al., 2018). For example, athletes are expected to engage in high-intensity exercise and maintain a high level of dietary control to increase their chances of achieving optimal performance in their sport (Chapa et al., 2018). These behaviors would be considered abnormal and likely associated with an ED diagnosis if engaged in with the same intensity and frequency outside of sport.

The effects of the sport environment/culture may be particularly problematic in relation to athletes being diagnosed and treated for EDs. Athletes often underreport their symptoms if they or their coaches believe that their food restriction and excessive exercise are perceived to be increasing their performance in sport (Fewell et al., 2018; Thompson & Sherman, 2010). Additionally, compulsive exercise and dietary restriction are ED risk factors that, in sport culture, may be viewed as signs of athletes' dedication or commitment, and are often reinforced or encouraged in competitive settings (De Bruin et al., 2007; Thompson & Sherman, 2010). Thus, athletes may have different perceptions of, and relationships with, thought patterns and behaviors commonly associated with ED psychopathology.

Across two studies, Fewell et al. (2018) compared young adult athletes and nonathletes who were patients entering either residential, or partial hospitalization (PHP), ED treatment programs. Across both groups, patients were primarily female (> 85%) and had a diagnosis of Anorexia Nervosa at time of admission (> 65%). In Study 1, they compared the two groups on their ED symptomatology and impairment, depression, worry, and BMI after controlling for the differences that existed on several variables at time of admission (e.g., diagnosis, age, gender). They found that although the athletes scored lower than the nonathletes on ED symptomatology and level of depression (which the authors attributed to the positive aspects of sport involvement), there was a strong association between the two for the athletes. In Study 2, they expanded their outcomes to include other measures of eating-related pathology (e.g., body dissatisfaction, purging, restricting), OCD symptoms, and compulsive exercise. Across all outcomes, there were no significant differences between the athletes and nonathletes. The authors concluded that, even though the two groups differed on their levels of ED symptomatology at time of admission, they were experiencing similar levels of impairment and

pathology across all other psychological and behavioral outcomes assessed. As the first study to compare athletes and nonathletes who were in ED treatment, Fewell et al. (2018) suggested that additional research was needed to examine a broader set of ED correlates. They argued that doing so would provide a more complete picture of athletes' psychological profiles when they enter ED treatment, which could guide clinicians as they develop treatments to address the unique needs and experiences of athletes.

Thus, the purpose of our study was to compare athletes and nonathletes at time of admission to an ED partial-hospitalization program (PHP). We extended research done by Fewell et al. (2018) by considering other standard measures of personality and ED pathology that often are part of PHP admission protocols. Specifically, we used the Eating Disorder Inventory-3 (EDI-3; Garner, 2004) and the Temperament and Character Inventory (TCI; Cloninger et al., 1993). The EDI-3 assesses eating disorder symptoms (e.g., Drive for Thinness, Bulimia) and psychological characteristics that are associated with an ED (e.g., Low Self-Esteem, Perfectionism). The EDI-3 consistently distinguishes between ED and nonED adult women (Claussen et al., 2011) and is considered a gold-standard measure of ED and related pathology. The TCI has been widely used to isolate character profiles that predict individuals who are at-risk for ED psychopathology and how they may respond to treatment (Fassino et al., 2004). For example, across all ED diagnostic categories (e.g., Anorexia Nervosa, Bulimia Nervosa), patients tend to score higher on the TCI's harm avoidance (HA) and lower on self-directedness (SD) than controls (Fassino et al., 2004; Fassino et al., 2013; Miettunen & Raevouri, 2012). The TCI may be particularly useful in understanding athletes' ED profiles at time of admission because athletes, in general, report lower levels of harm avoidance and higher levels of self-directedness than do nonathletes (Bauger et al., 2013).

Method

Participants

Participants were collegiate athletes ($n = 18$) and non-athlete adults ($n = 18$) who had received treatment in a PHP eating disorder facility that had a specialized program for athletes. All participants were women and did not differ significantly in their age at time of admission (Athletes: $M = 21.94$ years, $SD = 3.29$; Non-athletes: $M = 23.00$ years, $SD = 3.16$; $t[34] = -0.98$, $p = .334$). Diagnoses at time of admission included Anorexia Nervosa (Athletes = 12; Nonathletes = 5), Bulimia Nervosa (Athletes = 2; Nonathletes = 4), Binge Eating Disorder (Athletes = 1; Nonathletes = 2), and Other Specified Feeding Disorder (Athletes = 3; Nonathletes = 7); no significant between group differences emerged in the frequency of diagnosis, $\chi^2(3) = 5.48$, $p = .140$. In terms of educational level at time of admission, patients were in high school (Athletes = 0; Nonathletes = 5), in college (Athletes = 13; Nonathletes = 11), had their bachelor's degree (Athletes = 4; Nonathletes = 1), or had their master's degree (Athletes = 1; Nonathletes = 1); again, there were no significant between group differences, $\chi^2(3) = 6.97$, $p = .073$.

Measures

Eating disorder symptoms. The 91-item Eating Disorder Inventory-3 (EDI-3; Garner, 2004) assesses eating disorder symptoms (i.e., drive for thinness (DT), bulimia (B), and body dissatisfaction) and associated psychological characteristics (i.e., low self-esteem (LSE),

personal alienation (PA), interpersonal insecurity (II), interpersonal alienation (IA), interoceptive deficits (ID), emotional dysregulation (ED), perfectionism (P), ascetism, and maturity fears (MF)). For this study, raw scores were converted to T-scores for each subscale. Although Garner (2004) provided extensive data concerning the EDI-3's psychometric properties, recent research has confirmed the subscales' strong internal consistency reliabilities, factor structure, discriminant validity, and sensitive and specificity for women (Claussen et al., 2011).

Temperament and character. The 240-item Temperament and Character Inventory (TCI; Cloninger et al., 1993) assesses seven components of personality that have been found to differ extensively in the population – temperament (i.e., novelty seeking, harm avoidance, reward dependence, and persistence) and character (i.e., self-directedness, cooperativeness, and self-transcendence). Participants respond true or false to each item to indicate whether the item applies to them. Although this measure was not intended for purely clinical populations it is considered to be reliable and valid within clinical environments (Cloninger, 2004). For the purposes of this study, and consistent with past research (e.g., Frank et al., 2011), we used only the harm avoidance, novelty seeking, and self-directedness dimensions.

Procedure

On the first day of admission into the PHP program at EDCare in Denver, CO, as part of the treatment center's onboarding protocol, each patient completed the EDI-3 and TCI on the computer. Patients also were given the assessments in paper form by the admissions clinicians to assist them in completing the assessments. Patients were instructed to ask staff for assistance in reading or understanding the questions. Once completed, their assessments were entered into their electronic charts to aid in treatment planning and intervention selection. As part of the admissions process patients were given information on, and consented to, the way their data would be used (i.e., treatment planning, intervention planning, and research).

Data Analyses

The raw scores for each subscale from each measure were converted to T-scores based on each scale's normative data. Given the exploratory nature of this study, we ran a series of independent samples *t*-tests across the variables from the EDI-3 and TCI and calculated Cohen's *d* value for each significant test; we set alpha at .01 for each analysis.

Results

TCI Subscales

Significant group differences emerged for Harm Avoidance, $t [34] = -3.78$, $p = .001$, and Self-Directedness, $t [34] = 3.03$, $p = .005$, but not for Novelty Seeking, $t [34] = -1.87$, $p = .071$. Athletes reported lower scores on Harm Avoidance (Cohen's $d = -1.24$), but higher scores on Self-Directedness (Cohen's $d = 1.01$) compared to the athletes. See Table 1 for means and standard deviations.

EDI Eating Disorder Symptoms

There were no significant differences between the athletes and nonathletes on Drive for Thinness, $t [34] = -0.98$, $p = .334$, Bulimia, $t [34] = -0.98$, $p = .334$, and Body Dissatisfaction, $t [34] = -0.98$, $p = .334$. See Table 1 for means and standard deviations.

EDI Psychological Characteristics

The athletes and nonathletes differed significantly on Personal Alienation, $t [34] = -0.98$, $p = .334$, Interpersonal Alienation, $t [34] = -0.98$, $p = .334$, Emotion Dysregulation, $t [34] = -0.98$, $p = .334$, and Perfectionism, $t [34] = -0.98$, $p = .334$. There were no significant differences across the remaining five subscales. The athletes reported feeling less personally, (Cohen's $d = -1.02$) and interpersonally (Cohen's $d = -1.25$), alienated, less dysregulated in their affect (Cohen's $d = -1.11$), and less perfectionistic (Cohen's $d = -1.02$) than the nonathletes. See Table 1 for means and standard deviations.

Table 1

Athletes' (n = 18) and Nonathletes' (n = 18) Means and Standard Deviations on the EDI-3 and TCI Subscales

Subscales	Athletes <i>M</i> (SD)	Nonathletes <i>M</i> (SD)	<i>t</i> -values
TCI- Novelty Seeking	49.33 (8.81)	55.94 (12.18)	-1.87
TCI- Harm Avoidance	58.00 (12.54)	73.06 (11.82)	-3.71*
TCI- Self Directedness	43.89 (12.89)	30.67 (13.27)	3.03*
EDI-3 Drive for Thinness	45.67 (9.54)	52.72 (8.64)	-2.33
EDI- 3 Bulimia	47.83 (9.01)	50.94 (11.51)	-.90
EDI-3 Body Dissatisfaction	47.00 (10.18)	51.89 (7.77)	-1.62
EDI-3 Low Self-esteem	47.39 (9.44)	54.78 (10.46)	2.23
EDI-3 Personal Alienation	44.89 (8.81)	55.00 (11.05)	-3.04*
EDI-3 Interpersonal Insecurity	47.56 (7.83)	53.33 (10.48)	-1.87
EDI-3 Interpersonal Alienation	44.33 (7.04)	57.00 (13.20)	-3.59*
EDI-3 Interoceptive Deficits	47.17 (7.69)	54.00 (9.20)	-2.42
EDI-3 Emotional Dysregulation	43.88 (6.09)	56.78 (15.25)	-3.25*
EDI-3 Perfectionism	50.94 (9.23)	58.89 (7.43)	-2.84*
EDI-3 Asceticism	47.06 (8.75)	53.28 (9.99)	-1.99
EDI-3 Maturity Fears	46.17 (11.56)	52.72 (9.58)	-1.85

Note: Means for all subscales are expressed as T-scores.

* $p < .01$ for each t-test.

Discussion

Across the subscales of the EDI-3 and TCI, athletes and nonathletes differed, though primarily on the personality and psychological characteristics and not the behavioral measures of EDs. Specifically, at time of admission into the PHP program, the athletes and nonathletes scored similarly on their drive to reduce caloric intake and pursue a thin body, the extent to which they were dissatisfied with their bodies, and their endorsement of bulimic symptomatology. Although Fewell et al. (2018) found slight differences between their ED

inpatient athletes and nonathletes on ED symptomatology, the two groups were similar in terms of ED impairment, body dissatisfaction, binge eating, restricting, cognitive restraint, and purging. Similarly, our findings indicate that athletes are more similar to, than different from, nonathletes at time of admission on the traditional behavioral markers of ED diagnosis. Despite engaging in a culture that can encourage problematic behaviors, such as restricting caloric intake or engaging in excessively high levels of exercise, athletes actually may not require specialized treatment within PHP ED programs for the behavioral aspects of ED pathology being so similar to nonathletes in these areas.

The athletes and nonathletes, however, differed on a number of the subscales that measured the personality and psychological characteristics associated with EDs. On the TCI, the athletes scored lower on harm avoidance and higher on self-directedness; effect sizes were large on both. Thus, the athletes were presenting themselves as more responsible, hopeful, and self-accepting and as being more optimistic and having more energy than the nonathletes. These differences in harm avoidance and self-directedness between athletes and nonathletes appear to transcend ED status, existing among athletes and nonathletes who are free from any ED diagnosis (Bauger et al., 2013). That athletes have this level of temperament and character may bode well for them in treatment given that low self-directedness and high harm avoidance are strongly associated with ED pathologies and complicate the process of recovery (Abbate-Dega et al., 2013; Fassino et al., 2009; Miettunen & Raevuori, 2012). Recovery from ED's is often measured by changes in these personality traits, with decreased harm avoidance and increased self-directedness predicting treatment success (Segura-Garcia et al., 2013). Our findings suggest that athletes enter treatment programs with scores on harm avoidance and self-directedness that are similar to those found among healthy controls (Atiye et al., 2012). Such a profile across these two TCI subscales could predict greater success in treatment, but could also reflect that these factors are less salient in the treatment outcomes of athletes. Additional research is needed to determine how athletes' scores on harm avoidance and self-directedness predict progress through PHP ED programs as has been done with nonathlete patients

The athletes and the nonathletes also differed significantly on four of the nine EDI-3 subscales that assessed the different psychological characteristics associated with EDs. Similar to the differences that emerged on the TCI subscales, the athletes' scores on these four characteristics suggested a healthier profile than found among the nonathletes; again, the effect sizes were large. Overall, the athletes reported feeling more emotionally full, less alone, more trusting and connected in relationships, more stable, less angry, less impulsive, less self-destructive, and less perfectionistic. Although athletes generally report higher levels of perfectionism than non-athletes (Hopkinson & Lock, 2004; Krane et al., 2001; Schwarz et al., 2005), which is likely driven by demands within the sport environment, at the time of admission to an ED treatment program such differences appear to have flipped. That the nonathletes now scored significantly higher than athletes speaks to the centrality of perfectionism in their ED risk (Shanmugam & Davies, 2015). That the athletes scored lower than the nonathletes on personal and interpersonal alienation and on emotion dysregulation aligns with research that suggest sport participation fosters positive development within those traits (Hawley et al., 2014; Prentice et al., 1994). Thus, although impaired at levels similar to nonathletes in terms of their engagement in ED specific behaviors (e.g., bulimia), athletes appear to enter treatment with lower levels of pathology across a range of psychological characteristics; this healthier profile may have been developed through their sport participation. The association between certain personality traits, athletic success, and the development of healthy, appropriate coping strategies suggest that

athletes may be better equipped to manage the psychological demands associated with ED recovery and may have more favorable outcomes.

Athletic identity may be an important factor to consider when evaluating athletes for EDs. The cultural pressures in athletics previously mentioned in the study could be compounded by reliance on the external validation of athletic identity, which is also associated with ED pathology (Palermo & Rancourt, 2019). Given that high levels of athletic identity can manifest at any level of sport participation (Lamont-Mills & Christensen, 2006; Palermo & Rancourt, 2019), athletes at every level of competition should be included in future research to determine how athletic identity influences ED development. Additionally, social support and perceived control may serve as preventative factors against EDs for athletes (Buckley et al., 2021), and thus should be considered when designing and altering treatment plans in clinical settings for individuals who strongly identify as athletes. For example, more generalized treatment could distance athletes from established support networks and lead to diminished feelings of autonomy, especially when athletes are pulled from their sport life to enter treatment at a higher level of care (HLOC) (Buckley et al., 2019). Stephan & Bilard (2003) also found that athletes experiencing transition out of sport reported greater sensitivity to weight gain and bodily deterioration, perceptions that intensified in the months following their transition. This, coupled with findings that involuntary retirement or separation from sport may impede the process of developing a sense of self outside of sport, demonstrate the significance of athletic identity not only in the diagnosis of EDs, but also the effectiveness of treatment (Esopenko et al., 2020). Treatment approaches that restrict athletic training, body awareness, and access to athletic environments, which are common in PHP programs, may require adjustment for athletic populations (Esopenko et al., 2020).

Future studies should consider the interaction of gender and athletic identity as a potential factor that differentiates athletes from nonathletes. Despite the growth of women's sports since the passage of Title IX in 1972, athletics are still viewed as a masculine domain (Fallon & Jome, 2007; Sorbe et al., 2021). Research suggests that women's participation and success in traditionally masculine domains may not only have social consequences, but can also lead to gender-role conflict and greater identification with stereotypes related to chosen gender identity, all of which have roles in the development of EDs (Heilman, 2004; Rudman & Phelan, 2010; Veldman et al., 2017). Female athletes have also reported awareness of expectations related to their gender-role behavior that conflict directly with their role as an athlete, particularly those related to body shape and weight (Fallon & Jome, 2007; Krane et al., 2004). These findings could indicate an unconscious conflict between the athletic and gender identity of certain athletes, which could contribute to the development and maintenance of EDs. A study similar to ours that evaluates differences between male and female athletes on intake assessments might offer insight into how gender (as well as roles and conflicts) may be related to the development of EDs and how athletes respond to specialized ED care.

Despite the strengths of our study, which included matched samples of female athletes and female nonathletes and our use of measures with established psychometric properties, there were several limitations that warrant discussion. First, our overall sample was small ($N = 36$), which would be associated with lower levels of power in our statistical tests. However, we did find significant differences across six of the subscales and, in each case, the effect size was large. The limited number of participants was due to the small sample of athletes admitted to the program in the time frame observed in this study. As the athlete-specific treatment program continues, future studies will have larger samples of athletes and thus be more robust and

generalizable. Second, although similar to Fewell et al.'s (2018) methodology, we used only self-report measures, which could lead to inaccurate reporting. Also, certain patient treatment data (e.g., race/ethnicity) was not usable in this study due to subjects opting out of sharing that information during intake. In future studies, considering broader, more diverse groups of athletes is needed to better understand the nuances of their psychological profiles upon admission.

In this study, we compared athletes and nonathletes who were patients in an ED treatment facility that had a specialized PHP program for athletes. Both groups provided information on their ED behaviors and psychological characteristics at time of admission, which allowed us to determine how similar the athletes and nonathletes were. Interestingly, the two groups did not differ on any of the ED behavioral indicators suggesting that, in terms of these symptoms, athletes and nonathletes were alike. However, the athletes demonstrated a healthier profile than the nonathletes across six of the temperament and psychological characteristics. This healthier profile, which included being more self-directed and better able to manage their emotions, may have developed through their long involvement in sport. Thus, the sport environment may at once increase their behavioral risk of ED, but also provide them with opportunities to develop psychological characteristics that may benefit them in treatment. Longitudinal research that tracks athletes' progress in ED treatment programs is needed to determine if such benefits exist.

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Teaching Note: Integration, Creation, and Growth: A Path Forward for Sport Social Work Education

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The Alliance for Social Workers in Sports (ASWIS) represents the social work profession in areas of sport social work practice, education, research, and advocacy, and is leading the way in preparing social workers for practice in sport by offering the first and only Sport Social Work Certificate Program (SSW Certificate Program). Despite the development of the SSW Certificate Program, the demand, need, and interest in sport social work curricula and social impact education is growing. The purpose of this article is to outline a path forward for sport social work education by discussing strategies and practices to (a) integrate sports into existing coursework that imparts social work knowledge, values, and skills; (b) create sport social work courses and field placements; and (c) develop interprofessional specialization tracks that grow the sport social work workforce and platform for advancing social change through sport. Improving access to education and training can strengthen the specialization of sport social work, facilitate interprofessional collaboration through sport, and will ultimately benefit individuals, athletes, families, coaches, teams, communities, and sport organizations.

Keywords: sport social work, social work education, teaching, training, social work curriculum, interprofessional collaboration

Sports fans and the public alike have seen athlete activists and sport organizations spark conversations focused on equity, mental health, and human rights. Collin Kaepernick showed the world, by bending his knee during the national anthem in 2016, that non-violent social organizing can advance policy focused on accountable and anti-racist policing. Moreover, Simone Biles and Naomi Osaka set clear boundaries by choosing not to participate in their prospective sports in 2021; actions that educated the public on the importance of protecting athletes' mental health and prioritizing well-being over sport performance. Similarly, sport

organizations and global governing bodies have leveraged their power and allocated resources to address issues of equity and social injustice. Major League Baseball moved the 2020 All-Star game out of Georgia to protest voter suppression laws (Dimond & Radnofsky, 2021), and the International Day of Sport for Development and Peace was established in 2013 to leverage sport as a platform for social change (United Nations, 2013). These examples demonstrate, in no uncertain terms, shared values among athlete activists, sport organizations, governmental agencies, and the profession of social work.

Social work is a practice-based profession driven by values including social justice, integrity, and competence. Social workers are actively involved in advocacy comparable to the efforts of athlete activists, leaders in sport, and athletic organizations to destigmatize mental health and address complex social injustices. In sports terms, social workers are not on the sidelines but rather "in the game" when it comes to promoting social and economic justice, improving access to mental health services, and challenging individual and structural forms of oppression. To demonstrate, The Bureau of Labor Statistics (2021) recently reported approximately 715,600 social workers engage in practice "to enhance human well-being" in settings such as mental health clinics, schools, child welfare, and human service agencies, hospitals, settlement houses, community agencies, and private practices (National Association of Social Workers [NASW], 2017). Furthermore, a five-year impact report assessing progress toward addressing 13 macro-level social issues, such as systemic racism, human rights, and homelessness, revealed the growing impact of social work research, education, and practice in the fight to champion social change (American Academy for Social Work and Social Welfare, 2021). Ultimately, social workers and leaders in sport are those that have the experiences, relationships, and platforms to contribute to local and global social change efforts.

The potential for strong, well-informed, and effective collaborations among sectors of social work and athletics is promising, yet the establishment of a cohesive partnership is necessary for the two bodies to work together toward shared goals. Recognizing the potential for collaboration across sport and social work, the Alliance for Social Workers in Sports (ASWIS) was created in 2015 "to promote individual and community well-being through partnerships between the profession of social work and the field of athletics" (ASWIS, 2021). Over the last several years, the ASWIS has grown into a community of over 200 dedicated social work and interdisciplinary faculty members, practitioners, advocates, and students. The ASWIS is actively involved in building partnerships in areas where social work and sports systems intersect, and in strengthening the utilization of sport as a tool to promote individual and community outcomes (ASWIS, 2021). The collective outreach, education, and advocacy of the ASWIS continue to increase awareness of the specialization of sport social work within the social work profession and among interprofessional disciplines (McHenry et al., 2021).

As the ASWIS has grown, so too has the demand for social impact education within institutions of higher education. Students entering colleges and universities across the country are looking to pursue meaningful careers in the social sector yet lack access to interprofessional curricular pathways that harness their creativity, empathy, and insight to address complex social problems. Since its inception in 2015, the ASWIS has worked with professionals across multiple domains of sport to raise awareness about the profession of social work and to develop partnerships that improve conditions for athletes, teams, and communities.

The ASWIS has also led the way in creating a social impact curriculum that seeks to prepare the social workers for practice in athletic settings and engagement in broader advocacy efforts that utilize sport as a vehicle for social change. The ASWIS offers the first and only Sport Social

Work (SSW) Certificate Program for graduate-level social work practitioners with an interest in sport social work (ASWIS, 2021). The one-year, hybrid certificate program focuses on enhancing knowledge and skills relating to sport and social work theory, practice, research, and policy (ASWIS, 2021). The SSW Certificate program has several strengths and weaknesses for students looking to pursue a social impact education.

