Sport Social Work Journal

Volume 2, Issue 1
2023 3 3022

Sport Social Work Journal (ISN: 2835-5571)
OpenJournals.bsu.edu/SportSocialWorkJournal
SSWJ.org

Editorial Board

Dr. Matt Moore (Ph.D, MSW) Miami University - Editor

Dr. Stacy Eileen Kratz (Ph.D, LCSW, CAP) 98point6 Inc. - Associate Editor

Dr. Nafees Alam (Ph.D, LMSW) Boise State University

Dr. Akilah Carter-Francique (Ph.D.) Benedict College

Dr. Marc Felizzi (Ph.D, LCSW) Millersville University

Dr. Paul Gorczynski (Ph.D., CPsychol, AFBPsS) University of Greenwich

Dr. Ginger Gummelt (Ph.D, LCSW) Lamar University

Dr. James Houle (Ph.D., ABPP) Ohio State University

Cindy Miller Aron (LCSW, CGP, FAGPA) Ascend Consultation in Healthcare

Dr. Tarkington Newman (Ph.D, MSW, MS) University of Kentucky

Daniel Pollack (MSW, JD) Yeshiva University

Dr. Jerry F. Reynolds (Ph.D, LMSW) Ball State University

Dr. Vanessa Robinson-Dooley (Ph.D, LCSW, CNP) Simmons University

Dr. Lorin Tredinnick (Ph.D, MSW, LSW) Kean University

Dr. Stéphanie Turgeon (Ph.D., Ps.éd.) Université du Québec en Outaouais

Dr. Khirey Walker (Ph.D., MS) Elon University

Sport Social Work Journal is published and supported by Ball State University Libraries, Muncie, Indiana.
Sport Social Work Journal is supported by the Alliance of Social Workers in Sport.

Visit the website to submit a manuscript or to contact the editors. Authors retain copyright to their contributions but agree to license published content under a Creative Commons Attribution-NonCommercial-NoDerivates 4.0 License.

BALL STATE
UNIVERSITY
University Libraries

Sport Social Work Journal

Facing the COVID-19 Opponent: Checking in with Former Collegiate Athlete Women at Halftime

Stephanie E. Rosado
School of Social Work, University of South Florida

Sondra J. Fogel
School of Social Work, University of South Florida

Stacy E. Kratz
98Point 6, Behavioral Health Division

Amy E. Nourie
School of Social Work, University of South Florida

A group of women who have been left out of the conversation during the COVID-19 pandemic is middle-aged women (30-60 years old) who were formerly collegiate athletes. This population may be in a unique position to reflect on if and how their participation in college athletics has informed their response to COVID-19. Therefore, this study is one of the first to utilize halftime (i.e., middle age and mid-pandemic) to ask former women collegiate athletes to reflect on their college athletic experience and its relevance to the present day as society is facing a global crisis. Results from this exploratory study suggest that collegiate sport experiences serve to promote positive coping responses beyond college years and during difficult times for this group.

Keywords: women, former athletes, middle age, college athletes, COVID-19, coping development

The behavioral health of women has become a significant concern during and after the COVID-19 pandemic (Adisa et al., 2021; Gao & Sai, 2020; Kantamneni, 2020; Venta et al., 2021). Multiple studies have reported on the disproportionate burdens women faced in their roles as workers and mothers during the pandemic. For example, women faced additional caregiving responsibilities in the home, and pregnant women faced pandemic-related worries about pre- and post-natal wellbeing and healthcare (Gur et al., 2020; Power, 2020). Furthermore, being female was associated with greater psychological distress, depression, and anxiety (Almeida et al., 2020; Wang et al., 2020). Additional research has also identified various mental health consequences during the pandemic for women that include isolation, depression, anxiety,

and other forms of psychological distress (Thibaut & van Wijngaarden-Cremers, 2020; Ueda et al., 2022; Walton et al., 2021; Yarrington et al., 2021).

However, there is also a growing interest in factors that may contribute to resilience or coping strategies among women (Cloonan et al., 2021; Killgore et al., 2020; Kövesdi et al., 2020; Persich et al., 2021). Thus, Ravera and others (2016) argue that a shift is required; from the "tendency to frame the discussion on women being especially vulnerable to broader environmental and structural forces" (p. S238) to a "focus on women and other marginalized groups being active agents for transforming and adapting to change, collectively and from the margins" (p. S238). Studying adaptations of women during unprecedented events, such as natural disasters or COVID-19, is needed.

Studies on natural disasters have shown that age plays a crucial role in predicting coping barriers. In particular, Cong and colleagues (2021) found that younger and middle-aged adults experience more difficulties in coping during disaster preparation compared to older individuals. A group of women understudied during the COVID-19 pandemic is middle-aged women (30-60 years old) who were former college athletes. Former female collegiate athletes may be in a unique position to reflect upon how their participation in organized sports during college years informed their response to this global crisis since being an athlete is commonly associated with higher appraisals of psychological traits like resiliency (Caldarella et al., 2019). Furthermore, women athletes are uniquely positioned within the context of sport and society since consistent exposure to sex-based disparities in both settings may increase adaptability and resiliency in responding to adversity. Therefore, this study sought to learn if the lessons learned, and the traits developed during college athletics informed their coping response during a global crisis. This study is novel as it is one of the first, if not only, study to examine the reflections of former women collegiate athletes, who are now in middle age and in mid-pandemic (i.e., halftime), on the experiences of being a collegiate athlete, and if and how this experience influenced their coping during COVID-19 restrictions.

Positionality

This research is informed by the anecdotal experiences of the principal investigator. As a former Division I collegiate athlete woman now in middle age and living through the COVID-19 pandemic, the principal investigator was motivated to study the lived experiences of similar women. This motivation came when she noticed that, like her, women who were former college athletes had a unique coping experience during such a difficult societal period. She acknowledged that former college athletes in her social circles were facing similar stressors to everyone else in society, yet they were notably more adaptive—they were finding ways to thrive amidst the chaos. Thus, she wanted to learn more about this observation directly from the voices, memories, and perspectives of such women, especially those outside her immediate social circle. As an insider to this niche population, the principal investigator brings in a strength-based lens as well as her own knowledge of how she has been able to leverage her own college athletic experience to serve her during times of change and transition. This may have also aided in the rapport-building and meaning-making process (Dodgson, 2019; Hunter Revell, 2013) as the principal investigator disclosed her position as a former collegiate athlete while conducting each interview with the women in this study.

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Literature Review

To explore the current experiences of middle-aged women who were collegiate athletes, it is necessary to understand key factors that played a role in their ability to participate in college sports. This includes the impact that participation in sports has on the psychosocial development of girls and young women. Thus, the following review of the literature offers an overview of policy and legislation pertinent to women's sports, key ideas in sport for development, and an exploration of COVID-19's impact on women's roles in society.

Title IX and Women's Sports

Women's participation in collegiate athletics received an important endorsement with the passage of Title IX in the Education Amendments of 1972. This historic legislation promoted equality among the sexes and banned discriminatory practices in educational settings that received federal funding.

> No person in the United States shall, on the basis of sex, be excluded from participation, or be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. (Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 C.F.R. [1972])

Title IX marked the rise of the elite female athlete as competitive sport participation opened the opportunity for women and girls to participate in sports within schools, universities, and other sports leagues (Allen & Frisby, 2017; Elmenshawy et al., 2015; Messner, 1988). With this decision, female high school athletes and women in college gained opportunities for college scholarships in areas of their sport, improved training facilities specifically for women's sports, and additional funding for sports activities (Simon & Uddin, 2018).

According to Tanaka and colleagues (2021), the percentage of high school females participating in all types of high school sports after the passage of Title IX increased substantially compared to those of high school males. Specifically, from 1973 to 2018, there was a 261.7% increase in females' sport participation versus only an 11.4% increase in males (Tanaka et al., 2021, p. 3). However, these numbers may not actually reflect the total rise in high school-aged females' sports participation as many females in this age group may engage in sports activities outside of their school environment (Simon & Uddin, 2018). This is good news as research consistently suggests that participation in sports activities for females in this age group has significant physical health benefits as well as decreased rates of risky behaviors such as smoking, engagement in sexual activities, and suicidality, and a positive relationship with improved self-esteem (Simon & Uddin, 2018). However, it is also well known that young females face many internal and societal barriers to engaging in sports or any physical activity (McManama O'Brien et al., 2021).