Strengths of the SSW Certificate Program include the ability to facilitate students' field placements in athletic settings, its online accessibility, and the depth of the program. In addition, the SSW Certificate Program is currently approved for 52 continuing education units by the National Association of Social Workers (NASW). Weaknesses of the SSW Certificate Program include its high cost (\$2,600), and a lack of formal recognition from the Council on Social Work Education (CSWE) as accredited coursework within social work undergraduate and graduate programs. Without recognition from CSWE, social work students and students with an interest in advancing social change through sport are unable to access meaningful and innovative content, sport-focused coursework, and interprofessional education opportunities that can prepare them for practice with athletes or activism through sport.

Leaders of the sport social work movement are dedicated to growing the specialization of sport social work, developing partnerships with athletic organizations, and contributing to innovations in high-quality social impact education. To date, the SSW Certificate Program is a novel curricular model, but there are opportunities beyond this program to prepare interprofessional students for careers that use sport to advance social change (Beasley et al., 2019; Newman, 2021). With growing opportunities at the convergence of sport and social work, the purpose of this article is to outline a path forward for sport social work education. This commentary aims to describe ways in which the social work profession can (a) *integrate* sports into existing coursework that imparts social work knowledge, values, and skills; (b) *create* sport social work courses and field placements; and (c) develop interprofessional specialization tracks that *grow* the sport social work workforce.

Intersection of Sport and Social Work

Sport is one context in need of practitioners to address mental health concerns, and that intersects with emergent social, economic, and human rights issues at the forefront of public health and international policy debates (Anderson-Butcher & Bates, 2021; Dean & Rowan, 2014; Gill, 2008; Moore & Gummelt, 2017). The National Collegiate Athletic Association Sport Science Institute (NCAA, 2016) recently recommended that all athletic organizations hire a licensed mental health provider to support student-athlete mental health and well-being. This advocacy by the NCAA is due in part to increased awareness of the mental health vulnerabilities of athletes and gaps in higher education services to address the needs of athletes (i.e., after-hours care, interprofessional care teams, etc.). Sudano and Miles (2016) revealed only 20.5% of 127 college athletic programs had a mental health provider on their staff, yet recent reports estimate that between 24% to 31% of athletes admit to feeling significantly overwhelmed while balancing college academics and athletics (NCAA Goals Study, 2020). Furthermore, only 37% to 46% of athletes reported feeling very satisfied with the mental health care they receive from their organizations (NCAA Goals Study, 2020). As athletic organizations work to destigmatize support and increase access to mental health services, social workers can expect to see an increase in demand for mental health providers who are prepared for serving on interprofessional teams in athletic settings.

The connection between sport and social work also extends beyond the provision of clinical mental health supports to athletes. Sport has the potential to improve health outcomes and empower and connect people across the world. Laureus Sport for Good (2021) is a charitable company that aims to address six social focus areas of global social change which align with the United Nations Sustainable Development Goals (SDGs). Laureus Sport for Good (2021) funds programs, services, and activities that address health, employability, education, inclusivity, equity, and peace – with a focus on using sport to address systemic inequities and improve social conditions. Beyond the provision of financial support, Laureus Sport for Good (2021) also brings leaders of sport-based youth development programs together from all over the world. The organization encourages participation in learning communities that inform programmatic growth and the exchange of new ideas to help develop best practices in the field of sport for development. For social workers, Laureus Sport for Good’s mission aligns with professional values of social justice, the importance of human relationships, and competence at a global scale.

Sport is also relevant to informing U.S. and international policy issues such as democracy and diplomacy, environmental protection, and human rights. Social, economic, and political justice issues that influence sport and are influenced by sports include, but are not limited to, transgender rights, athlete compensation (i.e., name, image, and likeness policies), pay equity, employment, tourism, and economic development. The United States Bureau of Educational and Cultural Affairs houses the “Sport Diplomacy Program” leveraging sport and athletic platforms to champion foreign policy priorities and promote mutual understanding of global issues (U.S. Department of State, 2021). The fact is that social workers share similar values with athletic organizations and governmental agencies that use sport as a relational and community intervention to address social issues across the micro-macro continuum.

Integration of Sport in Social Work Coursework

Given the expansive reach of sport and high levels of engagement globally, sport is an excellent platform and tool to cultivate learning and growth across the nine CSWE social work competencies (Bates, under review; Moore & Gummelt, 2017). Currently, social work courses engage students in learning about the social work profession, human behavior and the social environment, diversity and intersectionality, and social work practice (CSWE, 2015a). The integration of sport-focused content into social work courses has the potential to capture students’ attention and help make relevant connections to social issues that influence youth, families, and communities across the macro-micro continuum. By integrating sport content into coursework using low-effort integration strategies that increase students’ exposure to sport, social work students can better understand how to leverage sport to improve social conditions when working in their various micro-, mezzo, or macro-practice settings.

Introductory social work courses. Sport topics can help strengthen students’ understanding of the history of the social work profession. In introductory courses, social work educators have an opportunity to outline the history of sport social work by integrating content focused on the contributions of Jane Addams and other social justice pioneers (Kratz & Rosado, 2021, in press; Lawson & Anderson-Butcher, 2001; Reynolds, 2017). For instance, social work pioneers such as Jane Addams often used sport, recreation, and play to strengthen social bonds, support positive overall health and well-being, and cultivate a sense of community (Kratz & Rosado, in press). Furthermore, instructors can demonstrate the synergies between sport and social work through

the contributions of activists like W.E.B. DuBois who, although not a social worker, pioneered the creation of the National Association for the Advancement of Colored People (NAACP). The NAACP has long stood in solidarity with athletes protesting and organizing through sport (Henderson, 2009). These examples can provide students with an understanding of how sport cultivates community and contributes to social change.

Introductory courses provide excellent opportunities to highlight diverse employment opportunities for students with an interest in social justice and education, coaching, sport science, or exercise physiology. Instructors teaching introductory courses could invite guest speakers who will expose students to different areas of social work. Sport social workers can speak to students about challenges, ethical issues, and practice innovations in athletic settings or the sport social work profession more broadly (Bates, under review). Bates (under review) invited several sport social workers leading policy and practice efforts in organizations such as the NFL Player Care Foundation and university athletic departments (see University of Michigan Athletes Connected Program, n.d.) to an introductory sport social work course. Students in the introductory courses reported learning from the guest speakers about how social work values and ethics align with employment opportunities in sport organizations (Bates, under review). Further, instructors teaching introductory courses can encourage students with an interest in sport to explore the ASWIS network, subcommittees, newsletters, blogs, and research opportunities. These are just a few of the ways instructors can introduce students to the specialization of sport social work and embed sport-focused content into courses.

Human behavior in the social environment. Sport social work content is also an excellent fit for human behavior in the social environment (HBSE) courses. Sport, play, and recreation are social determinants of health that have a bi-directional relationship with environmental conditions in which people are born, live, learn, work, play, worship, and age that affect a wide range of risk factors, functioning, and quality-of-life outcomes. Studies show that adults experience an array of positive health benefits and that there is a reduced risk of early mortality if they participate in 150 minutes per week of moderate-to-vigorous physical activity (Warburton & Bredin, 2017). Along with the broader health implications, social work practitioners need to be able to (a) provide psychoeducation on the influence of physical activity on endorphins and other neurotransmitters which impact mood and stress (Mikkelsen et al., 2017); (b) recognize how sport can cultivate community, belonging, comradery, and social support (Eime et al., 2013); and, (c) understand how sport can teach life and social skills such as teamwork, problem-solving, goal-setting, and social responsibility (Hermens et al., 2017). Understanding the ways sport, play, and recreation influence individuals will enable social work students to assess clients' behaviors and social environment, which in turn can inform the design of prevention and intervention efforts that focus on holistic health and well-being.

Diversity and intersectionality. Sport-focused content has important links to diversity and social justice issues. Sports serve as a universal "hook" that engages millions of people and exposes participants and spectators to new people, relationships, experiences, ideas, social issues, and cultures (Hartman & Kwauk, 2011; Newman et al., 2019). Culturally, athletes, sport teams, and athletics organizations have platforms that reach millions of people around the world, whether via television or on social media. The reach of sport is important for social workers to understand, considering that athletics exposes individuals to diverse ideas, perspectives, and social issues which they may otherwise not be conscious of in their everyday lives. For example,

Emanuel Ocho, a former professional football player, created a series on social media called “Uncomfortable Conversations with a Black Man” following the death of George Floyd, which increased the focus on the Black Lives Matter movement. This mini-video series and educational outreach has reached millions of viewers and built bridges from the sport community to the public on topics such as systemic racism, microaggression, and issues of diversity and difference. Social work instructors and faculty can utilize these videos in the classroom to build awareness and facilitate discussions about intersectional issues that transcend and influence sport.

Social workers must also remain keenly aware of how athletes from diverse backgrounds experience discrimination and oppression within athletic settings. At the macro level, racial disparities, including disproportionate representation of Black athletes on high revenue teams as against the underrepresentation of Black, Indigenous, People of Color (BIPOC) administrators in sport leadership positions, have persisted over time (Cooper et al., 2017). Social workers need to explore why athletics as a system perpetuates inequities, and the reasons for lower graduation rates among college athletes compared to non-athlete college students (Cooper et al., 2017). A lack of diversity among administrators and inequitable educational outcomes among groups of student-athletes highlight the need for culturally responsive and athlete-centered sport leadership, policy, and practice. These topics are highly relevant to diversity and social justice courses within social work programs. Other relevant macro-level social issues in sport that focus on diversity and inclusion include LGBTQ+ rights, pay equity, and Title IX regulations. Educators can leverage these examples to train social work practitioners to think systemically about issues of diversity and difference in sport.

Social work clinical practice courses. Clinical social work practice coursework utilizes a strengths-based approach focused on the person-in-environment perspective. The target of direct, clinical practice curricula is to equip students with various methods of working directly with individuals, families, and groups (Pomeroy & Garcia, 2017). Courses in clinical social work practice emphasize improving social functioning, strengthening clients’ problem-solving capacity, and best practices in enhancing the coping capabilities of clients (Saleebey, 2011). Embedding sport social work topics into clinical social work practice coursework with a primary goal of assisting vulnerable populations is an area of creative expansion. For example, there are opportunities to train social work students looking to work in youth-serving settings to ask about youths’ experiences in sport and how sport pressures and successes influence family interaction patterns and their school experiences.

Further, local, community, and national issues in sport are relevant to clinical social work practice with athletes. For example, the story of Emmanuel Durón, 19, who is now in counseling after lashing out at a referee at a Texas football game is an example of a clinical case that is relevant to the person-in-environment perspective (Longman, 2021). Durón had a history of challenges controlling his anger, while also living and attending school in the state ranked 51st in access to mental health services (Reinert et al., 2021). Moreover, recent high-profile cases and popular media stories focused on Michael Phelps, Simone Biles, and Naomi Osaka have elevated the need for clinical services to support athletes’ mental health (Knight, 2021). With the growing awareness that athletes are not immune to mental health issues, and in fact can be categorized as a vulnerable population (Moore & Gummelt, 2017), social work students can utilize sport-based case studies to simulate practice scenarios and engage in assessment, intervention, and evaluation activities to advance their clinical competencies.

Clinical practice courses in diagnosis and treatment planning can incorporate issues of athletic experiences as well. Courses presenting specific clinical interventions such as motivational interviewing, solution-focused therapy, or various other cognitive behavioral-based therapies, for example, can overlay athlete examples as case studies, with the increasing availability of scholarly articles and reference books on athlete mental health intervention strategies (Moore & Gummelt, 2017; Rollnick et al., 2020). With growing concern regarding substance-related and behavioral addictive disorders, social work courses can include information on the risk and protective factors of mental health literacy and positive coping beyond substance misuse for athletes (de Grace et al., 2017).

Social work mezzo- and macro-practice courses. Sport is highly relational and influences couples, families, and communities, making it an important topic to include in mezzo- and macro-level practice courses. For instance, scholars argue the likelihood of sport participation increases in families with an affinity toward sport (Strandbu et al., 2020). Practice courses focused on family structure and wellness can incorporate the beneficial aspects of sport in course materials, such as improved mental health and general physical capacity and performance (Parnell & Krustup, 2018). Utilizing sport-focused materials can also increase student knowledge of risk factors associated with sport participation, including the impact of injuries on athletes and their families, eating disorder prevalence rates and interventions, and the impact of exercise-induced physical ailments (Kwan et al., 2012).

Another area of direct macro-practice coursework that can involve sport participation is course content related to domestic violence, intimate partner violence (IPV), and sexual assault. Domestic and IPV perpetration research and advocacy efforts as they relate to sport participation are growing (Eitle et al., 2021). Recent high-profile cases involving both college and professional male athletes and assault against women are more than ever in the public discourse (Spencer & Limperos, 2020). Former Florida State University and current New Orleans Saints quarterback Jameis Winston has been in the headlines for years concerning his alleged perpetration of violence against women (Tracy, 2016). In 2014, news headlines revealed the case of Baltimore Ravens' Ray Rice allegedly beating his former fiancée at an Atlantic City casino. Similarly, in 2018, Kansas City Chief Kareem Hunt was presumably caught on video assaulting his partner (Doerer, 2018; Grinberg, 2018). Social work classes focused on domestic and intimate partner violence can pull from this body of sport research to assess environmental risk and prevention measures, and impact treatment options for survivors (Pomeroy & Garcia, 2017; Set the Expectation, 2021).

Human trafficking in and around sport is also a concern at the macro-level (Mission 89, 2021). Two trafficking aspects relate directly to social work practice: the need to protect young athletes from human trafficking in the name of sport, and sex trafficking at large-scale sporting events (Mission 89, 2021). Research, advocacy, and activism in the area focused on child trafficking involves sham agents smuggling children across international borders, promising fame, and escape from poverty through sport (Nkang, 2019). The concern of human and sex trafficking involved in large-scale sporting events such as the Super Bowl can be a focus area for social work students as well (Trujillo, 2021). Human trafficking and its connection to major sporting events are so well known that even Uber drivers and hotel employees are trained on how to identify victims (Lapchick, 2019; Uber, 2020). With thousands attending and tens of millions of viewers tuning in to watch the game, and many more talking about the outcome of the game, students and communities can benefit from an expanded approach that includes a social work

lens to prevent and bring awareness to the trafficking that occurs in and around sport (Lucio et al., 2020; Mahapatra et al., 2019).

Research and policy courses. Integration of sport topics in research courses can further support how social work students learn about research, evaluation, and policy analysis. Students with an interest in sport can design evaluation projects that assess the effectiveness of practice innovations in sport settings, such as support groups for injured student-athletes or the removal of drug-testing policies in professional sport settings. Analysis of changes in the sport environment that influence specific populations, such as the rising cost of youth sport and changes in standards for physical activity in schools, is critically important in research courses, given the broader implications for children's health (i.e., rates of childhood obesity, depression, anxiety). By examining innovations in practice or changes in policy at the intersection of sport and health, social work students can learn how to utilize research as a tool for advocacy and social advancement.

Sport is a global enterprise that profoundly influences individuals, cultures, and societies. Sport can divide people and evoke nationalism, corruption, and conflict. In contrast, sport can also serve as a societal tool to resolve social problems by improving health and increasing opportunities for communication, connection, and community (Hancock et al., 2013). As a result, there are additional opportunities for social work students and faculty to engage in policy analysis and community-based research to identify the context of local or global problems and engage directly with community or international partners to uncover culturally appropriate, locally sourced, and sustainable solutions. Moreover, sports stadiums and competitions held in large cities and on television generate large amounts of revenue, create jobs, and increase tourism both locally and globally. Students have opportunities to utilize a sport for development lens to explore how crises, like the COVID-19 pandemic, not only influenced policy, organizations, teams, and athletes but also the communities that rely on sports to stabilize their economic infrastructure. Training social workers to critically explore the relationships among sports, economic growth, and social welfare can also inform government relations and policy recommendations. Being that the field of sport social work is relatively new, there are ample opportunities to advance social change through research, evaluation, and policy practice at the intersection of sport and social work.

Creation of Sport Social Work Courses and Field Placements

Scholars and educators recommend social workers “get in the game” when it comes to tackling complex social issues, working to create inclusive environments within athletic settings, and supporting athletes' mental health, development, and well-being (Gill, 2008). To do so, social work educators can engage in medium-effort strategies such as the creation of sport social work curricula and field placements. At the time this manuscript was written, authors and leaders at the ASWIS identified a handful of sport social work courses offered within CSWE accredited social work programs. Existing courses cover a range of topics, from mindfulness, adolescent gang involvement, physical and mental performance, youth development through sport, social justice through sport, and generalist social work in sport courses (Lamar University, 2019; The Ohio State University, 2021; Texas Christian University, 2021; University of Alabama, n.d.; University of New Hampshire, 2021; University of Southern California, 2021; Wichita State University, 2018).

Based on a review of existing syllabi, sport social work courses are often approved as elective courses within social work curricula, but not as core coursework or a part of specializations focusing solely on sport. Magier et al. (2021) found that former students who now work in sport had to advocate to focus their studies on sport topics to pursue their professional growth and learning. Without formalized courses focused on sport, social work students with an interest in sport work independently to integrate sport into their learning rather than accessing training that supports their career goals.

Resources for curriculum creation. New resources and tools are emerging to support practitioners, instructors, and faculty in the creation of sport social work courses. *Sport social work: Promoting the functioning and well-being of college and professional athletes* (Moore & Gummelt, 2017) is the first readily available textbook designed to support the training of sport social work practitioners. Of particular significance for those developing sport social work curricula is that Moore and Gummelt (2017) have matched the nine CSWE social work competencies with expected knowledge, skills, and practice behaviors that guide the specialization of sport social work. Social work programs can utilize these competencies to assess student learning and ensure that courses meet CSWE accreditation standards.

Instructors looking to develop or strengthen existing sport social work courses can build upon the topics introduced by Moore and Gummelt (2019) and utilize additional tools and resources outlined in Table 1 to guide curriculum creation and innovation. These resources can inform assignments and in-class activities that will introduce students to current events and topics that transcend sport and encompass issues of diversity and difference, local and global policy, and social and economic justice.

Table 1.
Sport Social Work Resources for Coursework Creation

Resource Type	List of Resources
Textbook	<ul style="list-style-type: none"> • <i>Sport social work: Promoting the functioning and well-being of college and professional athletes</i> (Moore & Gummelt, 2017)
Books	<ul style="list-style-type: none"> • Sport social work (Kratz & Rosado, in press) in <i>Social Workers' Desk Reference, 4th edition</i> • <i>The Revolt of the Black Athlete</i> (Edwards, 2018) • <i>Stolen Childhood: Slave Youth in 19th Century America</i> (King, 1998) • <i>New Arenas for Community Social Work Practice with Urban Youth</i> (Delgado, 2000) • <i>N.F.L.: Not for Long: The Life and Career of the NFL Athlete</i> (Turner, 2018) • <i>What Made Maddi Run</i> (Fagan, 2017)
Documentaries, Movies, TV Series, and Videos	<ul style="list-style-type: none"> • <i>Necessary Roughness</i> is about a female sport psychologist working with vulnerable athletes in the NFL (recommended by Dean & Rowan) • <i>Safety</i> (Disney) is an original movie that brings to light several structural, policy, and interpersonal issues faced by a college athlete, Ray McElrathbey, on and off the field while raising and caring for his 11-year-old brother, Fahmarr (recommended by Bates, in press) • <i>Brooklyn Saints</i> (Netflix)

	<ul style="list-style-type: none"> • <i>Untold: Malice at the Palace</i> (Netflix) • <i>30 for 30: Youngstown Boys</i> (ESPN) • <i>At the Heart of Gold: Inside the USA Gymnastics Scandal</i> (HBO)
Reports	<ul style="list-style-type: none"> • <i>Mental Health Best Practices</i> (NCAA and Sport Science Institute, 2016) • <i>Covering LGBTQ Athletes at the 2020 Olympics and Paralympics</i> (GLAAD and Athlete Ally, 2020)
Blogs	<ul style="list-style-type: none"> • Player's Tribute article "<i>To Anybody Going Through It</i>" by NBA star Kevin Love (2020)
Research Centers & Institutes	<ul style="list-style-type: none"> • Center for Sport & Social Justice • Tulane Center for Sport • NCAA and Sport Science Institute

Strategies to create coursework. Beyond curricular resources, the creation of sport social work courses can look very different based on instructor expertise and the focus, context, and scope of curricular content. One medium-effort strategy to increase exposure to sport social work content is to have experts from across the country create learning modules that can be embedded into social work courses. For example, sport-based learning modules are relevant to social work courses that focus on youth sport participants, school-aged youth, vulnerable populations (i.e., older adults, veterans, underserved communities), or higher education and organizational practice to encompass college and professional athletes. Learning modules can focus on various populations or emphasize how sport influences overall health and well-being.