Psycho-Social Development of Girls and Women Through Sports

As young girls and female adolescents began to engage in more organized sports in schools, researchers began to explore the impact of sports engagement on females; often

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

comparing young girls to boys who are playing sports (Kiliç & İnce, 2021; Nicholls et al., 2009; Seefeldt & Ewing, 1997). There is an abundance of research that indicates youth sport participation is beneficial in multiple ways to young athletes, regardless of gender (Easterlin et al., 2019; Newman, 2020; Pierce et al., 2022; Zuckerman et al., 2021). Specifically, there is a positive correlation between sport participation and youth developmental factors such as mental health, social skills, wellbeing, and increased physical activities levels (Easterlin et al., 2019; Liddle et al., 2017; Malm et al., 2019; Newman, 2020; Newman et al., 2018)

Girls

In a systematic review of 24 qualitative studies that met the inclusion criteria for exploring opinions and insights of girls 12-18 regarding physical activities and sports, girls perceived societal pressures to represent themselves in a way that reinforces traditional girl roles and appearance which inhibits their participation in physical activities and sports (Corr et al., 2019). For instance, girls shared that "it is not possible to 'look good' (Loman, 2008) and be active at the same time as: 'what stops a lot of girls from doing sports is that they're worried about how they look, their make-up and everything' (Dwyer et al., 2006)" (Corr et al., 2019, p. 813). In addition, this systematic review noted the influence of the girls' self-perceived level of competence and skill at a physical activity increased their participation in a sport. However, girls who did not engage in physical activities cited their lack of "perceived skill, a dislike of team sports, and negative feedback from peers and teachers" (Corr et al., 2019, p. 813). This has internal and external consequences as inactive girls also report being humiliated in peer situations due to their lack of competence in this area, damaging their sense of self. (Corr et al., 2019). The conclusions of the systematic review by Corr and colleagues (2019) highlight that conversations about sports for young girls are bifurcated into male or female roles and stereotypes which tends to pull girls away from engaging in physical activities during the crucial adolescent years. This lack of participation can have lasting physical and mental health impacts as it limits opportunities to develop beneficial life skills (Newman, 2020; Pate et al., 2000). Furthermore, this sex-based "stereotyped" approach to physical activities for young girls does not encourage advancement in the multifaceted areas of youth development nor does it lead toward girl empowerment (Heinecken, 2021).

Women

Young girl athletes that go on to become college women athletes face similar issues that influence their psychosocial development as young women. Early on during the integration of women into college sports, particular attention had been given to understanding the physical development of women athletes. For instance, Huston and Wojtys (1996) found differences in neuromuscular performance between men and women, and Vescovi and colleagues (2008) studied the effectiveness of plyometric programs for jumping skills among college women. However, as opportunities for females to participate in collegiate sports teams grew, research continued to explore how being a young adult female athlete impacts psychological, social, and emotional development (Carter-Francique, 2014; Harrison et al., 2009; Mosewich et al., 2014; Otis et al., 1997; Voelker et al., 2019). An area of growing research focuses on the complexities of competing identities for female athletes. One such example of this type of research is the vast

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

body of literature that explores how being a female athlete challenges the socially constructed norms of what it means to be masculine or feminine (Bell & Coche, 2018; Musto & McGann, 2016; Steinfeldt, Carter, et al., 2011; Steinfeldt, Zakrajsek, et al., 2011). For example, Steinfeldt, Zakrajsek, and colleagues (2011) found differences between women college athletes and non-athletes in conforming to sex-based norms. More specifically, they found that student-athlete women conform to similar feminine norms as non-athletes but that they also conformed to masculine norms that are common in sports (Steinfeldt, Zakrajsek, et al., 2011).

A primary example of the intersection between identifying as an athlete and as a woman comes from my own experience. I, the lead author, was a former collegiate and professional athlete. When I got "too physical" in a women's basketball game or when I was just as vocal as a male counterpart, I was told to "stay in my role" and to "tone it down" by coaches, officials, and other authority figures. In their study, de Haan and Sotiriadouon (2019) explain that male coaches often let their own beliefs and philosophies about the sexes underestimate characteristics of female athletes such as their mental toughness as well as their commitment to sport because of assumptions that women will become mothers, caretakers and/or wives. Moreover, there is pressure to be strong, but "'acceptably' feminine" (Kotzé et al., 2020, p. 1). Thus, the messages sent from the male-dominated sports arena and messages from the empower-women-through-sport movement seem to contradict one another. These opposing views contribute to the inequities still seen today between male and female sports, nearly 51 years after the passage of Title IX (Bowes et al., 2021; Voepel, 2021).

Women, Roles, and COVID-19

Like in the sports realm, the COVID-19 pandemic also saw its fair share of sex-based inequities. For example, women were burdened much more by domestic workloads than men (Adisa et al., 2021). Even though the COVID-19 pandemic's end is now in sight, the experiences of women during COVID-19 have been examined and lend context to the current study. In order to learn from former college athlete women what skills or coping mechanisms they employed to get through this global crisis, an exploration of women's adaptation, in general, is needed.

While some research has stated that more men have died from COVID-19 than women, it has also been noted that the financial and emotional impact on individuals who identify as women have been devastating (Adisa et al., 2021; Danielsen et al., 2022). Nearly 1 in 10 (8%) women report quitting their job for reasons related to COVID-19, the majority of which were young women ages 18-35 (Ranji et al., 2021). Women have always been, and continue to be, the primary caregivers for children and also perform more household tasks than men, even if they also work outside of the home (Hess, 2020).

Women's lives are further complicated by their ascribed and implicit role positions in families as extended sisters, wives, mothers, or family caregivers, with additional cultural expectations to preserve formal and informal traditions, and often must occupy reduced employment options based on sex-based expectations (Almeida et al., 2020; Power, 2020; Zanin et al., 2021). During the COVID-19 pandemic, women who may already be vulnerable to mental health issues due to socioeconomic status and other stressors took on even more burden which exacerbated these concerns and highlighted gender role disparities (Lindau et al., 2021). When the world was grappling with death, loss, isolation, and uncertainty, women were disproportionately coping with a more significant burden. Although the representation of women

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

in the workplace, sports, and professional schools has increased significantly in the past 30 years, men still retain a higher status than women in Western society (Haines et al., 2016). Thus, the increase in gender role delineation and responsibilities brought on by the pandemic placed a greater demand on women and has exacerbated mental health disparities already present for women across the globe.

Purpose of Study

Research on sports activities during COVID-19 focused largely on the current youth, collegiate, and professional athletes' responses to the pandemic as these groups faced lost opportunities to function at peak performance times, build additional competitive skill competencies that may have enhanced their careers (Graupensperger et al., 2020; Şenışık et al., 2021; Szczypińska et al., 2021), and various non-athletic skills (i.e., life skills) including confidence, leadership, and teamwork (Anderson-Butcher & Bates, 2021). However, there is no information examining if these skills gained through prior athletic participation assisted with coping during the pandemic.

This study examines how middle-aged women coped during COVID-19. More specifically, this study seeks to know if former collegiate athlete women were utilizing skills that they learned from their college athletic experience to inform their coping with the life stressors of COVID-19. Reflection on this critical developmental time; college years and experience of collegiate sports participation, may offer insight into how to use prior experiences to assist middle-aged women to cope with stressful and uncharted crises.

Methods

This study was approved by the [Blinded] University Institutional Review Board. In-depth interviews were used to investigate if and how prior collegiate sports experiences influenced coping or other behaviors during the COVID-19 pandemic of middle-aged women who were former collegiate athletes. Participants were asked to recall their college athletic experience that according to Jin and colleagues (2021), provides the advantage of allowing investigators to capitalize on existing research by facilitating meaning-making between the prior experiences of participants and the current body of knowledge. The researchers utilized Braun and Clarke's (2006, 2012) thematic analysis process.