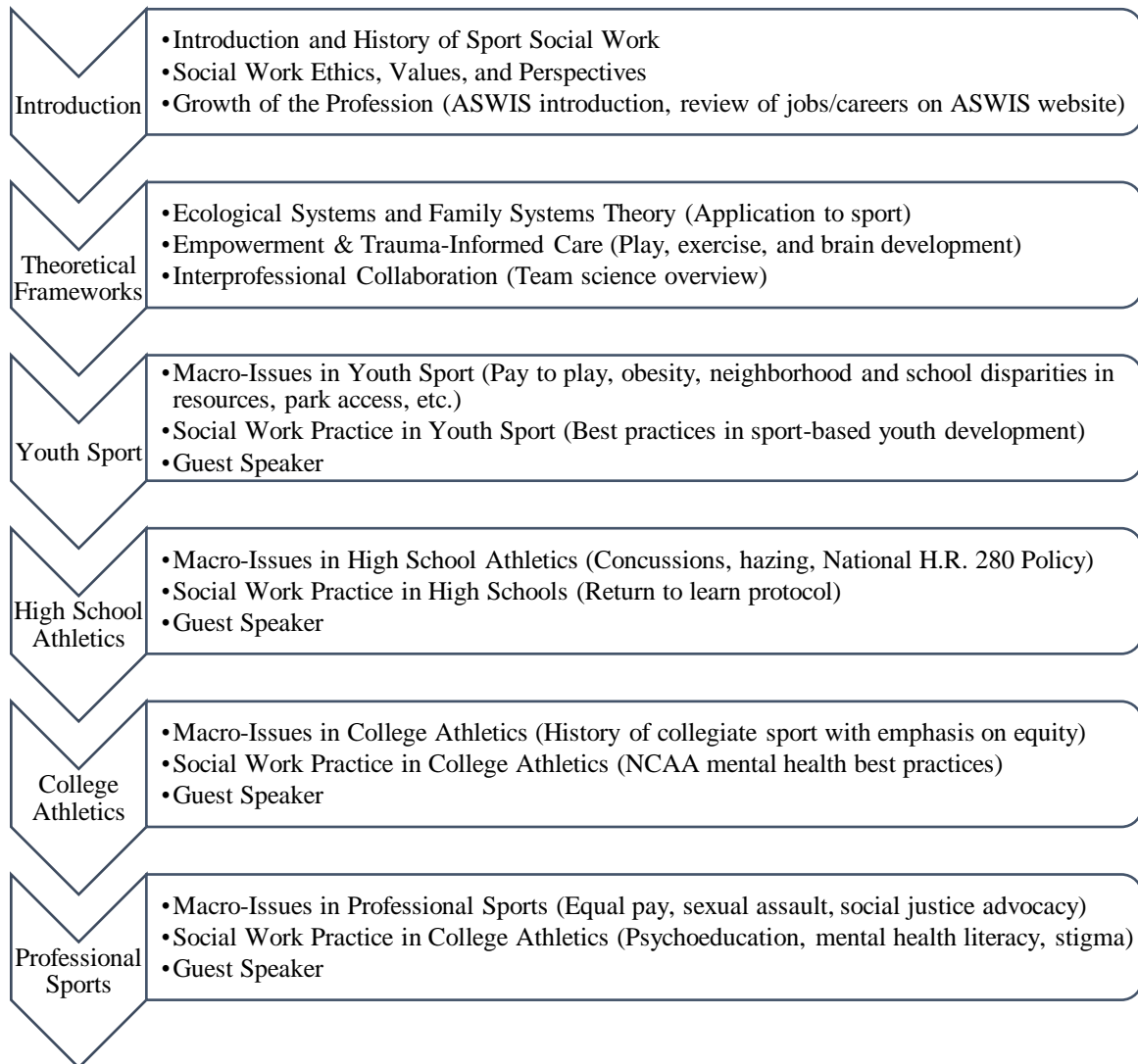
Other medium-effort strategies include leveraging the expertise of faculty to design and create sport social work courses. For instance, faculty experts in the field of sport-based positive youth development at The Ohio State University (2021) developed an undergraduate course entitled *Prevention and Youth Development through Sport, Recreation, and Play*. One half of the course takes place via lecture and discussion and the other part of the course is highly experiential. Students spend half of the course in a gym-like setting learning best practices that guide the design and delivery of youth development programming in sport settings. The course is housed in the College of Social Work within a Youth Development minor designed for students with career interests in education, out-of-school organizations, and community organizations including city governments, parks, recreation centers, and after-school settings. Social work programs can leverage this novel approach to work across academic minors and majors to increase exposure, enrollment, and collaboration amongst campus units that seek to prepare students for careers in sport or with specific populations.

Sport social work coursework can also focus on preparing practitioners for general or clinical practice in recreation or outdoor settings, college or professional sport programs, or broader sport governing bodies, research centers, or global advocacy committees. For example, Bates (under review) developed a hybrid undergraduate *Social Work and Social Justice through Sport* course. Each week, the course sessions introduced students to macro-level issues and current events, then sought to build students' knowledge and skills for generalist practice in sport environments and concluded with a sport social work guest speaker. Bates (under review) found engaging students in topics across the macro-micro continuum strengthened students' understanding of social work competencies and increased students' awareness of the power of sport. To inform the

creation of future sport social work courses, Figure 1 provides a brief example of the macro-micro continuum design of *Social Work and Social Justice through Sport*.

Figure 1.

Design of Social Work and Social Justice through Sport (Bates, under review)



Strategies to create field internships. Field internships coalescing across sport and social work also are necessary to prepare social workers for practice in sport contexts. Magier and colleagues (2021) found sport social work practitioners now working in the field have difficulties accessing field internships in athletic settings. During their training in formal social work programs, students were tasked with developing their learning opportunities and creating new internships in sport contexts (Magier et al., 2021). Magier and colleagues (2021) are among the first to spotlight gaps in accessing formal educational opportunities for students with an interest in sport.

Despite over 800 CSWE accredited social work programs, the accessibility of sport social work field internships remains relatively small, making it challenging for students to acquire sport-specific knowledge, skills, and competencies. Social work educators, instructors, and

program directors can look to partner with sports organizations, recreation centers, and athletic committees to develop training opportunities for students which mirror real-world practice settings. The ASWIS also developed a “Sports Social Work Field Placement Guide” to serve as a starting point for field directors could be to partner with athletics programs or sport for social change initiatives on university campuses (ASWIS, n.d.). By increasing formal learning opportunities that turn into jobs for students, the social work profession can increase the number of preceptors who can supervise social work students in their field internships and strengthen training opportunities within the specialization.

Collective efforts to enhance instructor expertise. Beyond the creation of courses and field internships, there also are opportunities to strengthen the development and delivery of sport social work education more systematically. Sport social work instructors and leaders of the ASWIS education committee can look to create a repository of syllabi and learning activities to support course development at universities across the country. A newly created website, *Prof2Prof.com*, allows faculty to share resources for teaching, research, and student support services. The site allows interdisciplinary scholars to share resources focused on instruction, curriculum design, and teaching innovations. This resource can help sport social work faculty and practitioners access content to support the development of innovative curricular activities, assignments, and coursework ideas.

As the ASWIS continues to grow, educators and instructors can also look to evaluate their courses and publish their curricular models to inform social work education. To date, the *Journal of Social Work Education* (JSWE) serves as a forum for exchanging creative ideas on trends, innovations, and problems across undergraduate, graduate, and postgraduate programs of study. However, sport social work is not currently recognized as a content area in the *Journal of Social Work Education* when authors go to submit articles for peer-review or publication. This gap likely signifies a dearth of scholarship on sport social work education or a lack of formal recognition from JSWE. Sport social work educators can look to utilize this platform to share pedagogical innovations and publish formative and summative assessments of educational innovations. Strengthening evidence on best practices in sport social work education remains a priority for ASWIS and the Society for Social Work and Research Special Interest Group that is focused on sport social work. Through these collective efforts, sport social work can become more widely recognized and grow the specialization.

Growth of Sport Social Work as a Specialization

Recruitment. There are several broad and high-effort strategies that social work students, practitioners, faculty, and interprofessional partners can utilize to grow the specialization of sport social work. As a starting point, leaders and members of the sport social work movement can seek to create a webpage that lists institutions where existing sport social work courses are offered and accessible for students. If a central resource hub existed to consolidate course offerings across the country, students with an interest in sport social work could consider attending institutions that have sport social work faculty or sport social work coursework and field placements. Strengthening the availability of resources on behalf of the ASWIS through social media, advertisements, and other recruitment efforts about sport social work courses, field placements, and informal learning opportunities (i.e., volunteer activities, institutes, university-community partnerships, professional development series, research labs, etc.) also can support the growth of the sport social work specialization.

Outreach. In addition, leaders of the sport social work movement can conduct a national survey to understand the state of sport social work. Understanding the reach and scope of the specialization today and recording its growth is paramount to future advocacy efforts. Scholars and national leaders of the school social work specialization distribute national surveys every 5 to 10 years to better understand the training needs, interests, and current practices of school social workers (Kelly et al., 2010). A national survey of sport social work has the potential to (a) describe the diverse practice contexts and interventions employed by sport social workers; (b) better understand sport social work practice considering the gaps or strengths of formal educational opportunities (i.e., courses and field internships); and (c) assess the characteristics of sport social workers (i.e., role, duties, challenges, successes, etc.). As a sub-specialty within the profession of social work, there is a need to gather data on sport social work to help construct the core knowledge, skills, and competencies underlying this growing area of practice.

Competency-based education model. To improve professional and informal learning opportunities for students with an interest in sport social work, the ASWIS and interdisciplinary partners in sport can work together to determine a national model of sport social work that is competency-based. The national model of sport social work would seek to address multiple areas to guide curricular design, development, and implementation. CSWE acknowledges several specializations, including child advocacy or child welfare, aging or gerontology, addictions or substance abuse, mental health, and school social work (CSWE, 2020), and has curricular guides that aim to prepare students, using best-practice standards (see Substance Abuse; CSWE, 2015a).

CSWE curricular guides are generated using the Commission on Educational Policy framework (CSWE, 2015b), to cultivate an outcome-oriented approach to curriculum design. Educators and leaders in the profession can utilize CSWE policy and accreditation standards to create a national model of sport social work that is driven by competencies and informed by evidence-based curricular resources, to grow the specialization of sport social work. Once a national model exists, leaders of the sport social work movement can engage in broader advocacy efforts to showcase how the specialization of sport social work builds on generalist practice skills, aligns with the nine CSWE competencies, meets workforce demands, and draws upon evidence-informed practices.

As a specialization within the profession, a competency-based curriculum is critical to promoting this area of social work practice at the national and global levels. Once a competency-based training model is developed, leaders of the sport social work movement can then work together to obtain formal recognition of sport social work as an educational track at CSWE's Annual Program Meeting (APM). Sport social work is not recognized as an educational pathway for social work educators at APM (CSWE, 2021). Recognition by CSWE at APM would help raise awareness of the opportunities in sport within the social work profession, allow for information-sharing about innovations in pedagogy, and help to connect faculty with an interest in sport to one another.

Reciprocity options and certification models. Another pathway for growth of the specialization is for universities to create reciprocity options where students can take a course at one institution and have it count for credit hours at their institution. For instance, Tulane, Loyola, Dillard, Xavier, and the University of New Orleans allow eligible full-time undergraduate students to take up to two courses at any one of the schools within the consortium (Tulane University Registrar, 2021). Universities or social work programs that offer sport social work

courses can work to establish reciprocity arrangements to bridge gaps in curricula for students, thereby helping to recruit, educate, and retain students in this specialized area of practice. Taking innovative approaches to offer sport social work courses to students enrolled in social work programs across the country can engage more students in the specialization, especially as universities move toward greater delivery of online or hybrid courses.

Second, opportunities to grow the specialization are through certification models such as the one created by the Network for Social Work Management (NSWM, 2020). The NSWM's certification model is a university partnership program that was designed to advance administrative and leadership competencies among social work graduate students. The NSWM offers a certificate to graduate social work students whose programs offer courses that meet 75% of the NSWM competency performance indicators (NSWM, 2020). To create a similar certification model, the ASWIS can identify specific criteria that demonstrate the competencies of a sport social worker. Criteria may include the following: (a) engagement in sport-specific social work internship; (b) completion of a sport-specific evaluation or research project; (c) enrollment in 6 hours of coursework emphasizing sport (or a % of assignments adapted to focus on sport). Several of these curricular approaches and training pathways can increase teaching and learning opportunities for students with an interest in sport.

Interprofessional collaboration. Social work programs can develop sport social work curricular pathways by leveraging collaborative efforts and interprofessional coursework with other university departments to successfully prepare students for practice in sport. One high-effort strategy to grow the specialization of sport social work is to create new minors and majors that bring together diverse campus entities and embed social work courses in these learning pathways. Examples might include a Mental Health and Sports minor or a Health, Physical Activity, and Sport major. Similar to the Youth Development minor at The Ohio State University, creating cross-disciplinary specialization pathways can expose students to different philosophies, practitioners, practices, and policy issues in sport.

A second high-effort strategy is to offer core sport social work courses within social work programs and supplement the specialization with courses offered in different academic units. Figure 2 depicts a sport social work specialization model where social work students enroll in three centralized sport social work courses in a social work program (i.e., Introduction to Sport Social Work, Clinical Practice in Sport; Social Justice through Sport). In addition, students choose two elective courses within interprofessional majors and minors that enhance their knowledge, skills, and competencies related to sport. Notably, depending on the university, interprofessional elective courses may be housed in health/medical, social science, business, or economic departments.

By developing an interprofessional curriculum, social work programs can create sport social work courses that are open to social work students and students from other disciplines. Students interested in sport social work can supplement their core coursework by taking courses in other departments. For example, a student with an interest in clinical work with athletes in a school setting can take elective courses in psychology, education (early childhood, secondary, or higher education), or counseling. In contrast, a student with an interest in international sport social work could select a course from a department such as sociology, public health, law, or global affairs. The opportunities for students to learn from, with, and among others with an interest in sport have the potential to enhance their interprofessional knowledge and skills, as well as help

educate other professionals about the vast array of skills social workers bring to interdisciplinary teams.

Table 2.

Sport Social Work Specialization and Interprofessional Coursework Model

Sport Social Work in Social Work Program		
<ul style="list-style-type: none"> • Three core sport social work courses • Field internship with a micro-, mezzo, or macro-focus on using sport to address health and well-being or economic, social, or racial justice 		
Interprofessional Coursework (Elective Courses from Different Pathways)		
<u>Physical Health and Exercise</u>	<u>Management and Leadership</u>	<u>Social Health and Well-Being</u>
<ul style="list-style-type: none"> • Nursing • Exercise Physiology • Athletic Training • Kinesiology • Nutrition • Recreation and Physical Education 	<ul style="list-style-type: none"> • Sports Management • Public Relations • Public Affairs • International Affairs • Hospitality Management • Sport Industry • Marketing 	<ul style="list-style-type: none"> • Counseling/Education • Youth Development • Outdoor Education • Coaching • Psychology • Psychiatry • Sociology

Mentoring and coalition-building. The growth of the specialization also requires faculty who are leaders of the sport social work movement to mentor doctoral, graduate, and undergraduate students. Faculty will need to lead efforts that contribute to the development of internship opportunities for students and lead service efforts that support the growth of the sport social work specialization. The University of Michigan has a student-led sport social work club (i.e., Michigan's Social Work & Sport Association, n.d.) that educates social work students about opportunities to practice in sport. At other institutions, faculty can help to bring students together to learn more about this specialization area and also advocate to help increase their access to formal and informal learning opportunities in sport.

Additional opportunities exist for leaders of the sport social work movement to develop partnerships at the annual Sport Social Work Symposium, Society for Social Work and Research Conference, a range of interdisciplinary conferences. Additionally, sport social work faculty and practitioners can advocate in partnership with social work deans, directors, department chairs, and leaders of undergraduate and graduate programs to enrich teaching and learning opportunities at the intersection of social work and sport. Cohort faculty hires and employment of adjunct instructors with a background in sport can increase student access to coursework and mentorship in this specialization area. By increasing collaborations, networking opportunities, and relationships among faculty and practitioners within the social work movement, more stakeholders can work together to strengthen learning opportunities for students.

Challenges, Limitations, and Barriers

Integration, creation, and growth of sport social work curricula is an opportunity for universities and colleges to prepare students for the complexities of social impact work. There are multiple ways education at the intersection of sport and social work can equip future generations of social workers for leadership and innovations within athletics, however, the small size of the

specialization may inhibit the implementation efforts presented in this commentary. Low- and medium-effort strategies (i.e., readings, modules within courses, course creation) are challenging based on the sheer number of sport social work articles, instructors, and evidence-based tools available to existing social work programs. Leaders of the sport social work movement can continue to address this challenge by collaborating with other disciplines, cultivating a competency-based curricular model, and contributing to the literature.

In addition, leaders of social work programs and faculty members may not view sport as a meaningful pathway to enhance social work knowledge, skills, and competencies. To overcome this limitation, leaders of the sport social work movement first need to define this practice area more cohesively, similar to how professional psychology specialties must define new practice areas (i.e., clinical, counseling, school, etc.) and then request recognition from the American Psychological Association (APA). To demonstrate, the APA asserts that new psychology specialties are needed as science advances and the world changes, yet formal recognition of specialties within the profession requires validation through a petition to the APA. To date, the advancement of sport social work movement is limited by its lack of recognition from CSWE. A collaborative, thoughtful, and evidence-informed petition to CSWE about the specialization of sport social work is needed to become a formally recognized area of social work practice that is characterized by specific competencies, problems, and populations.

Finally, sport is a unique ecosystem and mental health continues to be stigmatized by sport-adjacent disciplines, athletic organizations, and the broader cultural norms. Growth of sport social work through field placements, interprofessional coursework models, and research partnerships will require the establishment of trust, relationships, authentic conversations, and teamwork among administrators, faculty, students, and sport leaders on campuses to destigmatize mental health treatment and intervention within athletic organizations across the country. Team-based work, however, underscores the cooperative nature of social impact work and interprofessional collaboration. Social workers and leaders across multiple sectors of sport have an opportunity to work together to innovate and create social impact educational pathways for students by leveraging the knowledge of the whole and not just one profession alone.

Conclusion

The goal of this commentary was to outline a path forward for sport social work education and specific ways in which leaders of the sport social work movement can integrate, create, and grow the specialization of sport social work. The ideas presented here are flexible, adaptable, and present several steps for social work leaders to create social impact educational pathways that center social change and development through sport. For faculty and practitioners involved in the sport social work movement, integrating sport content into social work coursework can expose more students to the professional opportunities that exist within athletic settings, while enhancing their understanding of how sport is a tool for positive social change. Opportunities also exist to create innovative and competency-based courses that include sport-focused resources, evidence-informed curricular strategies, and interprofessional learning activities. Leaders of the sport social work movement can focus their efforts on engaging more students, partnering with other disciplines to offer sport social work training pathways, and working to achieve national recognition as a specialization within the profession of social work.

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Sexual Violence Prevention Among Intercollegiate Athletes, Recreational Athletes, and Non-Athletes: Environmental Considerations for Program Interventions

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Previous research has suggested that individual, social, and environmental factors all play a role in developing individual attitudes regarding sexual violence. On college campuses, both intercollegiate and recreational athletics provide opportunities for students to engage in group settings that can impact these attitudes. The primary purpose of this study was to examine how attitudes towards sexual violence compared across intercollegiate athlete, recreational athlete, and non-athlete populations, while accounting for other individual and school factors. Analysis of a large national dataset found very small but statistically significant differences among these groups in their personal social norms, campus social norms, and bystander efficacy regarding sexual violence. Intercollegiate athletes were slightly lower than non-athletes in their personal social norms and bystander efficacy and slightly higher in their perceived campus social norms, while recreational athletes were higher in bystander efficacy, but lower in personal and campus social norms. Other personal demographic factors, including gender identity and sexual

orientation, were also significant, while most campus factors were non-significant. These findings suggest the identification of college sport as an at-risk community for sexual violence may be an oversimplification, with implications for program intervention design.

Keywords: sexual violence prevention education, socio-ecological model, personal social norms, campus social norms, bystander efficacy

According to the Centers for Disease Control and Prevention (CDC), “sexual violence is defined as any sexual act that is committed or attempted by another person without freely given consent of the victim or against someone who is unable to consent or refuse” (Basile et al. 2014, p. 11). The Campus Sexual Assault Study (Krebs et al., 2007; 2009) indicated campus sexual violence (SV) affects one in five female undergraduate students, as well as 6% of undergraduate men. Recent research by the American Association of Universities found that rates of SV rose between 2015 and 2019 among 21 universities surveyed (Cantor et al., 2020). The prevalence of SV on college campuses is alarming, particularly given the devastating effects on victims (e.g., anxiety and depression, post-traumatic stress disorder, and increased substance use/abuse; Basile & Smith, 2011; Carey et al., 2018; Eisenberg et al., 2016; Ullman et al., 2013). In 2011, the Office for Civil Rights issued a “Dear Colleague Letter” and instructed colleges and universities to take steps to reduce SV on campus (Ali, 2011). These steps include investigations of known incidences of SV, as well as education with the intention of preventing SV from occurring among and between students.

The CDC has recommended “promoting social norms that protect against violence,” specifically pointing to bystander approaches in education (Basile et al., 2016, p.7) which can increase the likelihood of intervention (Ahrens et al., 2011; Santacrose et al., 2020) and decrease social norms supporting SV (Coker et al., 2011; Fenton & Mott, 2018). In their systematic review, Teten Tharp et al. (2013) found a common risk factor for perpetration was peer support for SV, including association with all-male groups, such as fraternities or athletic teams. Additional risk factors for perpetration were hypermasculinity, hostile attitudes toward women, and adherence to traditional gender norms, as well as an acceptance of violence and competitiveness. Lastly, rape myth acceptance (RMA) and victim blaming were found to be attitudes predictive of intentions and behaviors resulting in SV perpetration (Teten Tharp et al., 2013). Thus, programs that change social norms regarding peer support, masculinity and traditional gender norms, and awareness about SV (i.e., breaking down rape myths) are anticipated to be the most effective SV prevention education.

Research on SV has proliferated in the last three decades, but efforts to evaluate the efficacy of prevention education have not kept pace (DeGue et al., 2014). However, several reviews shed light on SV prevention education programming best practices. An older meta-analytic review by Anderson and Whiston (2005) found most programs demonstrated a change in knowledge about sexual assault, but it was difficult to determine efficacy as a whole because “programming on college campuses appears to differ depending on which types of outcomes are considered” (p. 381). DeGue et al. (2014) completed a systematic review of 140 evaluations of SV prevention programs and found that most programs were “fairly one-dimensional” (p. 356) and did not cover the complex array of SV-related topics necessary to change participant attitudes regarding SV. These programs were also found to have an insufficient dosage (i.e., one session of one hour or less) and did not include varied instructional methods (e.g., mainly

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lectures or videos). More recently, a meta-analysis of bystander intervention programs found that longer programs had greater effects than shorter programs on participants' attitudes and beliefs of SV (Jouriles et al., 2018).

The intended outcomes of SV prevention education are to lower risk factors (e.g., RMA, peer support of SV) and increase protective factors. Protective factors include emotional health and connectedness (Borowsky et al., 1997), social support and school belonging (Basile et al., 2018), conflict resolution skills (Forbes & Adams-Curtis, 2001), and greater empathy (Basile et al., 2018). However, "current knowledge of protective factors within the SV literature is extremely limited" (Teten Tharp et al., 2013, p. 141), suggesting SV prevention educators rely on reducing risk factors rather than increasing protective factors. Thus, protective factors should be examined more closely as changing social norms (e.g., gender norms, attitudes toward women, RMA) and increasing bystander efficacy are also critical to reducing and preventing SV.

At-Risk Communities

College communities are particularly at high risk for incidents of SV, with one in five college women experiencing SV (Krebs et al., 2007, 2009; Krebs et al., 2016). According to the U.S. Department of Justice, college women are at greater risk of victimization of SV (Sinozich & Langton, 2014), particularly during the first few months of their first semester, sometimes deemed the "red zone" for victimization (Cranney, 2015; Kimble et al., 2008). In efforts to learn more about SV in college communities, researchers have consistently found alcohol use and participation in fraternities linked with increased rates of SV perpetration (e.g., Klein et al., 2018; Martin, 2016). Additional research has found that participating in intercollegiate athletics is also linked with SV as the emphasis on competition, conquest, and aggression can lead to a "rape-prone environment" (Martin, 2016). These findings are mixed and not always consistent due, in part, to the heterogeneous nature of college sports participation (Burkhard et al., 2019), leading to calls for more research studying the differences between athletes and athletic teams (see McCray, 2019).

SV prevention research has focused on the differences between athlete and non-athlete populations (Morean et al., 2018; Navarro & Tewksbury, 2019; Young et al., 2017). However, the "athlete" designation is often exclusively for individuals playing on intercollegiate teams regulated by the National Collegiate Athletic Association (NCAA), while recreational athletes (i.e., players on club or intramural sport teams) are not distinguished. Although recreational athletes do not have the visibility of a NCAA athlete, they still maintain their association with competitive sports which can influence motivation, behavior, and self-concept (Lamont-Mills & Christensen, 2006). Recreational athletes also develop strong group bonds and experiences, positioning them to have a social lifestyle more similar to intercollegiate athletes and fraternity members than non-athletes (Allan & Madden, 2012). For example, Allan and Madden (2012) found 64% of club athletes and 49% of intramural athletes reported experiencing hazing (i.e., alcohol consumption, humiliation, isolation, sleep-deprivation, sex acts), compared to 74% of intercollegiate athletes and 73% of fraternity members. McGinley and colleagues (2016) found intramural sports participation significantly associated with risky alcohol use (for men and women) and generalized sexual harassment (for women).

Despite maintaining a social structure reflective of populations with higher rape-supportive attitudes and beliefs, recreational athletes are rarely distinguished from non-athletes in SV literature. As membership with athletic teams has been associated with attitudes and

environments related to sexual aggression (Humphrey & Kahn, 2000; McCray, 2015; Murnen & Kohlman, 2007; Stotzer & MacCartney, 2016; Wiersma-Mosley et al., 2017), it is important to determine whether recreational athletics promotes a similar environment. Young et al. (2017) extended the scope of studying SV among intercollegiate athletics to incorporate recreational athletes, finding non-athletes had lower rates of sexual coercion and RMA comparatively to athletes. There were no significant differences in RMA and attitudes toward women between intercollegiate and recreational athletes (Young et al., 2017), positioning recreational athletes closer to intercollegiate athletes than non-athletes. This remains one of the few studies that has captured differences in these athletic populations, therefore, a more comprehensive understanding of social norms, bystander efficacy, and SV education in the college environment can be achieved by studying recreational athletes as a unique subgroup.

Theoretical Framework

Prevention programming is most effective when clearly informed by theory (Nation et al., 2003). The lack of consistent theory framing research has been a criticism in the literature on evaluating the efficacy of SV prevention efforts (DeGue et al., 2014; Teten Tharp et al., 2013). Many SV prevention program evaluations have not used theory, but rather targeted specific outcomes (e.g., lowering RMA). Furthermore, when theories are used to guide SV prevention research, they range from feminist theory (as used by Cheever & Eisenberg, 2020) to grounded theory (as used by DeMaria et al., 2018) to the Theory of Planned Behavior (as used by Young et al., 2017). Often, these theories are focused on individual-level factors to understand SV perpetration and behavioral, cognitive, or emotional risk factors. While this is necessary, a broader view encompassing peer, community, and society-level factors is necessary to fully examine the complex issue of SV prevention (Casey & Lindhorst, 2009).

Bronfenbrenner (1979, 1994) established the ecological systems approach that provided a paradigm to study human development. The socio-ecological model focuses on the interactions and influences of the ecological environment on an individual. The innermost level contains elements of a person's social experiences and interpersonal relationships (e.g., family, peers, work environments). At levels further away from the individual, interactions between two or more inner systems are occurring that indirectly influence the individual (e.g., cultures, customs, belief systems). Ecological systems have been applied to SV research, such as Banyard's (2011) ecological model of bystander intervention, which provided perspective on influences motivating bystander behaviors. Similarly, the CDC established a violence prevention adaptation of the socio-ecological model with four levels – individual, relationship, community, and societal – identified to understand factors that perpetuate or protect against violence (CDC, 2020). This framework also accounts for relationships within and between levels of an individual's ecological environment. The flexibility and breadth of the CDC's violence prevention model affords intentional examination of communities at high risk for SV to guide change at the community level that can influence individual SV and bystander behaviors. As such, it guided two important aspects of this study.

First, the current study assesses protective factors at various levels of the violence prevention model, specifically personal social norms (i.e., individual level), campus social norms (i.e., relationship level), and SV education (i.e., community level). Second, we explored individual- and school-level variables that predict these protective factors among college students to establish a more holistic understanding of campus SV. Individual-level variables are

commonly studied to identify risk factors for sexual assault (Ullman & Najdowski, 2011), perpetrator characteristics (Loh et al., 2005), and bystander behaviors (McMahon et al., 2015). Thus, personal characteristics at the innermost level of the violence prevention model were included in the analysis. Additionally, research has highlighted the importance of considering campus-level variation and characteristics on the risk of experiencing SV (Daigle et al., 2020; Moylan et al., 2019). For example, student demographics (e.g., minority serving institutions) are proposed to be an important campus variable, but there is conflicting information regarding whether an increased risk of SV for minority populations at the individual level translates to the campus level (Moylan & Javorka, 2020). Moylan and Javorka (2020) also noted that campus size, geographic region, and type of institution generally require more attention. As such, several school-level variables were examined to account for important influences beyond the individual level of the violence prevention model.

Purpose of the Study

Distinctions between intercollegiate athletes, recreational athletes, and non-athletes, as well as institutional characteristics, can provide important insight for designing SV prevention education. Therefore, the purpose of this study is threefold: (1) examine differences in campus social norms regarding SV, personal social norms regarding SV, and bystander efficacy (i.e., SV protective factors) across intercollegiate athlete, recreational athlete, and non-athlete student populations; (2) examine how student-level variables (i.e., athlete status, personal demographics, and SV education) predict these SV protective factors; and (3) examine how school-level variables (i.e., institutional affiliation, minority-serving status, enrollment size, and athletic affiliation) predict these SV protective factors.

Methods

Participants and Procedures

Data were taken from a larger data set collected by EVERFI, Inc., an education technology company. EVERFI offers a digital SV prevention education course (*Sexual Assault Prevention for Undergraduates*TM) for college students, which is currently employed by more than 600 post-secondary institutions (Zapp et al., 2018). The online course includes six modules, each with associated learning objectives related to SV prevention. Students who participate in the course complete a pre-course online survey to assess their current beliefs, attitudes, and experiences pertaining to SV. The current study used anonymized data from this larger dataset, collected during the 2018-2019 academic year. Pre-course survey responses were requested from EVERFI to ascertain baseline characteristics of undergraduate students and control for the intervening effect of the course. The principal investigator's Institutional Review Board approved the study as exempt research.

Because this study was interested in how social and institutional structures on campus influenced attitudes regarding SV, first-year students and graduate students (whose amount of time spent on campus could not be determined) were removed from the sample. Additionally, the study included only students from schools whose athletics affiliation was noted at the time of the survey. Thus, the final sample for this study consisted of 62,996 students from 199 institutions in 41 U.S. states and the District of Columbia. Of these, approximately 55.8% identified as women,

41.5% identified as men, and 2.4% identified as another gender identity. Additionally, 19.8% identified as lesbian, gay, bisexual, queer, questioning, or asexual, and 79.1% identified as heterosexual or straight. Approximately 61.5% of the sample were White, while 14.0% were Asian, 12.5% were Black or African American, 15.8% were Hispanic or Latino/a, and 8.0% reported belonging to more than one race or ethnicity. Finally, roughly 7.5% of respondents said they were members of a varsity athletic team, with 6.5% playing intramural or club sports and 86.5% not reporting playing organized athletics at their institutions.

Primary and Secondary Data

Student-level variables were collected as primary data through the pre-course survey. The survey consisted of over 100 items assessing current beliefs, attitudes, and experiences pertaining to SV. Demographic information requested included gender identity, sexual orientation, academic status, age, race/ethnicity, school-based group memberships, and completed training related to SV prevention. Notably, the study assessed athlete registration status, rather than athletic identity itself. Students were asked to select options from a list of potential school-based membership groups to which they belonged; among these were “college athlete” and “intramural/club athlete”. This possible limitation and how it can impact future research in the field will be discussed further.

The current study included 23 ordinal items assessing awareness and attitudes towards bystander intervention and social norms related to SV. Specifically, the measures included 5 items adapted from Banyard et al.’s (2005) bystander attitudes scale, 10 items adapted from Berkowitz’ (2013) Social Norms Toolkit, and 8 items developed to align with the behavioral and learning objectives of the online course. Participants rated their level of agreement (1 = strongly disagree ... 7 = strongly agree) with various statements. These items were adapted and developed by a team of subject-matter experts and research methodologists using academic literature and gold standard tools for assessing SV (Zapp et al., 2018). Additionally, 10 binary (i.e., yes/no) items from Banyard et al.’s (2005) bystander efficacy scale were included. Participants selected all that apply from a list of 10 bystander behaviors they would be confident engaging in if observing a situation that is or could lead to SV.

School-level variables were collected as secondary data based upon the student’s institution. Institutional affiliation (public, private religious, or private nonreligious), minority-serving status (Hispanic-serving institution [HIS], Historically Black college or university [HBCU], or predominantly White institution [PWI]), enrollment size, and athletic affiliation (National Association of Intercollegiate Athletics [NAIA], National Junior College Athletic Association [NJCAA], NCAA Division I, NCAA Division II, or NCAA Division III) of the student’s institution were included in the dataset for analysis.

Data Analysis

Scale Development

For the 23 ordinal items drawn from Banyard et al. (2005) and Berkowitz (2013), a combination of parallel analysis, principal component analysis (PCA), confirmatory factor analysis (CFA), and Rasch analysis were used to explore and validate the measures ultimately used. The data were randomly divided in half, with the first half used in the exploratory phase

and the second half used in the confirmatory phase, per DeVellis (2017). Latent parallel analysis was employed to determine the proper number of components to extract from the data. Next, PCA with oblimin rotation was conducted to examine the underlying component structure. The reference structure was examined for items with loadings greater than 0.5 and with no cross-loadings within 0.2 (Osborne, 2014). Items that did not meet these parameters were dropped, and the parallel analysis-PCA process was reiterated until an acceptable structure was found.

Next, CFA was conducted to confirm the proposed PCA model was a statistically and theoretically good fit. Multiple fit indices were used to assess global model fit, including a non-significant χ^2 test, confirmatory fit index (CFI) > 0.95, Tucker-Lewis index (TLI) > 0.95, root mean squared error or approximation (RMSEA) between 0.00 and 0.06, and standardized root mean residual (SRMR) between 0.00 and 0.08 (Hu & Bentler, 1999; Kline, 2015). Standardized factor loadings > 0.70 and average variance extracted (AVE) > 0.50 also indicate good model structure (Brown, 2015).

Rasch analysis was utilized to further validate the scale. Person separation ≥ 2.0 and item separation ≥ 0.8 indicate the instrument distinguishes well between those of high and low ability, while item separation ≥ 3.0 and item reliability > 0.9 suggest adequate sample size to model the difficulty of the items; additionally, item outfit mean-square residual statistics (MNSQ) between 0.5 and 1.5 also indicate the data are a good fit to the Rasch model (Bond & Fox, 2015; Boone et al., 2014; Linacre, 2017). Items not falling within these ranges were dropped from the scale, and the process was repeated. Rasch scores were then produced to create continuous measures of item difficulty and person ability for use in subsequent analyses. By default, Rasch scores are calculated in logits; however, to ease interpretability, the scores were rescaled to fall approximately between 1 and 7, as in the original scale.

For the 10 binary (i.e., yes/no) bystander efficacy items, we were not able to conduct the full parallel analysis-PCA-CFA process, so the dichotomous Rasch model was used for psychometric analysis. Fit parameters were the same as those described above, with poor-fitting items dropped and the data re-analyzed until adequate fit was achieved. Rasch scores were calculated and rescaled to fall between 1 and 7.

Analysis of Variance

Because the data violated assumptions of normality and homogeneity of variance, the Kruskal-Wallis test, a non-parametric form of ANOVA, was employed to determine the amount of variance in Rasch person scores that could be explained by athlete status. Effect sizes were calculated using the η^2 statistic, and interpreted according to the following standards: < 0.06 is a small effect, 0.06 to 0.14 is medium, and > 0.14 is large (Meyer & Seaman, 2013). Dunn's test was used to analyze pairwise group differences, with statistically significant mean differences measured by Dunn's z -statistic > 1.96 and $p < .05$ (Dinno, 2015).

Multilevel Regression Analysis

Because of the clustered data structure (i.e., students within institutions), a multilevel regression analysis was conducted to determine how individual- and group-level variables were related to the three scale outcomes. Due to minor deviations from homogeneity of variance, robust maximum likelihood estimation was used. Two different models were estimated for each of the outcome variables. The student-level variables in the first set of models were athlete

status, age, year in school, on-campus residency, race/ethnicity, gender identity, and sexual orientation. School-level variables were institutional affiliation, minority-serving status, enrollment size, and athletic affiliation. In the second set of models, a number of variables concerning the amount of SV education students had received, the perceived usefulness of the education, and 12 different types of individual trainings. All individual categories were dummy-coded, with the predominant group used as the reference indicator and excluded from the models to avoid multicollinearity issues.

Results

Scale Development

Initial parallel analysis of the ordinal items suggested a three-component model. However, when this structure was tested with PCA, two items did not have loadings greater than 0.5 on any factor or had cross-loadings within 0.2. Thus, these items were dropped and the process repeated. After four total parallel analysis-PCA iterations, an acceptable reference structure was identified. Based on the content of items that loaded together, the first component was defined *personal social norms*, and the second *campus social norms*.

CFA was used to confirm this structure. Although the χ^2 test was significant ($\chi^2[89] = 46061, p < .001$) and CFI (0.861) and TLI (0.836) below recommended cutoffs, the RMSEA (0.041, 95% CI = 0.041, 0.041) and SRMR (0.031) indicated good fit. Additionally, the AVE for *personal social norms* was 0.673, and 0.643 for *campus social norms*. Thus, we determined the model was a sufficient fit for the data. After Rasch analysis on the *personal social norms* scale, two items were dropped as not having item outfit MNSQ in the acceptable range. On the *campus social norms* scale, Rasch analysis suggested it was not necessary to drop any further items.

Next, Rasch modeling was conducted on the dichotomous *bystander efficacy* items. Based on item outfit MNSQ, one item was dropped after the initial iteration. Item separation (215.4) and item reliability (1.00) were adequate, but person separation (1.21) and person reliability (0.59) were not. Still, the item-difficulty scores had a wide enough range to indicate the *bystander efficacy* scale accurately measures a broad range of person abilities. The final item structure of all three constructs, including Rasch item scores, is found in Table 1 below.

Table 1
Final Measures of Dependent Variables

Construct	Item	Rasch Score
Personal Social Norms	I would take action in a situation in which someone was trying to take advantage of another person sexually.	4.09
	I would never place blame on a person who told me that someone had sexually assaulted them.	4.04
	I would express concern if I saw a person exhibiting abusive behavior toward their partner.	4.02
	I would respect someone who made sure they asked for and received consent in a sexual situation.	3.67
	I would reach out to offer support to a friend who I suspect is in an abusive relationship.	3.63

	In a sexual situation, I would make sure to communicate with the other person about what they want.	3.57
	Clear, verbal, and sober permission is the best way to make sure a person is okay with sexual activity.	3.30
	I would respect a person who took action to prevention a sexual assault.	3.25
Campus Social Norms	Most students at my school would not engage in sexual activity with someone if the other person.	4.28
	Most students at my school would take action in a situation in which someone was trying to take advantage of another person sexually.	3.81
	Most students at my school would never place blame on a person who told them someone else had sexually assaulted them.	3.79
	In a sexual situation, most students at my school would make sure to communicate with the other person about what they want.	3.67
Construct	Item	Rasch Score
	Most students at my school would express concern if they saw a person exhibiting abusive behavior toward their partner.	3.40
Bystander Efficacy	Confronting the person who appears to be causing the situation.	4.74
	Talking to others about your concern.	4.11
	Creating a distraction to cause people to disengage from the situation.	4.00
	Stepping in and separating the people involved in the situation	3.83
	Asking others to step in as a group to diffuse the situation.	3.47
	Finding the friends of those involved and asking them for help.	3.34
	Telling someone in a position of authority about the situation.	3.32
	Following up later to check in with the person.	2.93
	Asking the person who you're concerned about if they need help.	1.98

Analysis of Variance

Based on the Kruskal-Wallis tests, athlete status explained a significant amount of variance in personal social norms ($F = 75.5, p < .001, \eta^2 < 0.001$), campus social norms ($F = 66.0, p < .001, \eta^2 < 0.001$), and bystander efficacy ($F = 87.0, p < .001, \eta^2 < 0.001$). While this estimate was statistically significant in all three analyses, the magnitudes of the effect sizes were very small. Thus, athlete status explained very little of the variance in *personal social norms*,

campus social norms, or *bystander efficacy*. Further, as seen in Table 2, almost all mean differences among the groups were statistically significant, using an adjusted *p*-value based on the multiple comparisons. However, the magnitudes of these differences, as well as which groups rated higher, changed with the outcomes.

Table 2
Pairwise Group Comparisons

Variable and Comparison	Δm	<i>z</i>	<i>p</i>
Bystander Efficacy			
College-IM/Club	-0.29	7.77	<.001
College-Non-Ath	-0.05	2.00	0.136
IM/Club-Non-Ath	0.26	-8.29	<.001
Personal Social Norms			
College-IM/Club	0.00	-1.64	0.102
College-Non-Ath	-0.10	5.07	<.001
Personal Social Norms			
IM/Club-Non-Ath	-0.10	6.70	<.001
Campus Social Norms			
College-IM/Club	0.20	-7.47	<.001
College-Non-Ath	0.15	-9.08	<.001
IM/Club-Non-Ath	-0.05	1.49	0.406

Multilevel Regression Analysis

Results of the first set of regression models without the SV education variables are found in Table 3.

Table 3
Multilevel Regression Results(Without SV Education Variables)

	BE	PSN	CSN
Intercept	4.01***	5.21***	4.52***
Level-One (Student) Independent Variables			
College Athlete	-0.05	-0.06**	0.12***
Intramural/Club Athlete	0.20***	-0.04	-0.03*
Age	0.02*	0.03***	0.03***
Junior	-0.01	-0.01	-0.06***
Senior	-0.06*	-0.06**	-0.16***
On-Campus Resident	0.01	-0.04	-0.04*
American Indian or Alaska Native	-0.36***	-0.09*	0.07
Asian	-0.64***	-0.49***	-0.01
Black or African-American	-0.48***	-0.08***	-0.09***
Hispanic or Latino/a	-0.34***	-0.05*	0.01

Pacific Islander or Hawaii Native	-0.11	-0.03	0.07
Other Race or Ethnicity	-0.58***	-0.20***	-0.08
More than One Race or Ethnicity	0.51***	0.19***	-0.06*
Female	0.01***	0.17***	-0.22***
Transgender Female	-0.68**	-0.58***	-0.48***
	BE	PSN	CSN
Transgender Male	-0.35*	-0.14	-0.56***
Genderqueer	-0.24	-0.06	-0.29**
Gender Nonconforming	-0.23*	-0.02	-0.34***
Other Gender Identity	-0.22	-0.19*	< 0.01
Asexual	-0.41***	-0.19***	0.09***
Bisexual	0.31***	0.17***	-0.13***
Gay	0.24***	0.21***	-0.11***
Lesbian	0.13	0.13**	-0.12**
Queer	0.46***	0.33***	-0.42***
Questioning	0.18***	0.01	-0.24***
Other Sexual Orientation	0.03	0.02	-0.19***
Level-Two (School) Independent Variables			
Private Nonreligious Institution	0.11*	0.09**	0.06
Private Religious Institution	0.05	0.08*	0.01
Hispanic Serving Institution	-0.08	0.03	0.17***
Historically Black College or University	-0.30***	-0.07	-0.19**
Enrollment between 1,000 and 4,999	0.21**	0.01	-0.13
Enrollment between 5,000 and 9,999	0.12	0.08	-0.13
Enrollment between 10,000 and 19,999	0.24*	0.060	-0.16
Enrollment greater than 20,000	0.20	0.09	-0.19
NAIA Athletics	-0.02	0.04	0.13
NJCAA Athletics	-0.07	-0.03	-0.01
NCAA Division II Athletics	-0.06	0.04	0.05
NCAA Division III Athletics	-0.06	0.01	0.01

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

College athlete status was negatively related to *personal social norms* ($\beta = -0.06$, $p < 0.001$) but positively related to *campus social norms* ($\beta = 0.12$, $p < 0.001$); the relationship to bystander efficacy was not statistically significant. Intramural/club athlete status was not significantly related to *personal social norms*, but was negatively related to *campus social norms* ($\beta = -0.03$, $p = 0.035$) and positively related to *bystander efficacy* ($\beta = 0.20$, $p < 0.001$). The magnitudes of these effects were relatively small.

Age was positively associated with all three outcomes, although junior and senior class status were negatively related, when statistically significant. For *bystander efficacy* and *personal social norms*, all race/ethnicity variables were statistically significant except for Hawaiian/Pacific Islander, which had the smallest sample size. In the *campus social norms* model, only Black/African American ($\beta = -0.09, p < 0.001$) and identification with more than one race or ethnicity ($\beta = -0.06, p = 0.011$) were statistically significant. Being female was positively associated with *bystander efficacy* and *personal social norms*, but negatively related to *campus social norms*; all of the other gender identity variables tended to be negatively associated with the three outcomes, with varying levels of significance. Non-heterosexual sexual orientations also tended to be positively associated with *bystander efficacy* and *personal social norms*, but negatively related to *campus social norms*. The sizes of the effects varied across outcomes.

Of the level-two predictors, private nonreligious institution status was positively related to *personal social norms* ($\beta = 0.09, p = 0.001$) and *bystander efficacy* ($\beta = 0.11, p = 0.017$). HSI status was positively related to *campus social norms* ($\beta = 0.17, p < 0.001$), and HBCU status was negatively related to *bystander efficacy* ($\beta = -0.30, p < .001$) and *campus social norms* ($\beta = -0.19, p = 0.007$). None of the other athletic affiliation variables were significant in any of the models.

Results of the second set of models including the SV education variables are found in Table 4.