Recruitment

Inclusion criteria for participants were the following: 1) participants for the study had to be between the ages of 30-60 years of age, 2) had previous college athletic experience at any division level, 3) identify as female during the college athletic career, and 4) and live in the United States for at least six months during the COVID-19 pandemic. The timing of this study was during the COVID-19 pandemic: April through July of 2021.

Participants were recruited via purposive and exponential discriminative snowball sampling through listservs and social media advertisements. A web link attached to recruitment a recruitment letter or flyer connected participants to an online questionnaire and scheduling platform (Calendly©). The initial questions confirmed participants meet the inclusion criteria of

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

the study. When confirmed, participants were directed to an automated calendar that allowed them to choose the date and time of their interview. Interviews were conducted via Zoom©. No incentives were offered for participation in this study.

Interview Protocol

Virtual individual interviews were conducted with consented participants using a semi-structured interview guide (Appendix) that explored the participant's experience with college athletics, social and life skill development in college, as well as their current experience and response to the COVID-19 pandemic. The first series of questions asked the respondents to reflect on their athletic careers. The purpose of these questions was to build rapport and gain an understanding of the participant's collegiate athletic involvement, and their sense of self at that time. The next series of questions probed into their adaptions during the COVID-19 pandemic. The final set of questions asked for their reflections on how their athletic experiences may have impacted their life experiences during the pandemic. Although we revised and piloted the interview guide several times, in hindsight, questions 9-14 offered the most robust responses to answer our research questions. However, questions 5-8 provided the context from which the themes were derived.

With the verbal consent of participants before beginning the interviews, all interviews were audio/video recorded and transcribed. The principal investigator conducted all the interviews of the study for consistency purposes and to reduce potential conflicts of interest. The research team elected two software tools to aid in the process. Zoom video conferencing was used to record and transcribe recorded interviews. The researchers independently coded the transcripts that were stored in Dedoose software.

Data Analysis

The data coding and analysis of this study were informed by the process recommended by Braun and Clarke (2006, 2012). Briefly, we proceeded in the following way. Three authors comprised the research analytical team. Each member independently read through the transcripts to become familiar with the data. After reading through the transcripts, members of the analytical team independently identified meaningful statements provided by the respondents and generated initial codes to reflect the content of the statement. Then, the team came together to discuss these codes. As discussions continued, each code had to be unanimously agreed about, supported by identified statements, and then categorized. Discussions continued and the categories of codes were further classified into themes that reflect meaning relevant to the research question (Guest et al., 2012). To summarize, we used an iterative team process to ensure that we represented the lived experiences of the participants accurately.

Trustworthiness

Processes related to trustworthiness in the data analysis in qualitative research are important to consider. Four aspects of trustworthiness were addressed for this study: confirmability, dependability, credibility, and transferability (Guba, 1981). Given that the interviewer was a former collegiate athlete, attention to processes to support the confirmability of the findings was paramount. Recognizing that researchers are part of the research instrument in

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

qualitative interviews (Hunter Revell, 2013), the primary investigator's proximity to the experiences of the study sample was addressed by way of reflective note-taking and other strategies. The interviewer recorded observational, theoretical, and methodological notes (Hunter Revell, 2013) during the interview process for self-reflection and to discuss with the other authors. Observational notes served as documentation of things that stood out during the interview process or that the interviewer wanted to refer back to later. Theoretical notes were the interviewer's attempts at making meaning out of the interview itself or out of the observational notes. The methodological notes aided in reflexivity and self-critique of the interviewer to improve the methodological flow in the interviews that followed. The co-authors met with the lead researcher (i.e., the interviewer) to provide peer debriefing. During the data interpretation process, an iterative process of independent coding, debriefing, and collaboration among the research team also ensured implicit bias was minimized. This process also helped to support the dependability of the findings. To improve rigor and trustworthiness, researchers aimed to reduce the interference of technological transcription errors by reviewing original interview recordings for the accuracy of statements (Hunter Revell, 2013).