Table 4

Multilevel Regression Results (With SV Education Variables)

	BE	PSN	CSN
Intercept	3.48***	4.96***	4.46***
Level-One (Student) Demographic Variables			
College Athlete	-0.01***	-0.09***	0.11***
	BE	PSN	CSN
Intramural/Club Athlete	0.13***	-0.07**	-0.04*
Age	0.02**	0.03***	0.03***
Junior	0.02	0.01	-0.05**
Senior	-0.04	-0.03*	-0.15***
On-Campus Resident	0.01	-0.05**	-0.04*
American Indian or Alaska Native	-0.33***	-0.09*	0.070
Asian	-0.49***	-0.43***	-0.01
Black or African-American	-0.44***	-0.07**	-0.01***
Hispanic or Latino/a	-0.27***	-0.03	0.01
Pacific Islander or Hawaii Native	-0.11	-0.04	0.05
Other Race or Ethnicity	-0.49***	-0.16**	-0.07
More than One Race or Ethnicity	0.40***	0.15***	-0.06**
Female	0.11***	0.16***	-0.23***
Transgender Female	-0.66**	-0.12	-0.48***
Transgender Male	-0.28*	-0.14	-0.54***
Genderqueer	-0.230	-0.07	-0.29***

Gender Nonconforming	-0.20*	-0.014	-0.34***
Other Gender Identity	-0.22*	-0.18*	< 0.01
Asexual	-0.35***	-0.17***	0.09***
Bisexual	0.26***	0.15***	-0.14***
Gay	0.19***	0.18***	-0.12***
Lesbian	0.12	0.12**	-0.13**
Queer	0.39***	0.29***	-0.42***
Questioning	0.17***	< 0.01	-0.24***
Other Sexual Orientation	0.01	0.02	-0.20***
Level-One (Student) Training Variables			
Hours of Training Received	-0.01	-0.02***	-0.03***
Perceived Usefulness of Training	0.04***	0.06***	0.05***
Alcohol and Drug Training	-0.04	-0.12***	-0.13***
Bystander Intervention Training	0.24***	0.05**	-0.04*
Consent Training	0.09***	0.06***	-0.06**
Dating Violence Training	-0.01	0.01	-0.03
Healthy Relationships Training	0.06***	-0.020	0.04
Support Training	0.15***	0.13***	0.11***
Reporting Training	0.19***	0.12***	0.09***
Personal Safety Training	0.12***	0.01	-0.01
Sexual Assault Training	-0.08*	-0.040	0.04**
Sexual Harassment Training	0.04	0.040	-0.02
Sexual Health Training	0.10***	0.06***	-0.03
Stalking Training	0.02	0.020	0.15***
	BE	PSN	CSN
Level-Two (School) Independent Variables			
Private Nonreligious Institution	0.06	0.06*	0.06
Private Religious Institution	-0.01	0.05	0.01
Hispanic Serving Institution	-0.05	0.04	0.17***
Historically Black College or University	-0.32***	-0.08*	-0.21**
Enrollment between 1,000 and 4,999	0.11	-0.03	-0.14
Enrollment between 5,000 and 9,999	0.05	0.05	-0.14
Enrollment between 10,000 and 19,999	0.14	0.020	-0.172
Enrollment greater than 20,000	0.10	0.05	-0.20
NAIA Athletics	0.02	0.06	0.13
NJCAA Athletics	0.02	0.01	< 0.01
NCAA Division II Athletics	-0.04	0.04	0.05
NCAA Division III Athletics	-0.06	0.01	0.01

* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Controlling for the SV education variables did not meaningfully affect the significance of magnitude of most variables in the model. Notably, however, upon the addition of these variables, college athlete status became significantly and positively related to *bystander efficacy* ($\beta = -0.01, p = < 0.001$), and intramural/club status became significantly and negatively related to *personal social norms* ($\beta = -0.07, p = 0.004$).

Among the SV education variables, hours of training were negatively and significantly related to *personal social norms* ($\beta = -0.02, p < 0.001$) and *campus social norms* ($\beta = -0.03, p < 0.001$), but not significantly related to *bystander efficacy*. Usefulness of training was positively and significantly related to all outcomes. The individual training variables also yielded some notable results. Not surprisingly, bystander intervention training was significantly and positively related to *bystander efficacy* ($\beta = 0.24, p < 0.001$), with the largest effect of any individual training on any of the outcomes. Trainings that had positive and significant effects across all outcomes included programs on helping victims and reporting. Some trainings had differing effects on the different outcomes. For instance, consent training was significantly and positively related to *personal social norms* ($\beta = 0.08, p < 0.001$) and *bystander efficacy* ($\beta = 0.09, p < 0.001$), but negatively related to perceptions of *campus social norms* ($\beta = -0.04, p < 0.001$). It is possible such trainings make some students more confident in their personal norms and efficacy, but can also cause them to have fewer positive views of the behaviors they observe from peers on campus.

Discussion

The current study examined differences in campus social norms, personal social norms, and bystander efficacy across athlete and non-athlete populations and tested student-level and school-level variables as predictors of these SV protective factors.

Differences Across Athlete and Non-Athlete Populations

The findings demonstrated significant differences in personal social norms, campus social norms, and bystander efficacy across athlete (intercollegiate; recreational) and non-athlete student populations. Overall, this aligns with previous studies that have demonstrated differences between athlete and non-athlete populations (e.g., McGinley et al., 2016; Murnen & Kohlman, 2007; Young et al., 2017) and athletic contexts (e.g., Forbes et al., 2006; Gage, 2008) in relation to SV attitudes and behaviors. However, whereas the variance explained by athlete grouping was statistically significant, the effect size for all outcomes was very small, suggesting athletic context may not be as much of a risk factor as previously proposed (Martin, 2016) or differences in sport participation may merit investigation (e.g., team vs. individual sports).

From a socio-ecological perspective (CDC, 2020), engagement in an athletic group should influence a student's SV protective factors. Intercollegiate athletes may have reported higher campus social norms due to departmental initiatives fostering community engagement (e.g., athletes organizing charity events) that promote a positive view of one's campus community (Huml et al., 2017). Comparatively, intercollegiate and recreational athletes reported lower personal social norms, which may be explained by the construct of athletic identity. Brewer et al. (1993) defined athletic identity as the extent to which an individual sees themselves as an athlete and associates with the athlete role. For recreational athletes, their continued participation in competitive sports allows them to retain some degree of their athletic identity (Lamont-Mills & Christensen, 2006). Like student-athletes, this may be a dominant identity that

insulates other social identities, such as the role of SV bystander (Beamon, 2010). Athletes are also at risk for “pluralistic ignorance,” which is “a psychological phenomenon in which the majority of group members hold private attitudes that differ from perceived group norms” (Levene et al., 2014, p. 527). Pluralistic ignorance may be reflected in the findings as athletes’ personal social norms (private attitudes) were considerably higher than their perceived campus (group) norms.

When comparing athlete populations, recreational athletes reported the highest bystander efficacy. Collegiate recreation presents a unique environment, as students often straddle athlete and non-athlete roles in their recreational sport involvement (Helms, 2010). Though their athlete identity likely remains salient to an extent, transitioning out of varsity athletics (e.g., high school) may decrease their exposure to toxic cultures prevalent within hegemonic, hypermasculine environments (Martin, 2016; Murnen & Kohlman, 2007). Furthermore, engagement in collegiate recreation facilitates opportunities for leadership development (e.g., sport club officer; Dugan et al., 2015). Literature has identified student leaders as informal helpers on college campuses, possessing important skills in working with peers that can aid in SV prevention efforts (Banyard et al., 2009).

Student-Level Predictors of Sexual Violence Protective Factors

Athlete status was a significant but small predictor of each SV outcome. Intercollegiate athletic membership predicted lower personal social norms and bystander efficacy but higher campus social norms. Thus, while intercollegiate athletes may have a positive view of other students on campus, they are less likely to report protective factors enhancing SV prevention. This is an important contribution as previous scholarship has almost exclusively focused on SV risk factors (Teten Tharp et al., 2013). Overall, this finding supports scholars’ efforts to develop SV interventions targeting intercollegiate athletes (McCray et al., 2018a).

Comparatively, recreational sport membership was associated with decreased personal and campus social norms, and higher bystander efficacy. This finding suggests recreational sport athletes are similar to intercollegiate athletes in terms of SV attitudes, which aligns with Young et al. (2017). However, recreational sport athletes demonstrate greater confidence to intervene when observing SV, which may reflect the priorities of their campus unit. Collegiate recreation departments are housed within the division of student affairs, where student development and diversity and inclusion are of primary concern (Lower-Hoppe et al., 2019). Within this environment, students may experience greater confidence to intervene on behalf of a peer.

Athlete status had little impact on a student’s perceived social norms and bystander efficacy. While many scholars point to the rape prone culture, hegemonic views, and sexual aggression/coercion within athletics (Cheever & Eisenberg, 2020; Martin, 2016; McCray, 2019; Young et al., 2017), a few previous studies have found athletes and non-athletes are more similar than dissimilar in relation to SV attitudes, behaviors, and victimization (Navarro & Tewksbury, 2019; Smith & Stewart, 2003). Humphrey and Kahn (2000) argued mere athletic membership is not as important as the specific norms of existing team members that influence team culture and behaviors. It is possible some athletic teams foster prosocial norms and bystander efficacy while other athletic teams do not (Gidycz et al., 2007). SV interventions may be more effective by targeting the team-level of the athletic community. Overall, the notion that college sport is an at-risk community appears to be an oversimplification (Smith & Stewart, 2003).

Personal demographics were significant predictors of campus social norms, personal social norms, and bystander efficacy. Previous research indicates demographics play a large role in bystander intervention and perceived social norms (Diamond-Welch et al., 2016; Hoxmeier et al., 2020). Social identity theory proposes individuals categorize themselves as belonging to various social groups, which can lead to the adoption of attitudes and behaviors of that in-group (Tajfel, 1979). Berkowitz (2013) claimed an individual's likeliness to engage in SV prevention is influenced by the degree individuals feel their beliefs and attitudes are supported. Accordingly, one's social group can impact their individual SV attitudes and behaviors.

Gender and sexual orientation demographic variables had the greatest effect on all outcomes and are considered salient identities in the context of SV prevention education (de Heer & Jones, 2017; Rogers & Rogers, 2020). Prior studies on gender and sexual minorities demonstrated certain populations of queer students, gay men, bisexual women, and especially transgender people are at an increased risk of SV on college campuses (Cantor et al., 2020; Johnson et al., 2016) and, therefore, may be more sensitive to social norms regarding SV. Racial/ethnic identity had moderate effects on SV protective factors. Prior studies have found Black students and those with intersecting or multiple identities experience higher rates of SV (Coulter et al., 2017).

A student's year in school has been linked to a prevalence of SV (Rogers & Rogers, 2020) such that first-year students are at a higher rate for victimization (Adams-Curtis & Forbes, 2004). While academic year was found to be a significant predictor of campus social norms, it was not significant of bystander efficacy. Thus, while greater time in school may influence one's views of the campus community, it may not directly contribute to one's confidence to intervene if observing SV.

SV education was a significant predictor for campus social norms, personal social norms, and bystander efficacy. More specifically, the breadth of training completed (i.e., different content areas) positively predicted all outcomes. When analyzing the specific training variables, bystander intervention training had the highest effect on bystander efficacy, which is a common finding in the literature (Banyard et al., 2005; Moynihan et al., 2011). Additionally, training on how to support someone who has experienced SV and how to report SV had a significantly positive relationship with all outcomes. On the contrary, alcohol/drug training had a negative relationship with all outcomes, which could indicate a lack of connection between SV and the presented topics (Leone et al., 2018). This demonstrates the importance of including relevant topics within SV prevention programs.

Perceived usefulness of training also positively predicted SV protective factors. Education theorists suggest more meaningful learning experiences are less likely to be rejected (Weinberg & Reidford, 1972). Learning experiences that are personally meaningful, relevant to the learner's self-concept, and situated in the learner's environment (e.g., social, cultural) can result in greater learning and overall development (Chen & Schmidtke, 2017). While level of training and usefulness of training positively predicted the SV protective factors, hours of training was a negative predictor. This conflicts with a majority of scholarship finding longer programs more effective (DeGue et al., 2014; Nation et al., 2003). However, Jouriles et al. (2018) conducted a meta-analysis of bystander programs and found that while the longest programs (i.e., 6 hours) produced the largest effects on participant attitudes and behaviors, 20-minute bystander programs had positive effects comparable in magnitude to 90-minute programs. Collectively, these findings support quality over quantity in relation to SV education programs that may have limited resources or access to target populations.

School-Level Predictors of Sexual Violence Protective Factors

Based upon the socio-ecological model (CDC, 2020), a student's school environment should influence their awareness and attitudes towards bystander intervention and social norms related to SV. When considering the classification of institution, institutional affiliation (i.e., public, private religious, or private nonreligious) was largely non-significant. The literature presents mixed findings as some studies have suggested the "moral community" of religious institutions help prevent SV (e.g., Vanderwoerd & Cheng, 2017), while other studies have implied the lack of sexual education at religious institutions increases the risk for SV (e.g., Davidson et al., 2017). In light of the non-significant findings, perhaps the provision of SV education is a greater predictor of SV protective factors than the public versus private nonreligious environment.

The present study found a statistically significant negative relationship between HBCU classification and predicting bystander efficacy, personal social norms, and campus social norms. Thus, individuals at these institutions have lower perceptions of their own personal social norms and bystander efficacy, as well as the campus social norms they observe. While, previous studies have found lower rates of SV at HBCUs compared to non-HBCUs (e.g., Krebs et al., 2010), scholarship has also pointed to HBCUs having less bystander intervention education within their prevention programs (Kafonek & Richards, 2017). The literature also highlights conflicting messages students at HBCUs are exposed to, with the media portraying Black students as hypersexual while the religious affiliation of many HBCUs makes the topic of sexual behavior taboo (Johnson, 2017). These conflicting messages may undermine students' social norms related to SV and confidence intervening when observing SV.

The literature proposes larger university settings are more susceptible to SV due to the greater presence of *available* victims (Stotzer & MacCartney, 2016), elevated status of athletes, and likelihood students are more removed from controlling institutional forces (Murnen & Kohlman, 2007). However, the current study found no significant relationships between enrollment size and SV protective factors. Murnen and Kohlman (2007) unexpectedly found fraternity men at smaller colleges at greater risk for RMA than at larger colleges, pointing to the power of peers in defining the parameters of acceptable SV attitudes and behaviors and exerting pressure on group members. Therefore, school-based group membership (intercollegiate athletics; intramural or club sport) may have a greater influence on SV protective factors than broader institutional factors such as enrollment size (Gidycz et al., 2007).

When examining athletics beyond individual membership, institutional athletic affiliations were found not significant in the model. However, previous studies have found reports of SV to be higher on campuses with Division I athletic programs versus Division II, III, and institutions with no athletics (Wiersma-Mosley & Jozkowski, 2019). The non-significant findings within this study may be attributed to the differing levels of social power and prestige within intercollegiate and recreational programs but also across division levels. Overall, individual variables appear to have greater impact on SV protective factors than school variables.

Implications

SV continues to be a salient problem within college communities (Krebs et al., 2007), with legislation (e.g., Clery Act) and the Office for Civil Rights calling upon universities to implement SV prevention education (Ali, 2011; Coker et al., 2011). In response to research

suggesting college athletes are at greater risk for perpetration and victimization of SV, bystander intervention programs have begun targeting this at-risk population (e.g., McCray et al., 2018a; Moynihan & Banyard, 2008; Moynihan et al., 2010). Contrary to popular media and some scholarship, the current study suggests athletes may not be at greater risk for SV perpetration than non-athletes. These results do not diminish the value of interventions targeting college athletes, but rather illuminate program design considerations that may enhance program efficacy.

For example, EVERFI's digital SV prevention education course (*Sexual Assault Prevention for Undergraduates*TM) that served as a platform to access participants for this study is only one of several different courses in their Sexual Assault Prevention suite. EVERFI also offer courses designed specifically for college athletic staff and intercollegiate athletes. The results from this study that shine light on the differences and similarities of students based on athlete status can help EVERFI further develop and refine the sexual assault prevention courses targeting specific groups (B. Burkhard, personal communication, December 8, 2021). As intercollegiate athletes reported lowest personal social norms and bystander efficacy, EVERFI could evaluate their curriculum to ensure athletic staff and student participants learn what consent and SV is, receive opportunities to critically reflect upon their attitudes and behaviors related to consent and SV, learn strategies to intervene if observing a situation that is or could lead to SV, and receive opportunities to translate their learning into practice to increase their bystander efficacy.

Scholarship suggests the potential rape-prone culture of college athletics may be more prevalent at the team-level than program- or division-level (Gidycz et al., 2007; Humphrey & Kahn, 2000). As such, SV intervention programs should target the most at-risk athletic teams (e.g., teams with incidents of SV, aggressive sports; Forbes et al., 2006) and/or be implemented across the department. The authors of the current study recommend SV intervention programming be required department-wide, yet delivered at the team-level. Within college athletics, NCAA policy now requires all intercollegiate athletes complete SV prevention education (NCAA, 2020). Athletic administrators may consider evidence-based SV education programs (e.g., EVERFI's SV prevention education course), as well as the NCAA's toolkit for SV prevention (NCAA Sport Science Institute, 2019), as available resources. In addition, educators and administrators may rely upon the Resource Guide offered by Raliance, a nonprofit organization dedicated to ending sexual violence in one generation, particularly through the use of sport as a protective factor. Lastly, as EVERFI intends to disseminate the findings of this study (and other research on their SV prevention education courses) to campus practitioners through webinars, podcasts, monthly publications, and their annual research conference (H. Rider-Milkovich, personal communication, December 8, 2021), athletic administrators can look to this organization as a source of information.

According to the CDC, effective SV prevention programs must address individual, relationship, community, and societal factors influencing SV knowledge, attitudes, and behaviors (Basile et al., 2016). As intercollegiate athletes function in tightly knit, social communities (McMahon, 2004), bystander intervention programs should be delivered at the team-level to effectively address SV culture and behaviors within athletic teams (McCray et al., 2018a). Moreover, scholars have called for a more nuanced education on SV, "as one size does not fit all" (McCray et al., 2018b, p. 45). Particular attention should be paid to individual demographics of program participants, which were found more influential in predicting SV protective factors than athletic status or school-level variables.

The present study found gender and sexual orientation to be the strongest predictors of SV protective factors amongst other demographics, and should be considered throughout program design. Women and queer students are more likely to be assaulted; therefore, they have a greater inclination to be receptive to gender-segregated program design (de Heer & Jones, 2017; Rogers & Rogers, 2020). Prior research has indicated gender-segregated training appears more effective (Anderson & Whiston, 2005; Berkowitz, 2002; Jackson & Davis, 2000), as men can become more defensive on topics of SV in the presence of women (Brecklin & Forde, 2001; Rozee & Koss, 2001). Additionally, same-gender educators could ensure receptive audiences (McCray et al., 2018a). Placing individuals with others who share similar social identities could create more engagement with the educational programming as individuals would be surrounded by people with congruent attitudes and beliefs (Berkowitz, 2013). Furthermore, program design could portray both genders as bystanders - rather than men as perpetrators and women as (potential) victims - to minimize defensive responses and promote a greater sense of openness to program content (Moynihan & Banyard, 2008, 2011).

Given the low amount of training reported in the current study, there is a clear need for SV prevention education on college campuses, particularly in the fall semester deemed the “red zone” for victimization (Kimble et al., 2008). SV education should be presented in a manner personally meaningful to participants’ social identity and self-concept (Chen & Schmidtke, 2017), and emphasize content areas that are relevant to SV prevention. A comprehensive approach to SV programming should include training across all levels of the socio-ecological model to address the complex array of individual, relationship, community, and societal factors contributing to students’ SV knowledge, attitudes, and behaviors (Basile et al., 2016).

As institutional characteristics were found less predictive of SV protective factors than student-level factors, the study findings somewhat combat scholarship that has identified large, NCAA DI, public institutions as high-risk settings for SV (Stotzer & MacCartney, 2016; Vanderwoerd & Cheng, 2017; Wiersma-Mosley & Jozkowski, 2019). Moreover, the authors assert the importance of SV prevention education for all types and sizes of institutions. Such education should account for participants’ school-based group membership, personal demographics, and educational topics that are personally meaningful.

Limitations and Future Research

While the current study extends SV prevention literature, the findings should be interpreted with the limitations in mind. In light of the social cohesion of athletic teams, participants reporting athletic membership may be influenced by their team’s social norms more than campus norms. Future research should seek a broader cross-section of athlete and non-athlete populations across academic years and consider measuring social norms at the group-level rather than campus level. Additionally, as noted above, the study focused primarily on athlete registration status, a dichotomous indicator of whether a student was on a varsity or intramural/club team. Future research can expand in this area by including more robust and psychometrically tested measures of athlete identity such as the Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993). It is also highly possible that other factors at the individual, relationship, community, and societal levels are influencing these SV protective factors. Future research may consider the influence of media, peers and teammates, and one’s family and background as contributing to SV knowledge, attitudes, and behaviors (McCray et al., 2018b). Evaluating different subgroups of athletes (e.g., contact vs. non-contact sports) may also identify

at-risk populations and increase understanding of ways SV prevention programming works for different types of athletes. Measuring athletic identity using the AIMS scale is an important variable to include in future studies that evaluate athlete subgroups. This study focused on membership to athletic groups or teams, but it did not capture the strength of athlete identity for individual team members. Athletic identity would add depth to such studies since expectations and competitiveness vary considerably across different intramural and sport club teams.

Another limitation is in construct measurement. While anonymous or confidential questionnaires can result in valid and reliable self-report population-level data (Zapp et al., 2018), future research may consider incorporating objective measures. Additionally, though PCA and CFA metrics indicated the measures were sound, Rasch analysis suggested limitations in measuring individuals at extreme abilities on the construct. Lastly, intersecting marginalized social identities can be lost in survey construction that compares different groups (Koss et al., 2011). Future research may consider a qualitative or mixed-methods research design to deepen our understanding of how demographics influence SV protective factors. Tests of measurement invariance can also provide evidence that measures function equally well across groups and time.

Conclusion

Participation on college athletic teams is often linked to higher rates of SV, making athletic teams the focus of much research on SV prevention. By exploring comparisons between athletes (i.e., intercollegiate and recreational) and non-athletes, this study found differences in SV protective factors among all three groups. Our findings demonstrated gender and sexual orientation are more predictive of personal social norms, campus social norms, and bystander efficacy when compared to athlete status. Despite small effect sizes, DeGue et al. (2014) noted that when interventions have the potential of reaching a large audience, it may be necessary to look beyond statistical significance and consider clinical significance because “even a small effect on perpetration behavior may have a large impact” (p. 359). As such, findings from this study can guide the design and delivery of SV prevention education on college campuses.

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Collegiate Athletes Engaging in Activism: Perceptions of Social Justice Causes and Support from Significant Social Agents

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Recently, collegiate athletes have used their platform to promote positive social change. However, few studies with large samples have investigated the demographics of collegiate athlete activities, their views toward a number of social inequities, and their perceptions of social support. The current study aimed to address those gaps and explore how these factors influenced the likelihood of collegiate athlete activism engagement. Participants ($n = 4,473$) completed self-report scales on social justice causes and perceived support. For this sample, athletes who identified as male, Black, and More than One Race engaged in activism at a higher rate than expected and a majority of participants viewed all social issues as social justice causes. In terms of support, athletes viewed higher levels of general support than instrumental support and approval for engaging in activism and rated parents, friends, and teammates as most supportive in all three support categories. Activists, compared to non-activists, were more likely to view social issues as social justice related and rated most social agents as more approving of their own activism. Findings indicate that perceptions of social issues and support from social agents, especially non-sport social agents, might be one reason for collegiate athletes' participation in activism.

Key words: collegiate sports, activism, social justice, athlete

Due to their roles on college campuses, collegiate athletes have greater visibility and a larger platform than their non-athlete student peers (Kluch, 2020). This platform provides collegiate athletes with unique opportunities to use their voices for the promotion of positive social change, often to an extent that is unavailable to their non-athlete counterparts (Mac Intosh et al., 2020). Given the recent national revitalization of the Black Lives Matter movement due to the brutal murders of Black Americans such as George Floyd and Breonna Taylor, athletes have begun to call for systemic change to eradicate social injustice. These actions have included a number of high-profile activist acts across the country. For example, athletes from Pac-12 institutions formed the #WeAreUnited group to fight for fair treatment of college athletes with regard to COVID-19 protocols, revenue sharing, racial equity, and image and likeness rights (*#WeAreUnited*, 2020). Data from a national survey conducted by the National Collegiate Athletic Association (NCAA) during the 2020 academic year – a time marked by increased national discourse on racial justice – also showed a significant increase in social justice engagement among collegiate athletes, with almost 90% of survey respondents having engaged in racial justice conversations (NCAA, 2020).

In spite of the recent increases in collegiate athletes' engagement in racial justice conversations, we know relatively little about which athletes are moving beyond these conversations to actual activism. Some research suggests that individuals' identities may play a role in their motivation and level of engagement in activist work (Calow, 2021; Kluch, 2021; Mac Intosh et al., 2020). Further investigating the demographic characteristics of activist athletes would allow for the development of targeted interventions to help athletes find their voice for causes that were individually relevant. In addition to the demographic makeup of these individuals, another key factor in their engagement in activism might be their own personal beliefs about various social causes. As athlete activism has been increasing at all levels, but especially at the collegiate level, understanding the athletes' perception of what constitutes a social justice issue was an important first step in better understanding what issues were important to athletes and consequently the motivation these athletes may draw upon to inform their activism. This is even more important since universities as a whole are supposed to be aiding in the holistic development of their students.

In addition to personal characteristics, another reason why collegiate athletes might be becoming more active in the social justice space could be the support they receive from coaches, academic advisors, athletic trainers, faculty, and other athletics department staff. Even though these support systems are a critical component of the athletes' environments, we know relatively little about how collegiate athletes perceive support from these various social agents when it comes to engaging in activism. Therefore, we looked at the support from significant social agents for college athletes' activist engagement to gain a better sense of how such agents may assist activist athletes in utilizing their platform for social justice efforts while also helping those closest to these athletes (e.g., coaches, administrators) understand how to better support athletes in driving action for systemic change.

Athlete Activism for Social Justice

Activism, or groups applying pressure on institutions or organizations in an attempt to change practices, conditions or policies with which they do not agree (Smith, 2005), has seen an increase in recent years in the sport environment – particularly when it comes to activism for social justice. Sport scholars have defined social justice as the “embracing [of] diversity, equity,

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and inclusion while recognizing the roles of privilege and power” (Camiré et al., 2021). More specifically, social justice is concerned with creating an environment in which all members of society are treated equitably, fairly, and respectfully (Culp, 2016) and are provided the same protections, opportunities, and rights (National Association of Social Workers, 2015). A commitment to social justice can range from recognizing the dignity of historically marginalized groups to redistributing economic wealth and power (Fraser, 1999). Social justice activism is often aimed at creating more equitable opportunities and outcomes for historically minoritized groups, which Tatum (1997) has identified as groups that are marginalized based on their race/ethnicity, gender, sexual orientation, socioeconomic background, religion, age, as well as mental and physical abilities.

In this most recent new wave of social justice athlete activism led by Black athletes (Edwards, 2016), activist efforts can take multiple forms including, but not limited to, community outreach, financial contributions, public statements, wearing activist apparel (e.g., “I can’t breathe” shirts), and engaging in protests or other public displays of resistance (Mac Intosh et al., 2018). While these efforts have often taken place at the professional level, collegiate athletes have increasingly used their position on college campuses to encourage political and social change as well (Kluch, 2020). For example, in 2015, the University of Missouri’s team protested discriminatory practices and racist actions on their campus (Ferguson & Davis, 2019; Yan et al., 2018) and football players at Northwestern University led an unsuccessful attempt to unionize (Strauss, 2015). Other prominent examples of collegiate athletes utilizing their platform for social change include football players at the University of Texas leading efforts for numerous campus changes (Davis, 2020), basketball players at the University of Washington launching initiatives that focus on prison and criminal justice reform (Kirschman, 2020), and calls by athletes at the University of Texas and University of Washington to eliminate controversial landmarks, many of which celebrated the country’s racist past.

Despite the well-documented stigma attached to activism in the arena of sport (Kaufman, 2008; Kaufman & Wolff, 2010), the recent reemergence of the activist athlete is informed by a rich history of athlete activists from historically minoritized and marginalized populations who have leveraged their power to challenge the institution of sport to call attention to injustices (Wiggins, 1992). For example, scholars have long shown the central roles Black athletes have played during the Civil Rights Movement (Agyemang et al., 2018; Cooper et al., 2019; Edwards, 2016; Edwards, 1969) and, more recently, the Black Lives Matter movement (Sarver Coombs & Cassilo, 2017). Similarly, women have played crucial roles in advancing feminist movements in and beyond sport, as each wave of feminism often coincided with advances in women’s empowerment informed by female athleticism (Cooky, 2017). Scholars have also examined the leadership of queer sportspeople in advancing the rights and inclusion of athletes who identify as members of the LGBTQ+ community (Anderson, 2002; Anderson et al., 2016; Griffin, 1998). The leadership of athletes from minoritized groups to advance social justice agendas is not surprising, given that they are often motivated by a desire to provide visibility to minoritized voices, serve as role models, eliminate discrimination, and promote more inclusive environments both in and beyond sport (Kluch, 2021). However, even though this area of research is beginning to receive additional attention, large scale studies that have looked at exactly *who* is participating in activism and *why*, especially at the collegiate level, are rare. Therefore, the first purpose of the current study was to investigate the demographics of collegiate athletes engaging in activism and explore how athlete identities (demographics) might influence an athlete’s likelihood to engage in social justice activism.

As an athlete's demographic background is only part of what would make one engage in activism, the Theory of Planned Behavior (TPB; Ajzen, 1991) might also provide insight into why athletes decide to engage, or not engage, in social justice activism. Specifically, the TPB predicts an athlete's attitudes and normative beliefs will influence their intention to engage in an activity, which will ultimately influence their engagement in the behavior. One aspect that could influence one's attitude toward engaging in social justice activism are one's beliefs about various social inequities. Specifically, if an athlete views a specific cause as being a social justice issue, they would be more likely to engage in action that would illuminate that cause and bring change to the matter. For example, if an athlete viewed racism as something that is personally relevant and influencing them or their significant others, they would be more likely to engage in action to bring attention to the issue. On the other hand, if they perceived the cause as unrelated to themselves or those they care about, they would be less likely to engage in activist behavior. A similar pattern was recently identified by Mac Intosh et al. (2020), who found that collegiate athletes who held minoritized gender or racial identities were more likely to engage in activism than their non-minoritized peers. However, currently no studies have investigated collegiate athletes' perceptions of social justice issues. Therefore, the second purpose of this study was to (a) investigate collegiate athletes' perceptions toward various social justice issues, and (b) explore if there were differences in these perceptions between activist and non-activist athletes.

Social Support

In addition to attitudes influencing individuals' likelihood to engage in activism, the TPB (Ajzen, 1991) also predicts that subjective norms will influence their intentions to engage in the behavior. As subjective norm beliefs focus on how an individual perceives others, these beliefs would be closely connected to athlete's perceptions of social support. Social support, or "verbal and nonverbal behavior produced with the intention of providing assistance to others perceived as needing that aid" (MacGeorge, et al., 2011, p. 317), influences a number of behaviors and personal outcomes. Specifically, social support influences feelings of value, acceptance and love, perceptions of belonging, as well as mutual obligation and communication (MacGeorge et al., 2011). A network of support includes relationships in all areas of one's life such as family, friends, neighbors, coworkers, clubs, church, social groups, political groups, and many others (MacGeorge et al., 2011). For college athletes, this network also encompasses those involved in the sport environment and includes coaches, peers, athletic trainers, dieticians, sport psychologists, medical practitioners, and other athletic department staff (Freeman, 2020).

Although initially thought to be a unidimensional construct, recent studies have shown social support to be multidimensional with four functional aspects (Freeman, 2020; MacGeorge et al., 2011). Primary types of support include emotional support (e.g., reassurance, comfort), instrumental support (e.g., material goods, services), informational support (e.g., advice, feedback), and esteem support (e.g., validation, value assurance; Burleson & MacGeorge, 2011). The multidimensional nature of social support allows for a more nuanced understanding of the construct, as individuals will need different types and levels of each type of support largely dependent on their circumstances. However, even though the multidimensional nature of social support allows for a range of possibilities in research studies, studies examining the various types of social support from multiple social agents are not numerous (Freeman, 2020). Studies that investigate more than one type of social support and perceptions of how multiple social agents provide that support offer an opportunity to expand understanding of their

individual impacts, especially in the sport realm that has typically utilized social support in very specific situations. This multidimensional support may also be critical to understanding when and why athletes engage in specific activist behaviors.

In the sport context, several studies have explicitly investigated social support, with a majority of those studies investigating collegiate athlete perceptions of general support. For example, multiple studies have demonstrated that high levels of perceived social support from teammates, coaches, athletics department staff, family, and friends have positive impacts on mental health and well-being as well as were related to lower levels of burnout (Cho et al., 2020; DeFreese & Smith, 2013, 2014; Gabana et al., 2017; Hagiwara et al., 2017; Sullivan et al., 2020). Further, higher levels of perceived social support from strength and conditioning coaches, athletic trainers, coaches, and teammates were recognized by athletes as having a large impact on their recovery, value of rehabilitation, feelings of well-being, and overall satisfaction (Barefield & McCallister, 1997; Bone & Fry, 2006; Corbillon et al., 2008; Judge et al., 2012; Lu & Hsu, 2013). Clearly, the perceptions of support for collegiate athletes have shown to be related to a large number of positive outcomes – and the lack of perceived support, in turn, to be related to more detrimental outcomes.

In addition to the perceptions of general support, several studies have investigated support in regards to the four functional aspects of support (Freeman, 2020; MacGeorge et al., 2011) and found that, typically, these more specific forms of support also led to positive outcomes for athletes. For example, Sullivan and colleagues (2020) found that tangible support strongly negatively related to depressive symptoms as athletes were more able to handle stress because of the tangible support available (e.g., tutoring, health services, and a supportive network of family and friends). Finally, one study by Corbillon and colleagues (2008) investigated types of support from various social agents and found that injured athletes perceived emotional support from teammates to be stronger than that from coaches, indicating that assessing social support from a variety of social agents can be informative in certain events and inform best practices for how to help athletes in these circumstances. In total, these studies indicate that measuring both general support and specific types of support might be beneficial to understand the impact of support for collegiate athletes better.

Social Support for Activism

In many of the examples of athlete activism, support from the public was mixed (Sarver Coombs et al., 2019; Kaufman, 2008). Often, athletes are expected to focus solely on sport and not use their platform for influencing social change (Kaufman, 2008). However, the presence of social support from key social agents can influence athletes to engage in social justice movements. For example, Havana McElvaine, a collegiate athlete who kneeled to protest police brutality, indicated her coach's support was one reason for her actions (University of Washington, 2017). Similarly, Kluch (2020) found that athletes draw heavily from mentorship in their activism. Conversely, several athletes who acted without support of their coaches or individuals at their institution faced backlash that included loss of playing time and scholarship, and even suspension or removal of the team (Kaufman, 2008). In the research domain, a number of studies have looked at how perceptions of support have influenced engaging in activism. Fuller and Agyemang (2018) interviewed Black Division III male collegiate athletes in terms of their attitudes toward activism, perceptions of social support, and ability to engage in activism. Athletes in the study indicated that perceived social support, or lack of support, would influence

their actions toward activism (Fuller & Agyemang, 2018). Specifically, these collegiate athletes voiced that even though coaches pushed them to engage in community service activities, they felt like the coaches would not support engaging in activism because of negative impacts to the program and institution “image”.

A recent study by Mac Intosh et al. (2020) utilized the Theory of Planned Behavior (Ajzen, 1991) and found that collegiate athletes’ intention to engage in activism was influenced by their own attitudes, perceived behavioral control, and subjective norms. While not explicitly investigating social support, this study supports the idea that significant others will impact athletes’ intentions to engage in activism. However, even though these two studies provide some support for the influence of others on collegiate athlete intentions to engage in activism, Fuller and Agyemang (2018) investigated a small group of Division III athletes while MacIntosh et al. (2020) did not explicitly measure perceptions of support. Whereas past studies have investigated perceived support for athletes in a number of settings and activities, collegiate athletes’ perceptions of support to engage in activism on different social justice issues is relatively unexplored, especially with consideration to individual factors that might influence these perceptions. Therefore, the third and final purpose of this study was to investigate athletes’ perceptions of support in terms of general support, instrumental support, and support to engage in activism from a variety of significant social agents (i.e., parents, friends, teammates, coaches, athletic department employees, professors, university administration).

As such, our study had three primary purposes. First, we aimed to assess the demographic characteristics of collegiate athletes who are engaging in activism (gender, year in school, race/ethnicity, self-identified socio-economic status, and parental level of education) and investigate if those demographic characteristics influenced athletes’ engagement in activism. Second, we looked to explore athletes’ perceptions of current social inequities (e.g., racism, sexism, health) and how these perceptions differ between activist and non-activist athletes. Finally, we aimed to investigate collegiate athletes’ perceptions of support, specifically their perceptions of both general and instrumental support, as well as perceived approval to engage in activism from a number of social agents that included parents, non-teammate friends, teammates, coaches, athletics department employees, faculty, and university administrators. By investigating these questions, we aimed to better understand athletes’ decision to engage (or not engage) in activism and provide suggestions for social agents about the ways they can best support athletes in engaging in activism moving forward.

Methods

Participant Recruitment, Data Collection & Procedure

The current study is a secondary analysis of data collected by (organization focused on racial justice through sport that has been redacted for peer review). The initial data collection involved collegiate athletes completing an online survey sent to them by their athletic directors or other athletics staff member at each university. In some cases, the survey was shared with certain teams or athlete groups at the school (e.g., Student-Athlete Advisory Committee) while other times contact individuals sent the survey to the entire athlete population at a school. Once respondents accessed the survey, they were asked to give consent and proceeded to complete the survey, which took approximately 15 minutes. The survey contained sections focused on demographic information, the extent to which respondents viewed issues as social justice causes,

and perceptions of support from a variety of individuals close to the athletes. Only after all athletes had completed the survey, (organization redacted for peer review) provided school-specific reports of school-wide responses to the athletics departments and, in many cases, completed programming on race and racism with the athletes. In addition, (organization redacted for peer review) created an initial report outlining some descriptive statistics that was made available directly to their stakeholders and posted on their website. For the current project, the (organization redacted for peer review) reached out to the research team to complete additional data analyses on the de-identified data set.

Measures

Demographics

Participants responded to a number of demographic questions including age, gender, race and ethnicity, class standing, engagement in previous activism, sport, economic background, parents' educational attainment, and engagement in activities outside of sport. For previous engagement in activism, we asked athletes to indicate "Prior to campus" and "Since coming to campus" if they had participated in a social justice initiative. If athletes answered yes to either/both of the questions, we classified them as activist athletes.

Social Justice Causes

We asked participants about a number of possible social justice causes with a stem of "Which of the following types of causes would you consider social justice causes?" These causes included racism, mental health, health/disease, sexism, poverty, LGBTQ+, and disability. Participants responded on a four-point Likert scale ranging from 1–4 (1 = Definitely not; 2 = Probably not; 3 = Probably yes; 4 = Definitely yes). For the current study, responses from this scale were reported for each social justice cause in terms of athletes' perceptions of *yes* and *no* as well as mean responses. Specifically, we classified athletes who answered "definitely not" or "probably not" as not viewing the cause as social justice-oriented and those who answered "probably yes" or "definitely yes" as viewing the cause as social justice-oriented.

Perceived Support

We asked participants to indicate their perceptions of support from various key stakeholders (parents, teammates, friends, athletics department employees, coach, professors, and university administrators) in their lives in three dimensions of support. For general support, we asked athletes to "indicate how supportive in general you would consider the following persons." For instrumental support, we asked athletes "how likely you would be to go to one of the following persons for assistance if you had a problem." Finally, for support for engaging in activism, we asked athletes "how likely you believe the following persons would be to support your involvement in social justice initiatives." For each section, athletes answered questions about all seven social agents on a six-point Likert scale that ranged from extremely supportive/unlikely to extremely supportive/likely. Participants rated each social agent on three dimensions.

Participants

In total, 4,473 participants completed the online survey. Participant' average age was 19.65 ($SD = 1.34$) and the sample was closely split between athletes identifying as men ($n = 2,588$; 57.8%) and athletes identifying as women ($n = 1,884$; 42.1%), with one athlete identifying as gender-queer. In terms of race and ethnicity¹, there was a high percentage of athletes who identified as Caucasian/white ($n = 3,398$; 75.9%), with other athletes identifying as Black/African American ($n = 387$; 8.6%), More Than One Race ($n = 295$; 6.6%), Hispanic ($n = 193$; 4.3%), Asian ($n = 137$; 3.1%), Pacific Islander ($n = 20$; .4%), Native American ($n = 18$; .4%), and Other ($n = 25$; .6%). Participants represented a variety of class standings with the highest number indicating they were first-year students (first-year students $n = 1714$, 38.3%; sophomore $n = 995$, 22.2%; junior $n = 939$, 21.0%; senior $n = 772$, 17.2%; graduate student $n = 21$, .5%; not indicated $n = 35$, .8%). Participants represented 42 schools from all three NCAA divisions. In terms of previous activism, over two-thirds of participants had not engaged in social justice activism in the past ($n = 3206$; 71.6%) with the remaining collegiate athletes reporting participation in high school ($n = 385$; 8.6%), college ($n = 442$; 9.9%), or during both high school and college ($n = 443$; 9.9%)

Collegiate athletes were drawn from a wide variety of sports in the sample. Groups representing more than 5% of the sample included cross country and track and field ($n = 649$; 14.5%), soccer ($n = 601$; 13.4%), football ($n = 460$; 10.3%), lacrosse ($n = 365$; 8.2%), swimming and diving ($n = 346$; 7.7%), softball ($n = 302$; 6.7%), basketball ($n = 296$; 6.6%), baseball ($n = 257$; 5.7%) and volleyball ($n = 252$; 5.6%). When self-identifying their background, athletes overwhelmingly identified as middle class ($n = 3325$; 74.3%) with others identifying as working class ($n = 662$; 14.86%) and upper class ($n = 433$; 9.7%). Participants also reported their parents' education background with a majority reporting they had two parents who had graduated with a college degree ($n = 2704$; 60.4%), while others indicated that one parent had a college degree ($n = 1104$; 24.7%), neither parent had a degree ($n = 634$; 14.2%), or that they did not know their parents' educational background ($n = 34$; .8%). Participants were also involved in a variety of other activities outside of sport including a volunteer organization ($n = 850$; 19.0%), religious organization ($n = 559$; 12.5%), academic honors society ($n = 520$; 11.6%), Greek Life ($n = 348$; 7.8%), political organization ($n = 173$; 3.9%), and performing arts organization ($n = 92$; 2.1%)

Statistical Analyses

We conducted statistical analyses that aligned with our three primary research purposes. First, to answer which athletes were engaged in activism and whether various demographic characteristics (year in school, gender identity, ethnicity/race, self-assessed socio-economic status, and parental level of education) influenced that engagement, we calculated descriptive statistics and conducted chi-square analyses. Second, to understand how college athletes viewed a number of social issues and if those views differed between activist and non-activist athletes, we calculated descriptive statistics and again conducted chi-square analyses. For both research

¹ Even though we combined both in one question for analysis purposes, we recognize that *race* and *ethnicity* are two separate social constructs. Participants were given the option to choose one or more of the following descriptors when asked about their racial and ethnic identities: Black/African-American, White/Caucasian, Hispanic, Native American, Asian, East Indian, Pacific Islander, and More Than One Race, Other.

purposes 1 and 2, we utilized standardized residuals to indicate whether the actual number of athletes engaging or not engaging in activism was significantly more or less than would be expected for the current sample. In these analyses, we used a threshold of $p < .05$ to determine overall significance of the chi-square test and a threshold of (+/-) 1.96, as suggested by Field (2013), that would indicate that the actual count in a cell was significantly different (more or less) than what would be expected for the current sample. Finally, to explore collegiate athletes' perceptions of support from a number of social agents (the third research purpose), we conducted a series of repeated measures ANOVAs for each of the social agents. In each of these repeated measure ANOVAs, the type of support (general support, instrumental support, and approval to engage in activism) was the main effect and activist status was used as a between subject factor. In these analyses, we used a criterion of $p < .05$ for both the main effect (general support, instrumental support, and approval to engage in activism) and the interaction effect (activist and non-activist X support).

Because we also wanted to get a better understanding of how an individual's identity influenced their participation in social justice activism, we conducted a series of chi-square analyses. Due to the concerns about unequal group sizes and the necessary power to detect group differences, we did not include any individuals who identified as a classification that had low representation in the overall sample (e.g., graduate student).

Results

Who Engages in Activism?

When investigating those individuals who participated in social justice initiatives in the past, several demographic groups were overrepresented in relation to the total population (see Table 1). Specifically, collegiate athletes identifying as men participated in social justice initiatives at a higher rate than expected for the sample while collegiate athletes identifying as women participated at a significantly lower rate than expected for the sample. In terms of grade classification, the chi-square test was also significant, $\chi^2(3, n = 4420) = 9.71, p < .05$. Participants who identified as seniors reported they were less likely to have engaged in social justice initiatives than expected for the sample. Finally, the chi-square test analyzing race was significant, $\chi^2(8, n = 4476) = 48.85, p < .001$. More specifically, athletes who identified as Black/African American and More Than One Race indicated that they engaged in social justice initiatives at a higher rate than expected, while athletes identified as white engaged in social justice initiatives at a lower rate than expected. In terms of gender identity, the chi-square test was also significant, $\chi^2(1, n = 4472) = 46.74, p < .001$. The chi-square analysis for both self-identified socioeconomic status $\chi^2(2, n = 4420) = 8.052, p < .05$ and parental education level $\chi^2(1, n = 4442) = 10.97, p < .01$ were significant but no individual cells reached the threshold for significance indicating that these groups had unexpected variation, but not sufficient variation in any one grouping to demonstrate significant differences.

Table 1.

Demographic information for total sample and in relation to past activism experience.