In addition, the primary investigator piloted questions for the interview guide with other individuals familiar with collegiate female sports, other researchers, and a few individuals who represented the target population. This method of constructing the interview guide resulted in an iterative process of revising and piloting questions until the entire research team reached a consensus that these questions aided in supporting the replication of the study by others.

This study stopped recruitment when participant stories reached saturation—meaning that respondents were describing similar responses to the questions. While the respondents were all former collegiate athletes, this represented different sports teams with the potential for different experiences. Given the similarity of the responses, no matter what type of sport the respondent played in college, this adds to the credibility and transferability of the findings.

Strategies to obtain a representative sample and increase diversity in the sample were implemented through the recruitment procedure which sought participants via various avenues (listservs, email, social media, etc.). As another way to engage diverse respondents and remove barriers to volunteering for this study, participants were provided a variety of time options to schedule interviews at their convenience.

Findings

This study asked middle-aged women about their response to the pandemic and about their use of college athletic skills as they engaged in retrospection about their college athletic career. The data analysis resulted in four final categories of codes: identity, pivot, grit, and empathy. These categories of codes were collapsed and resulted in the generation of two final themes: Pivot (with a subtheme of grit) and "Sticky People."

Sample

The final sample consisted of 19 women. These women had a mean age of 42 years old, most women played soccer (n=7), and most of the sample identified as White (n=16). (See Table 1). For anonymity purposes, all names associated with quotes are aliases.

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Table 1.
Sample Characteristics (N = 19)

Age	
Mean	42
Min	31
Max	58
Race/Ethnicity	
White	15
Black/African American	4
Sport	
Soccer	7
Softball	2
Swimming	1
Field hockey	1
Volleyball	3
Basketball	2
Track and field	2
Lacrosse	1

Defining the Context of this Study: "The Dual Pandemic"

Before discussing the findings of this study as they pertain to the main research question (i.e., *how* participants were coping), additional contextual details and findings that aid in understanding *what* the study sample was experiencing are offered. As noted earlier, this study took place during the middle of the COVID-19 pandemic, when public health guidance strongly suggested that individuals stay home, refrain from social activities with others outside of their immediate family and avoid enclosed public spaces with large groups of people. Also, our data collection period occurred a year after the tragic murder of George Floyd on May 25, 2020. This event marked the rise of the Black Lives Matter (BLM) movement. BLM sought to confront the blatant acts of racism, systematic injustices, police brutality, and other acts of violence faced by Black communities. Despite government recommendations to isolate, political, racial, and social unrest occurred worldwide. Thus, as COVID-19 progressed, it became known as the "double or dual pandemic" because of the link to these social justice activities.

Many of the women interviewed for this study were experiencing the pandemic while caring for children and families of their own, as well as their parents. When asked about current experiences that stood out about the pandemic, two perspectives arose. First, these women shared

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

about the political and racial unrest related to BLM. Second, many of them shared examples that spoke to the intersection of the diverse roles (mother, daughter, employee, etc.) they hold as women in society. More specifically, they spoke of having to juggle the responsibilities of these roles during COVID-19. First, let us present their words regarding the dual pandemic.

> *I think the first things that come into mind are like, fear, isolation. And not just for me personally, but, just like the community aspect of it… I feel like the protest and then the subsequent riots in some areas and different places like wearing [on me].* (Karla)

> *It would just be so heavy to see Black people continuously murdered and no consequences or we have a really close family friend who was very much a part of the protests… it was serious stuff to watch someone you actually know be fearful for their life, day in and day out, that was emotionally taxing*. (Jess)

> *So much fear, with the sickness and the politics, and then you're isolated… I think mentally as well, so yeah, I think fear*. (Betsy)

A year into the pandemic when these interviews were held, the respondents blended the political and social unrest in the environment with their intrapersonal experience of the pandemic. This revealed heightened levels of fear, isolation, and anxiety from both forces. The world was summarized by Betsy when she shared that "*we are in a collective trauma environment... it definitely does take a toll."*

> Linda speaks to the uncertainty that these women shared when she recalled that,
> *One of the main things or main themes that comes up is tolerating uncertainty… And so, it was this like this feeling inside, of like, is my job secure?… Definitely anxiety. Definitely fear, and trying to work through that experience. I think, tolerating uncertainty was a huge one, and then it was like well I ever make friends somewhere? Will I find a partner?* (Linda)