Demographics	n (%)	Activist	Non-Activist
Total Participants	4476	828 (18.5)	3648 (81.5)
Gender			
Male	2588 (57.8)	565 (21.8)	2023 (78.2)
Female	1884 (42.1)	260 (13.9)	1624 (86.1)
Year in School			
First year	1714 (38.3)	342 (20.0)	1372 (80.0)
Sophomore	995 (22.2)	192 (19.3)	803 (80.7)
Junior	939 (21.0)	168 (17.9)	771 (82.1)
Senior	772 (17.2)	115 (14.9)	657 (85.1)
Race/Ethnicity			
White	3398 (75.9)	561 (16.5)	2837 (83.5)
Black	387 (8.6)	99 (25.6)	288 (74.4)
More than one Race	295 (6.6)	83 (28.1)	241 (71.9)
Hispanic	193 (4.3)	39 (20.2)	154 (79.8)
Asian	137 (3.1)	31 (22.6)	106 (77.4)
Pacific Islander	20 (.4)	8 (40.0)	12 (60.0)
Native American	18 (.4)	4 (22.2)	14 (77.8)
Self-identified Socioeconomic Status			
Working Class	662 (15.0)	137 (20.7)	525 (79.3)
Middle Class	3325 (74.3)	583 (17.5)	2742 (82.5)
Upper Class	433 (9.8)	96 (22.2)	337 (77.8)
Parent Education Levels			
Both parents have a college degree	2704 (60.9)	543 (20.1)	2161 (79.9)
One parent has a college degree	1104 (24.9)	185 (16.8)	919 (83.2)
Neither Parent has a college degree	634 (14.3)	97 (15.2)	537 (84.8)

Note: Percentages might not add up to exactly 100% because of those not included in the chi-square analyses and due to rounding.

What do Collegiate Athletes View as a Social Justice Cause?

In terms of what type of issues collegiate athletes perceive to be social justice causes, a majority of participants indicated that all provided topics were social justice causes (see Table 2). Specifically, over 90% of collegiate athletes in the study perceived that racism and sexism were social justice causes while just under 70% of participants perceived health issues to be a social justice cause. When comparing collegiate athletes who had participated in social justice activism to those who had not engaged in activism, all chi-square tests for each type of activism were significant. These significant chi-square tests indicate that collegiate athlete activists perceived all of the topics as social justice issues at a higher rate than what would be expected for the sample.

Table 2.

Perceptions of various societal issues as social justice causes by the total sample, activist athletes, and non-activist athletes and results from the chi-Square tests between activist and non-activist athletes.

	Total	Activist	Non-Activist	F value	p- value
Racism	94.4%	97.2%	93.8%	15.37	$p < .001$
Sexism	93.2%	95.8%	92.6%	10.56	$p < .001$
Mental Health	87.6%	93.5%	86.3%	32.12	$p < .001$
LGTBQ	86.2%	93.0%	84.6%	39.71	$p < .001$
Disability	85.7%	93.1%	84.0%	45.79	$p < .001$
Poverty	85.2%	92.6%	83.5%	44.84	$p < .001$
Health	69.5%	75.8%	68.1%	19.27	$p < .001$

Note: χ^2 (1, n = 4476); Athletes who answered “definitely not” or “probably not” were classified as not viewing the cause as social justice-oriented and those who answered “probably yes” or “definitely yes” were classified as viewing the cause as social justice-oriented.

Do Collegiate Athletes’ Feel Supported in Activism?

Collegiate athletes perceived relatively high levels of support from all significant social agents (see Table 3). However, athlete perceptions did differ with the perception of the highest levels of support, in all three dimensions, from family and friends and the lowest support from professors and university administration. In terms of how the types of support differed from each other in relation to all social agents, all repeated measure ANOVAs were significant (see Table 3 for all main effect and interaction effect values). From nearly every significant social agent, collegiate athletes perceived the highest levels of general support, followed by instrumental support, and the lowest support in terms of approval for engaging in activism. Of note, the only social agent that collegiate athletes perceived as providing the same levels of general and approval to engage in activism was from athletics department employees. When investigating the interaction effects for the significant social agents and differences in the collegiate athlete activist and non-activist groups, the groups perceived the level of general and instrumental support similarly, but the activists perceived greater approval for engaging in activism than non-activists from parents, friends, and teammates. The interaction effect was non-significant for athletics department employees, professors, and university administration indicating similar patterns of support across the three types that we measured.

Discussion

As one of the first large-scale studies investigating a large number of collegiate athletes (i.e., over 4,000 participants) in a systematic way to measure the level of engagement in activism, we conducted the current study to investigate three research questions: Specifically, we wanted to know (1) if certain demographic characteristics were related to an athlete’s engagement in activism, (2) what social issues athletes viewed as social justice causes, and (3) what social agents athletes perceived as being supportive of engaging in activism. While previous events surrounding activism have been covered in the media (e.g., football players at

the University of Missouri and Northwestern University; basketball players at University of Washington), this study indicates that collegiate athletes beyond the (most visible) Power 5 level are engaging in activist behavior and deserve further attention and study. Our study adds to the growing literature on athletes' activism at the college level, some of which has shown that activism among collegiate athletes is becoming increasingly popular (Mac Intosh et al., 2020) and that athletes are often very motivated to improve their campus communities via activist actions (Kluch, 2021). It would be useful for future studies to investigate exactly what type of activism collegiate athletes are engaging to understand better both what they perceive as activism, how frequently they are participating in activism, and what events require support so collegiate athletes can utilize their platform for various social changes more effectively.

In terms of specific characteristics of those who engaged in activism and those who did not engage in activism, several relationships stood out as noteworthy. First, collegiate athletes who identified as seniors were less likely to have participated in activism than expected. This is counter to expectations in multiple manners. First, as these college athletes were older compared to other athletes in the sample, they would have had more opportunities to engage in activism as the question was focused on any previous engagement and not focused on previous engagement in a set time period (e.g., in the last year). Second, we hoped that as collegiate athletes moved through their academic and athletic systems, they would have begun to find a cause that was personally significant to them that would spur action and engagement. It is possible that with the current wave of activism, especially among athletes, those individuals with less seniority on their team, even if that difference was just one or two years, were more likely to engage in activism. Further, it is possible that those collegiate athletes who engaged in activism during their first few years had withdrawn from the sport entirely and only those hyper-focused on their sport participation remained in organized athletics. Given the well-documented stigma attached to activism in the sport literature (Kaufman, 2008; Kaufman & Wolff, 2010; Kluch, 2020), further investigation for this relationship would be beneficial to indicate if activism truly is more prevalent in this younger cohort or if there are some forces that exist that are pulling collegiate athletes who engage in activism early in their college career out of sport. One possibility for this lack of activism in these older individuals is a perceived lack of support.

In addition to differences in the collegiate athletes' year in school and their engagement in activism, we found significant differences in engagement of activism depending on athlete race/ethnicity and gender identity, although the findings were somewhat contrary to each other. Unsurprisingly, those individuals who identified as Black/African American or as More Than One Race were overrepresented in the activist category and those who identified as white were underrepresented in the sample. Because racially minoritized athletes such as Black athletes have been at the forefront of many activist movements (Agyemang et al., 2018; Cooper et al., 2019; Edwards, 2016; Edwards, 1969; Peterson, 2009; Sarver Coombs & Cassilo, 2017), this finding is in line with the established literature on athlete activism. What was somewhat surprising, however, was that collegiate athletes identifying as men were more active in engaging in activism than collegiate athletes identifying as women. Because women continue to represent a marginalized group both in sport in general and in athlete activism specifically (Cooky, 2017), which makes them more likely to turn to activism to fight the inequities they face (Mac Intosh et al., 2020), these two findings seem to run counterintuitively to each other.

Indeed, previous research has indicated that groups that hold more privilege in a society often are the groups who resist social change (Ruparelia, 2014). How come, then, that men in our study seemed more likely to engage in activism than women? One possibility for the greater than

expected level of activism for men in the study might be that these athletes and their teams receive greater support, both on campus and in their communities – making them more poised to engage in the activism of their choice. Further, it might be possible that because two of the primary sports that receive the most attention and support, men's basketball and football, often have an overrepresentation of Black male athletes. These findings might indicate that individuals hold more power in the sport ecosystem and further studies should investigate how these aspects arise in NCAA sport. Another important element to consider is that our study focused on perceptions of activism. Therefore, it might not be that collegiate athletes identifying as women are engaging in less activism, but their perceptions of what qualifies as activism might differ from their male counterparts. The role of gender identity in activist engagement should be further investigated to better understand the gendered differences in activist perceptions and behavior. Further, the lower rate of activism for white collegiate athletes should also be investigated more as there might be specific barriers, both internal and external to intercollegiate athletics, for white athletes to engage in activism (e.g., racial privilege). This is particularly important given the most recent NCAA demographic information indicated that 63% of collegiate athletes identified as white (NCAA, 2021), yet this group continues to be the racial group that engages in activism the least compared to other racial groups (NCAA, 2020). Specific research, as such, should look at how to engage white collegiate activists in particular in social justice activism.

Out of all the social issues provided to survey respondents, collegiate athletes overwhelmingly viewed a majority of the issues as social justice causes (with a range of 69.5% to 94.4% identifying the issues as social justice causes). It is positive that so many collegiate athletes see nearly all social issues as social justice causes, yet it continues to be concerning that over 5% of individuals did not perceive issues such as racism and sexism as social justice causes. Further, even though more than 80% of the collegiate athletes perceived that a majority of these social issues were social justice causes, one was perceived by less than 70% of athletes as a social justice cause: health. As findings consistently have shown that socioeconomic status, race, and gender interact to influence health-related outcomes (Barr, 2014; Laveist, 2011), greater emphasis should be placed on helping youth draw these links to social justice causes – particularly in the context of the COVID-19 pandemic, which has revealed persistent health inequities in the U.S. (Bushana et al., 2020). Finally, respondents who had engaged in activism before perceived each social issue as a social justice cause at a higher than expected rate than those who identified as non-activists. Future studies should explore these relationships further to determine if activist collegiate athletes are more active due to their beliefs or if their beliefs are shaped by their engagement in some form of activism.

In terms of perceptions of support from significant social agents, collegiate athletes perceived relatively high levels of support from all significant social agents with every measure coming in above the midpoint of the scale. The athletes perceived parents, friends, and teammates as providing the highest level of all three types of support. This finding speaks to the importance of support from non-athletic department sources, even for collegiate athletes, and supports the idea that these individuals might be the most influential when athletes are deciding on whether or not to engage in activism. Specifically, these social agents are the ones who are most likely to influence athlete attitudes and shape their subjective norms, both aspects that were shown to influence athletes' intentions to engage in activism in the future. Not surprisingly, when comparing perceptions of support between athletes who have engaged in activism in the past and those who had not, athletes who had engaged in activism perceived significantly higher levels of support from family and friends and, to a lesser extent, teammates. This indicates that collegiate

athletes' perceptions of these three social agents is important for their actions promoting social justice. As such, investigating what these actions look like in practice might help better understand how to create a more accepting climate for those interested in navigating activist spaces.

It is also interesting to note, when investigating the total sample, that there was a large drop in the level of support between parents, friends, and teammates and other social agents. Specifically, collegiate athletes perceived lower levels of instrumental support and approval of activism from coaches and athletics department employees, individuals who they interact with consistently in the athletics space. As previous studies have indicated that support from coaches is critical to collegiate athletes' engagement in activism (Fuller & Agyemang, 2018), investigation on how to increase coaches' support for athletes could have significant impact on the athletes' activist behavior. In addition, individuals associated with the university but not situated in the athletics department (such as professors or university administration) were perceived to provide positive support to a much less degree than the other social agents. As these individuals typically have less frequent interactions with athletes, the fact that the perceptions of their support are lower is not unexpected, but it is positive to see that collegiate athletes still perceived the support to be beneficial. These results seem to contradict previous large-scale studies that have shown that two-thirds of participants indicated they had a close personal relationship with at least one faculty member (NCAA, 2016). Even though the current study measured support in a number of different ways, these differences demonstrate how difficult it is to truly measure support and additional studies should continue to investigate athletes' perceived support from a wide range of social agents. Specifically, a more nuanced investigation into sources of support for those individuals who have engaged in activism would further our understanding of collegiate athletes' experiences engaging in social justice activism.

Finally, it is important to note that even though the collegiate athletes in the sample all engaged in some programming surrounding race and other social issues, these perceptions of support were collected from the athletes prior to engaging in any of such programming. This collection time of the data is crucial to note because it is possible that after participating in programming linked to activism, the perceptions of support might have changed. In the future, it would be beneficial to survey collegiate athletes after said programming to see if their perceptions change in regards to social justice attitudes – and what aspects of the current programming are the most helpful for athletes to understand the power they wield when it comes to their activist platforms. Collegiate athletes have an important platform for highlighting social justice issues and bringing about change (Carter-Francique et al., 2015), but these platforms can only be utilized strategically if collegiate athletes feel like they have the support needed to voice their own thoughts and opinions on matters of social justice.

Limitations, Implications for Praxis & Conclusion

The current study was not without limitations. One limitation of the study is that even though these measures were collected prior to any programming focused on activism or social justice topics, this sample might have been skewed in some way. Specifically, all of the collegiate athletes attended schools that had athletics departments that were open to programming focused on race and social justice, and they were willing to have (organization redacted for anonymous review) come to their university for training. It is possible that collegiate athlete perceptions of support were high because the environments they were in were generally supportive of this type of engagement. It would be interesting to investigate programs that did not have interest in the programming to see if their athletes were as active as the current sample

and if the athletes perceived support for various types of activism in similar ways as this group. Another limitation involves the scales utilized in the current study. Although high in face validity, the scales would benefit from further psychometric testing to ensure that they are measuring what we anticipate they are measuring. Finally, collegiate athletes' engagement in activism was largely self-reported. It is possible that some athletes might not perceive their engagement in various activities (e.g., working at a women's shelter, promoting breast cancer awareness) as engaging in activism, which might possibly underestimate the total number of participant engagement.

Despite these limitations, our study provides some important implications for those working with athletes in a variety of contexts. First, our findings support the idea that athletes in the contemporary cultural climate view activism as a valuable undertaking in driving systemic change. Practitioners should continue to nurture activist behaviors to drive systemic change. To nurture such behaviors, practitioners must continue to fight the stigma initially attached to social justice activism by making conversations on social justice topics part of group cultural norms and expectations. For example, they may regularly dedicate space in team meetings to the discussion of social justice topics, call out discrimination when it occurs, include bystander intervention and a commitment to matters of diversity, equity, and inclusion in documents governing team behavior, as well as provide space for athletes to receive specific training on how to utilize activist platforms. Second, while the collegiate athletes generally perceived most social agents to be supportive of activism, athletics administrators, coaches, and social workers working with athletes should continue to demonstrate their support of activism – especially because such activism disproportionately affects athletes identifying as members of minoritized groups. Such support can take the form of committing financial resources to activism, providing space (both physical and virtual) for athletes to connect with activist mentors, and engaging in strategic coalition building (e.g., connecting with on-campus resources) that can enhance the reach and impact of collegiate athletes' activism.

Finally, we close this manuscript with a call to those with institutional power to support collegiate athlete activism to continue “utilising (sic) one's privileged identities to facilitate long-term substantial gains of social justice movements in, through, and beyond sport” (Jolly et al., 2021, p. 241). While the activism of collegiate athlete activists should be applauded, these athletes often have little institutional power – unlike coaches, athletics department staff, and university administrators. Those in positions of institutional power, thus, should work towards creating an infrastructure supporting collegiate athletes' voices and activism. For example, the creation of a student-led committee or a formalized social justice position within Student-Athlete Advisory Committees (SAAC), such as a Social Justice Action Chair, is one way to provide institutional power to collegiate athletes utilizing their platform for social justice action. Similarly, staff working with athletes should strategically form partnerships with social justice offices on campus to provide collegiate athlete activists with more institutional support for their activism. One group positioned especially well to support athletes engaging in activism are social workers as these individuals are trained to respond to a crisis, typically utilize an empowerment perspective that encourages individuals to utilize their voices, and can join in advocacy for change (Mc Coy et al., 2017). We highlight a strong infrastructure as a form of support here, because such support is particularly important in times when collegiate athlete activists may feel unsupported by significant social agents such as their parents, coaches, or teammates. A comprehensive approach to athlete support for engaging in activism, therefore, takes into account

all potential areas of support, so that athletes can continue to lead the way for systemic, sustainable social change.

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Table 3.
Perceptions of general, instrumental, and support for engaging in activism from significant social agents for the total sample and activist and non-activist student-athletes.

Social Agents	Total (n = 4476)			Activist (n = 828)			Non-Activist (n = 3648)			Main effect		Interaction Effect	
	GS	IS	AA	GS	IS	AA	GS	IS	AA	F d.f (2, 8948)	p-value	F d.f (2, 8948)	p-value
Parents	5.65 ^a (.86)	5.52 ^b (.97)	5.28 ^c (1.08)	5.60 (.93)	5.43 (1.13)	5.48 (.96)	5.67 (.85)	5.54 (.92)	5.23 (1.11)	94.35	.001	48.87	.001
Friends	5.46 ^a (.85)	5.47 ^a (.85)	5.20 ^b (.99)	5.48 (.82)	5.50 (.83)	5.48 (.79)	5.45 (.86)	5.46 (.85)	5.13 (1.02)	53.72	.001	46.71	.001
Teammates	5.26 ^a (.96)	4.99 ^b (1.18)	5.08 ^c (1.05)	5.18 (1.01)	4.90 (1.27)	5.17 (1.07)	5.27 (.94)	5.01 (1.15)	5.06 (1.05)	87.87	.001	17.82	.001
Coaches	5.12 ^a (1.06)	4.27 ^b (1.46)	4.93 ^c (1.18)	5.05 (1.14)	4.20 (1.51)	4.97 (1.18)	5.13 (1.12)	4.29 (1.45)	4.92 (1.18)	690.72	.001	5.08	.02
Athletic Department Employees	4.90 ^a (1.11)	3.66 ^b (1.45)	4.87 ^a (1.20)	4.81 (1.12)	3.59 (1.47)	4.86 (1.21)	4.92 (1.11)	3.67 (1.45)	4.87 (1.20)	1457.17	.001	2.13	.12 (NSD)
Professors	4.63 ^a (1.06)	3.29 ^b (1.53)	4.73 ^c (1.24)	4.68 (1.06)	3.36 (1.54)	4.84 (1.24)	4.62 (1.06)	3.28 (1.53)	4.71 (1.24)	1724.23	.001	.96	.39 (NSD)
University Administration	4.46 ^a (1.20)	3.02 ^b (1.57)	4.68 ^c (1.33)	4.35 (1.22)	2.96 (1.55)	4.61 (1.41)	4.49 (1.20)	3.03 (1.57)	4.69 (1.31)	1914.44	.001	.87	.42 (NSD)

Note: GS = General Support, IS = Instrumental Support; AA = Approval to engage in Activism; different subscript in the total column indicates significant differences between the types of support at the $p < .05$ criterion level in a repeated measures ANOVA.



Practice Notes For Clinical Sports Social Worker

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Athletic Clinical Consultant and Mental Health Provider

Clinical sport social work involves a coupling of the heart and mind. An unrelenting passion for helping people/systems, combined with an unquenchable desire to learn. This is essential to become an exceptional sport clinician. The power and utility of the mental health provider in athletics lies in the establishment of a solid foundation of theory and practice. This commentary conceptualizes the role of the clinical sport social worker, along with key considerations relative to practice and collaboration. Appreciating the complexity of the athletic system, the diverse backgrounds of the athletes/staff, power differentials, personal biases, ethical issues and an abiding awareness of the scope of one's clinical competence, are crucial to expert practice.

Keywords: clinical social work, athletics, sport social work

Developing a strong clinical practice, including consultative skills in individual/group psychotherapy, provides the scaffolding upon which the clinical sport social worker can interface with the multifarious world of athletics. As a clinician the work is comprised of the art of relationship and the science of theory using a biopsychosocial perspective. Clinical sport social workers are instruments of healing; detectives of the heart and agents of the mind. An individual or system presents with a problem that typically involves suffering or struggle. Understanding the contextual pieces of the suffering, determining the best course to follow, setting the stage for change/growth, is the job. This task involves collaboration; working with the individual/system to search for the missing pieces to the puzzle of suffering and less than helpful thought patterns. A search for subtleties is often required. It is important to look beyond the obvious explanations for the distress and distortions. Clinical sport social workers must carefully investigate the less than conscious reasons for the athletes' undoing. Imparting ongoing cognitive skills and psycho-education to help reduce suffering hopefully increases the individual, team or departments' ability to function at its most capable level.

Foundations of Clinical Practice

Clinical practice is comprised of many factors, depending on the practitioner and the scope of their interests/capabilities. Expert practice evolves over many years, utilizing the kind of determination and openness to learning, that high performing athletes need to be their best. This includes expertise in psychodynamic/relationship-based therapies (e.g., CBT), and short- and long-term individual and group approaches to care. Familiarity with substance abuse issues, trauma related disorders, eating disorders, bipolar disorders and psychopharmacology strengthens the practice foundation. A strong suit clinical sport social workers bring to athletes/athletic systems, is the keen appreciation for the cultural context of the athletes' background, as well as the repercussions of functioning within the top-down authoritative culture of athletics. Utilizing an understanding of systems and dynamics is foundational to consultative services to athletic teams and athletic departments. These skills allow the clinical sports social worker to provide consultation intra- and inter-departmental crisis', athletic program development, advocacy and education. Regardless of the task at hand, clinical sport social work is founded upon the value of relationship, and the notion of starting where the client is.

Humans are hardwired for relationships (Geller & Porges, 2014). Understanding and appreciating developmental theory provides a solid base to understand why relationship health lowers the risk of developing mental health symptoms. The culture of athletics has protective factors, with built in opportunities for connection and belonging. It also has significant risk factors, particularly as an athlete becomes identified as elite. The more commodified and objectified the individual, the more differentiated they become from their peers. This separation can become a risk factor for developing mental health symptoms. The culture of athletics as a whole can be isolating, particularly as skill levels increase. The more elite athletes become increasingly secluded increasing the risk factor for sexual abuse. (Reardon et al., 2019).

Strong clinical practice is firmly rooted in theory. Theories are built upon the given knowledge base at a time. Grounding one's professional self in a theory base provides the scaffolding upon which to think about, appreciate, and understand where the strengths and areas of vulnerability are for a client. Developmental theory, psychodynamic theory, cognitive behavioral theory, existential theory, and humanistic theory all bring important clues to further make sense of a client's struggles. The intersection of race, diversity, and gender has implications for socio-political oppression within the context of sport (Carter-Francique et al., 2013). Theory is the backdrop. Cultural context is where the action takes place, including the culture of athletics.

Nut and Bolts of the Therapeutic Interface

The essence of a clinical social work interview is focused upon relationship (Goldstein et al., 2009). The athlete's relationship to the clinician in the room, the relationship of the athlete to their sport, family, friends, culture, and essentially their relationship to the context of their lives establishes the base for clinical intervention. The initial meeting represents a microcosm of all of these factors. This meeting provides the emotional container of safety (e.g., listening carefully, being attuned to the athlete's experience), which allows the clinical sports social worker to gather data that will contribute to an initial impression of the athlete. This data needs to be historical, including family history and their educational/social history. Close attention needs to be paid to significant personal/family events. For example, frequent and/or disruptive moves, significant illness in any family member, divorce, death, etc.