Other women shared that isolation continued to be the hardest part of the pandemic:

> *Isolation was the hardest part; it continues to be. I still haven't been home. I'm planning to go home…for my nephew's second birthday because I missed the first one.* (Jess)

> *The first word [that comes to mind] is isolation. I think that is one that jumps out of me as what the pandemic has really done and a lot of ways, on multiple levels.* (Betsy)

Their responses communicated that the political and social unrest, concern with physical wellness, and the impact COVID-19 had on their mental health were further complicated by social isolation. These contextual findings help us understand *what* environment, *what* feelings, and *what* experiences these women were coping with during the study. Therefore, we could answer the main research question of how middle-aged former college athlete women were using skills from college athletic experience to inform their coping during COVID-19 pandemic.

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Themes: Pivot and "Sticky People"

Pivot

During the interviews, participants were asked to describe profound memories for them during COVID-19. Conceptually, these middle-aged women associated the pandemic with shifting and having to quickly adapt or redirect during the many demands placed on them by the pandemic. In basketball terminology, a pivot is a movement in which a player holding the ball may move in any direction with one foot, while the other foot (the pivot foot) stays grounded on the floor (World Association of Basketball Coaches, n.d.). These women were describing how being an athlete helped to guide the pivots they made while staying grounded in their lives during the pandemic.

> *The unpredictability of sports… And really that just equates to life. Because you really never know what's going to happen in life, and I think as an athlete, the ability to develop mental toughness. And I'm not saying every athlete has mental toughness but the athletes that can develop mental toughness I think it gives them the ability to do that pivot, to reframe. And to hold on to that hope. When life doesn't go the way you want it to go and you're not always going to win the game and how do you handle not winning the game.* (Laura)

> *I would say as an athlete as a college athlete sometimes we don't have a lot of control over the decisions that are happening for us, or we have a goal and sometimes we have to sacrifice. You know and make those things happen, but in this area you realize that you do have the control, you can be intentional, have a plan, get connect with folks that have walked the walk so they can support you and I think that's the biggest thing is being prepared to pivot, be flexible.* (Jess)

> *So, it was never a matter of can I do this,... it's more a matter of how do you do what you always did in this new way and I think that comes from being an athlete. you know when you're down in softball when it's the sixth inning and you're down by five runs it's not a matter of oh we're just going to lose, it's a matter of how do we win this game, what do we need to do, what do we need to change.* (Eva)

Grit. The Pivot theme encompasses the subtheme of grit. Grit is a concept first identified by Duckworth and colleagues (2007) to represent personal qualities that keep individuals pursuing a goal, more specifically; a long-term goal, even under difficult circumstances. We determined that you needed "grit" in order to "pivot" to achieve a long-term goal—stay healthy—during the pandemic. It was evident throughout the interviews that women had a distinct awareness that participating in college athletics prepared them for tough times, and even COVID-19.

> *Being an athlete is like requires a big-time commitment, it requires self-motivation. Required requires a commitment to, you know, your sport and training and the time and*

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

> *being efficient with your time. So, I would say, definitely I use a lot of those same skills during the past year of COVID-19 had, like just being self-motivated, getting myself up.* (Sabrina)

> *I don't [want to] say "regular people", but like non-athletes… I don't know if there's anything that is as comparable to like the physical demand and the mental demand of being an athlete. I've always found that there's an incredible value in that....So, I would say grit and resiliency and accountability are probably those you know all kind of tying together but definitely, each with their own significance. To be able to like get through life successfully.* (Tina)

> *I think, being a college athlete builds a certain level of resilience and that you draw on. So, it was never a matter of can I do this, can I meet my student's needs, can I teach online, can I live isolated alone in [STATE], it was never a matter of can I, it was more matter of how.* (Eva)

> *Just the sense of inner resilience the sense of inner strength that you can continue to apply. ... just get more confidence that we can do that next hard thing, and so I think what I would want for college students to take away is you're doing hard things, and this is going to teach you can still you can do even harder things anything you can.* (Linda)