Gathering the data is accomplished by creating clear parameters, letting the athlete know what you will be doing with the designated time, maintaining a fidelity to the structure of the session without a rigidity, and addressing the protocols relating to confidentiality. Solving the therapeutic puzzle requires a great deal of inquiry beginning during the initial session. The exception to this is if the athlete presents in crisis. The first task then is safety and containment, both in the therapy room and the person's life. There are different kinds of interview questions (Sommers-Flanagan, & Somemers-Flanagan 2013). Closed-ended questions are necessary to get key facts and demographics. Open-ended questions allow more autonomy for the client to share their experience, which in turn fosters an environment in which the client is less defensive and more likely to open up. Swing question can be answered yes or no, but is constructed to allow the client the option to not respond, which often will result in increased safety within the room for the individual. An example of the same question asked three different ways:

- Closed-ended: Did your first panic attack happen on the football field?
- Open-ended: Tell me a bit more about your first panic attack.
- Swing: Would you be willing to share more about the panic attack you experienced?

By paying attention to the athlete's strengths and viewing vulnerabilities as by-products of life circumstance, allows the clinical sport social worker to interact with the client in growth-promoting ways that the athlete may not have previously experienced (Kohut, 2010). Clinical sport social workers must be careful with assumptions they could make about the athlete's experience. This allows for a different kind of interpersonal experience for the athlete; where their experience is the one that matters. There are times clinicians need to go beyond empathy and point out self-sabotaging/destructive behavior. In the end, it is the athlete's choice on whether they want to embark in the change process. Helping the athlete appreciate that there is a choice to be made can be empowering (Sommers-Flanagan & Sommers-Flanagan, 2013).

Being patient with the therapeutic process can be difficult, particularly given the pressures of performance. Healing from emotional injury is no different than healing from physical injury (Hainline & Reardon, 2019). The athlete may need to understand the rehabilitation of one's emotional life can be slow and also steady. It is common for athletes, as well as other members of the multi-disciplinary team, to want advice. Offering concrete tasks within an overarching framework typically is most effective. Simple advice may be requested, but often is not what is wanted or needed at the time. Advice can perpetuate dependency, undermining the athletes' self-efficacy. This can affect the athlete's sense of autonomy, as well as their developing sense of self. It is important to recognize the athlete's wish to get better. The best advice resides in the development of a treatment plan with mutually agreed upon goals, shifting the goals as needed with the task at hand.

Assessment and Diagnosis

Assessment and diagnostic skills are an essential part of a clinical sport social worker's job. This takes ongoing education and direct service experience. Clinical sport social workers need to be able to make a differential diagnosis based upon the presentation of symptoms and a careful history. It is important to know when to make referrals and for what. With athletes the presenting problem often relates to performance complaints and/or somatic concerns. These issues are frequently expressions of anxiety and depression in disguise. They are manifestations

of underlying distress that are split off from the consciousness of the athlete. In addition to being hidden from the athlete themselves they present real life problems that restrict the athlete's freedom to perform in their sport. (Aron & Lefay, 2021)

Case Example One

A 20-year-old, male transfer football player is referred for an evaluation as a result of explosive anger episodes and fighting at practice. The athlete described his behavior as uncharacteristic and a surprise to himself. He said that he would feel triggered by a small comment of a coach or player. The notable events in his childhood were experiences in foster care until the age of four, when he and his siblings were adopted by a stable, loving family. He reports his childhood experience being positive (e.g., success in school and sports). He has a particularly strong attachment to his father, who was his childhood coach as well as being an educational administrator and coach in the community. When the athlete was ten, he recalls being unexpectedly picked up at school by a relative who took his siblings and him home to tell them that their father had died suddenly that morning. As the oldest child he became the man of the house. Although this is a role, he expressed being proud of, it did not come without cost. He described having to fight for everything athletically. He was undersized for his position but had the speed and agility to be effective. Fast forward to the current circumstance. After unpacking the family history as well as his history of anxiety it became quite apparent that he had an underlying anxiety disorder as well as PTSD from the death of his father. This is an insightful young man who could use the overarching dynamic frame to understand what is going on in practice, as well as some specific cognitive skills to manage the arousal he experienced during practice. Another explosive event did not happen after the first session. He continued in treatment to work on his history and management of anxiety disorder.

It is not enough to simply identify depression or anxiety symptoms. It is crucial to the treatment of the athlete to tease out the underlying causes of these symptoms. Effective clinicians need to be able to distinguish between anxiety that indicates an anxiety disorder, versus a mood spectrum disorder, versus an adjustment reaction, versus trauma. It is crucial to consider medical conditions, unrelated to psychiatric presentations that contribute to the expression, leaving no proverbial stone unturned. Co-morbid conditions, such as substance use/abuse need to be evaluated. Solving a diagnostic puzzle needs to transpire in an ongoing manner; as long as there is suffering, a sport social worker needs to continue to explore and examine all possible ways to understand the athlete's experience. When giving our diagnostic impressions providing a big picture (macro) way for the athlete to think about their current experience, coupled with a here and now (micro) perspective that sets the stage for movement forward.

Case Example Two

An African American freshman football player is referred for treatment as a result of frustrated football and educational staff members. These staff members state the he was not showing up for compulsory meetings, would show up late, leave early, and was out of compliance with mandatory requirements. In addition to the inconsistent behavior, a point was made that he had been in special education classes throughout high school and that he perhaps did not intellectually understand expectations. At the initial meeting with the young man who was understandably anxious, he expressed he was not sure why he was behaving as he was. He shared how he simply becomes overwhelmed from time to time must retreat to his room. After a

few sessions of working with him around managing to follow what is expected it became very clear that he had social anxiety. This was undiagnosed and likely had been operative with him for a long time, which contributed to why his school performances suffered. It is also likely that there was a racial bias involved in the placement in the high school special education classroom. Once this was properly identified, medication was put into place, as well as using cognitive behavioral techniques to manage anxiety. He was able to successfully participate in school and sport. He graduated and went on to have an outstanding career.

Collaboration

Collaborative work is the cornerstone of working in athletics (Purcell et al., 2019). There are a variety of stakeholders interfacing with the athlete and/or team. Communicating appropriately/ethically within the system and the boundaries of confidentiality can be extraordinarily complicated. The boundaries in athletics can be blurry. Multi-disciplinary teams need to maximize the collective intelligence of the group, be inclusive in their work together, and maintain open communication. Being territorial, competitive, or cavalier has no place in clinical work. This can be remarkably challenging as a result of the systemic devaluing that can take place within the culture of athletics regardless of the role one plays. Clinical sport social workers often take the lead promoting informational diversity and collaboration, with the belief and understanding that it will likely benefit the athlete most. This perspective can, at times, challenge the hierarchies within established systems. It is expected that reactance to change on a systemic level happens. It is impossible to do the work of moving a field forward without personal and professional risk. It is not for the faint of heart.

Professional and Personal Development

Supervision/consultation address the necessary boundaries of clinical care, as well as the less than conscious boundary violations. Ethical care is fundamental to successful care. Ongoing examination of the therapeutic process can yield information about dynamics relative to the power differential between clinical social worker and the athlete. It is useful to learn how to use inevitable mistakes therapists will make, as an opportunity to help the athlete have a corrective experience. This happens when mistakes/lapses/empathic failures, can be addressed with the athlete. This provides the athlete with an opportunity to be visible and heard, without negative repercussions.

The safe haven a supervisor/consultant can provide clinicians is a parallel process to what clinicians are offering clients. Providers need the necessary holding environment for work experiences. Solid supervision is not therapy, it is a hybrid experience that can involve exploration of vulnerable aspects of self, intertwined with the psycho-educational aspects of the work. This can be the secure base from which one can try new and/or challenging clinical interventions. The salient message is - we cannot do this work alone, just as we cannot live our lives alone. We need each other.

This is crucial to foundational success during the early years of practice, creating the strong foundation upon which to continue developing practice competencies. Additionally ongoing involvement in organizations for networking, continuing education, and professional enlightenment brings a richness to our work and our lives.

Conclusion

Athletics is a rapidly changing field. To develop competencies, ongoing supervision/consultation, as well as continuing education, working towards integrative, multi-disciplinary provider teams, is the essence of being a clinical sport social worker. The social work discipline views context as part and parcel of the client experience. This ability to assist can only be as strong and vast as the willingness to explore different aspects of ourselves, our limitations, our biases, and our knowledge base. Stay humble and stay hungry.

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

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Student-athlete barriers to bystander intervention have generally not been explored in the literature. This research examined how gender role conflict (GRC) inhibits student-athlete intentions to intervene post-sexual assault due to the masculine norms of the sport culture. Using a non-probability cross-sectional design, 300 student-athletes from five National Collegiate Athletic Association (NCAA) institutions completed an anonymous web-based survey. Independent samples t-tests revealed that male student-athletes exhibited greater GRC than female student-athletes. Next, an ordinary least square multiple regression assessed GRC and intentions to respond post-sexual assault. Of all GRC subscales, conflicts between work and leisure-family relations was associated with intentions to respond post-sexual assault and was significantly moderated by gender. Results indicate that student-athletes are not only prone to GRC, but also exhibit barriers to bystander intentions as a result. These findings underscore the importance of engaging student-athletes in bystander intervention training to prevent campus sexual assault. Implications to field of social work will also be discussed.

Keywords: sexual assault, gender role conflict, bystander intervention, prevention, student-athletes, sport social work

Sexual assault is a pervasive issue on college campuses. Approximately 26% of females and 6% 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 largely underreported to police, and only one in five student survivors seek assistance from a victim services agency (Sinozich & Langton, 2014). Bystanders play a crucial role in supporting survivors' post-sexual assault (Foubert et al., 2010). Active bystanders can support survivors after an incident occurs by helping peers access campus resources or reporting a known offender to authorities (McMahon & Banyard, 2012). Bystander intervention prevention is fundamental to educating potential bystanders on prosocial helping behaviors and instilling a greater sense of responsibility to respond to sexual assault (Banyard et al., 2004; McMahon &

Banyard, 2012). Despite the growing popularity of bystander intervention programs to reduce campus sexual assault, college students perceive numerous barriers to intervening as a bystander (Bennett et al., 2014; 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. 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 (Milner & Baker, 2017). Meanwhile, a study that analyzed reports of sexual assault near schools with top ranked football and basketball programs, male student-athletes made up 3.3% of the total male student population but accounted for 19% of reported sexual assaults over a 3-year period (Crosset et al., 1995). Participation in contact sport versus non-contact sport has also been identified as a predictor of sexual assault (Sønderlund et al., 2014). Rates of sexual violence vary across National Collegiate Athletic Association (NCAA) institutions, as there are higher reports at Division I schools compared to Division II or III (Wiersma-Mosley & Jozkowski, 2019). Given that student-athletes spend more time together and have stronger relationships with their teammates than non-athletes (Clopton, 2010), student-athletes may be potential bystanders to sexual assault. However, 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 barriers to bystander intervention among student-athletes, particularly supporting survivors after sexual assault occurs.

Gender role conflict (GRC) may be a potential target for intervention for student-athlete bystander intentions. 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). GRC has been seldom studied with student-athletes (Daltry, 2013; Desertrain & Weiss, 1988; Steinfeldt et al., 2009; Steinfeldt & Steinfeldt, 2010). However, 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 (Fallon & Jome, 2007; Steinfeldt et al., 2009; Steinfeldt et al., 2010; Ramaeker & Petrie, 2019). GRC may be further exacerbated for student-athletes aware of sexual assault allegations involving peer survivors or offenders. With a heightened sense of masculinity, 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 intentions to respond 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 and examine whether GRC may inhibit intentions to respond post-sexual assault.

Bystander Intentions to Respond 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). As an active bystander, students 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 an offender, provide information to campus authorities or resident assistants, and corroborate information during an investigation with police or university officials (McMahon & Banyard, 2012). Active 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. In interviews with 2,000 females from 4-year colleges, nearly half of the participants received a rape disclosure from a peer. Of those, more than two thirds encouraged survivors to report the incident to the police or other authorities (Paul et al., 2013). 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 bystander may be aware of suspected sexual offenses by one of their peers. Active 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). Since there are differential levels of social interactions 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 with student-athletes document greater intentions to intervene after participating in bystander intervention trainings (Jaime et al., 2015; McCauley et al., 2013; Moynihan et al., 2010). However, 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 a handful of notable barriers: opinions of others, relationships with people involved, and 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 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-athlete 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). Female student-athletes may ascribe to 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 post-sexual assault in fear of overstepping boundaries or being perceived as weak or disloyal to their peers. Focus groups with teams and individual interviews at a Division I school in the Northeast revealed that a 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 (McMahon, 2007). In another study, male student-athletes emphasized GRC in focus groups because taking action to intervene would affect the entire team dynamic (McGovern & Murray, 2016). GRC may be an important factor to consider since studies underscore how perceptions of others can be a barrier 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 measure GRC and the athletic experience (O'Neil, 2015). While student-athletes may experience GRC due to the hypermasculinity of the sports culture, there is a scarcity of research on GRC in male and female athletes. To date, the rates of GRC among student-athletes are 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 male and female student-athletes and to examine how different dimensions of GRC are related to intentions to respond post-sexual assault. This study aims to fill a key gap by identifying 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-athlete intentions to respond post-sexual assault will be useful for social workers providing direct support to student-athletes, designing effective sexual assault prevention, and advocating for the safety and well-being of student-athletes. In this study, it is hypothesized that 1) male student-athletes will exhibit higher GRC scores than female student-athletes, 2) student-athletes with higher GRC scores will exhibit lower intentions to respond to post-sexual assault, and 3) the relation between GRC and intentions to respond post-sexual assault will be moderated by gender such that males will experience a weaker association compared to females.

Method

Participants

College students 18 years or older who were members of an NCAA team 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 (three Division I, one Division II, and one Division III). 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 primary contact at each school were designated as gatekeepers. These gatekeepers were responsible for emailing the survey link to their respective student-athlete listserv to maintain researcher anonymity. The survey was sent 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 seen in Table 1, there were 139 male (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 participants were Non-Hispanic and 13.1% were Hispanic. Most student-athletes participated in non-contact sport (63.2%) versus 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. A unique link was created for participating schools and sent to the designated gatekeeper at each school's athletic department. The gatekeeper 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. Approval from the Institutional Review Board 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). 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 et al., 1997). Although women's GRC is currently undefined and there is no theoretical measure of women's conflicts with their gender roles (O'Neil, 2015), 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 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) measured intentions to respond post-sexual assault ($\alpha = .94$; Banyard et al., 2014). The 8-items listed strategies to support survivors or report suspected offenders. 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 post-sexual assault.

Moderating Variables

Gender binary was used as a moderator to differentiate outcomes between those who experience negative effects of GRC from those who do not (O’Neil, 2008). Survey participants were asked to indicate whether they participated on a men’s or women’s team.

Control Variables

The control variables 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 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 Division I, II, or III. Division was dummy coded into dichotomous variables to compare each division to the reference category (Division I).

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 based on their gender identity for GRC, a new variable for each GRC subscale was created that combined the data for 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. Gender was examined 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 (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 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.

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 Subscales (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**
Work-Leisure Conflict	22.98	6.97	24.22	6.61	-1.578	.116

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

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

Ordinary Least Squares Multiple Regression

The ordinary least squares multiple regression examined the association between GRC subscales (success, power, and competition; restrictive emotionality, restrictive affectionate behavior, and conflicts between work and leisure-family relations) and intentions to respond post-sexual assault, while controlling for race, ethnicity, 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 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 total variance explained by the model as a whole was 11%, $F(14, 282) = 2.49, p = .002$. The main effect of gender was significant with intentions to respond to post-sexual assault ($B = 2.52, p = .012$). Female student-athletes had higher intentions to respond post-sexual assault than male student-athletes.

Table 3

Gender Role Conflict Subscales 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
Work-Leisure Conflict	.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**

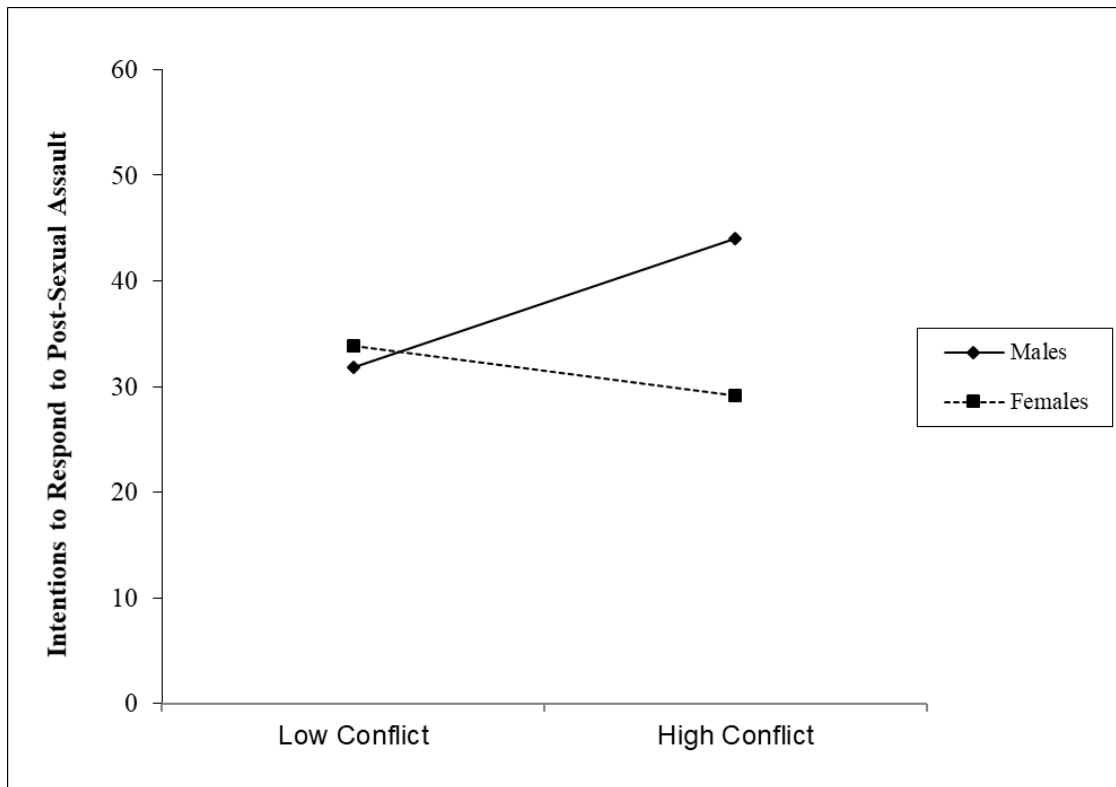
Note. Reference categories are in parentheses

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

Out of the GRC subscales, only conflicts between work and leisure-family relations was statistically significant with intentions to respond 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 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 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 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 student-athletes experience GRC and how GRC may be associated with bystander intentions to respond post-sexual assault. This study also sought to explore gender differences between male and female student-athletes bystander intentions to respond post-sexual assault. Results supported the first hypothesis, as male student-athletes experienced higher GRC scores 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, student-athlete intentions to respond post-sexual assault increased as conflicts between work and leisure-family relations increased. These findings suggest that student-athletes may be proactive bystanders post-sexual assault despite conflicts between work and leisure-family relations. Participating in 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. Literature on bystander intervention shows that 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 to increase student-athlete bystander intentions to respond post-sexual assault.

Regression analyses revealed that female student-athletes had higher intentions to respond post-sexual assault than male student-athletes. Mounting evidence supports a greater willingness to intervene by female student-athletes compared to male student-athletes (McGovern & Murray 2016; McMahan 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 rape myth acceptances by college-aged men (McDaniel & Rodriguez, 2017). 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).

The results of the moderated effects of gender between GRC and intentions to respond post-sexual assault were supported in Hypothesis 3 only for conflicts between work and leisure-family relations subscale. These findings reflect the overall institutionalization of sport as a masculine domain which 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 (McMahan, 2009), it may be perceived as an additional burden for female student-athletes to get involved as an active bystander. Future studies should delve into these complexities perceived by female-student athletes that hinder their bystander intentions to respond post-sexual assault.

Implications

This study has important implications for the field of social work. Findings confirm that student-athletes are indeed a vulnerable population at-risk of GRC. High rates of GRC have 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 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. Encouraging healthy masculinity is imperative to move away from attitudes and behaviors that reflect GRC (O'Neil, 2008). Social workers can facilitate conversations to reduce the stigma of homosexuality and encourage help seeking. Furthermore, social workers can teach effective coping strategies and time management skills for student-athletes. Since time management has been recognized as an important tool for academic and athletic success (Rothschild-Checroune et al., 2012), student-athletes can be encouraged to utilize these skills to better manage their stress and effectively communicate their needs (Gomez et al., 2018). This is especially important for females who may be experiencing higher conflicts between work and leisure-family relations, as female student-athletes may experience greater pressure to succeed in a male-dominated environment. Therefore, 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 post-sexual assault in intercollegiate athletics, such as GRC, social workers could create customized prevention programs for the student-athlete population. Designing more relatable training curricula for student-athletes will promote a more conducive learning environment to learn prosocial bystander behaviors. By creating safe spaces for intimate dialogue, student-athletes can practice how they would intervene as an active bystander and respond to incidents of sexual assault involving their peers. In addition, curriculum on bystander intervention tailored to student-athletes could adopt a more culturally relevant model for diverse populations, which has shown positive increases in attitudes toward bystander intentions (Lawson et al., 2012).

Taken together, social workers can advise athletics departments as they implement policies and best practices for mental health and sexual assault prevention. 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 this document, 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 mental health services. Due to their knowledge in clinical practice, social workers would be a valuable resource to shape institutional policies and practices to address crises and improve internal supports.

Similarly, social workers can help athletic departments maintain compliance with policies around sexual assault and prevention. The three main principles of the NCAA Policy to Combat Campus Sexual Violence (2020) stipulate that athletic departments should be aware of institutional policies and processes to address sexual assault; refer to the latest *Sexual Violence Prevention Toolkit* (2019) to provide ongoing sexual assault prevention education for student-athletes, coaches, and athletic administrators; and actively participate in campus activities organized to combat sexual and interpersonal violence. Social workers can support NCAA member institutions as they annually attest their compliance that they are actively engaging in steps to respond to, address, and prevent sexual violence in their respective programs. Social workers can also enforce Title IX (1972) regulations, which prohibits sex discrimination at institutions receiving federal financial assistance, when responding to allegations of sexual assault involving student-athletes. Additionally, social workers can offer insight on how to improve protocols that better protect student-athletes if an incident occurs and encourage policy reform to expand services. For the reasons listed above, social workers play an instrumental role in supporting and shaping policies that prioritize the health and wellness of student-athletes.

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. The survey also did not allow for more inclusive gender identities (e.g. nonbinary, trans individuals). Moreover, 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. 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 the student-athlete population.

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 post-sexual assault as an active bystander, particularly for females who experience conflicts with work and leisure-family relations. Social workers are well-positioned to build context-specific support and sexual assault prevention for student-athletes.

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