Overall, participants indicated the ability to pivot was a reoccurring theme which they drew on from their athletic experience. Many of them indicated that skills and traits like, "flexibility," "creativity," the "ability to adapt," and "toughness" were significantly engrained in them during college athletics, and these helped them successfully navigate the pandemic. In their descriptions of these skills, they also indicated a level of "grit". This trait keeps them focused on the long-term goal and adapting to achieve it. They shared that this is also something that current college athletes should appreciate as they are building this skill and that they can utilize it during the pandemic, and later in life. As Dianne said,

> *The same thing that allowed you to face a tough opponent, you have those qualities that will help you face this crisis we're facing. That same quality, that grit, that determination, that willingness to work hard that, willingness to be a part of a team. And I think knowing how to be part of a team will help you navigate the landscape of facing a pandemic.* (Dianne)

"Sticky People"

The former athlete women in this study repeatedly mentioned the relationships, bonds, and comradery of their college athletic experience as something influential in their current lives and during the pandemic. They further attributed their college athletic experience to learning about building a sense of community. For example, as Dianne, a former volleyball player, reminisced on her most profound memories of the COVID-19 pandemic, she shared "*I think the biggest thing [that comes to mind] is my responsibility to my community*." Similarly, Karla, a former softball player, shared that the "*first things that come to mind are like fear... isolation,*

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

*and not just for me personally, but, just like the community aspec*t." She continued by stating that:

> *You need to connect like family, you know and have that same type of support, so I feel like that has carried me through and even with COVID knowing that I need to be connected with other people. And I think there's always that component to that it doesn't mean you're going to always think the same way you do and feel the same way you do and. That that that to me, though, I feel like I learned that as a team, though it doesn't matter you still need to work together as a team, so I think I've kind of carried that piece.* (Karla)

This same sentiment was shared by Katie, an educator who expressed that she has maintained this value of building strong relationships in her career and even during the pandemic:

> *One of the biggest things that I've taken in the last year was doing a check-in for all of my classes for all of my people from the beginning, how are you doing today, what are you coming in with? how are you feeling? It has made my teaching so much stronger because again my teaching philosophy is relationships is community.* (Katie)

Linda shared how social relationships and bonding with others were directly connected to her college experience and that it has helped her get through depressive times during the pandemic:

> *Honestly, I felt a little bit of depression may not have been that clinical level, but… I looked for ways to have small group physical activity interactions because you could be outside, although you had to you know, obviously still social distance and mask and so. I the few friends, I had, I would go mountain biking with I would you know do hikes where it wasn't a huge group, it was one on one... we're outdoors and so that really helped and I think it stemmed from you know part of it was that collegiate experience* (Linda)

Tina realized, as did the other women, that she needed to prioritize social connection during the pandemic:

> *Feeling like you were missing life events. You know, people had kids that I wasn't able to kind of be out there for… Big events that I normally otherwise would have been at. I think that social circle… it was challenged in a way that was like, okay. Are you going to keep in touch with these people if you don't get to go see them all the time? Like you need to make this a priority.* (Tina)

We call this awareness of making efforts to remain connected to individuals, family members, or those in the community the theme of "sticky people". We use this term as a metaphor for making or maintaining social connections during COVID-19 because in sports, a "zone defense" is a key strategy in which team members move together—relying on the connectedness of the group—to defend against a specific offensive threat on the opposing team, and in this case, it was COVID-19.

In summary, participants recalled how important it was to be a member of a team as well as the importance of a team (i.e., a community) as well. They "stuck" to people during this

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

pandemic in new ways, using the available time to help others or reconnect with people through the use of technology. During COVID, quite a few of these women mentioned reconnecting with former teammates to check on their status during the pandemic and continuing this renewed relationship.

Identity: A Consideration for Interpreting Findings

While we identified "pivot" and "sticky people" as themes that answered our research question, we also heard respondents speak of the importance of the athletic experience to their adult identity.

Karla shared that,

> *I just feel like it's been like foundational and like I almost feel like as I continue to get older it kind of builds on that you know, like you, I found different ways to be able to be lead or be a leader and still be part of a team, and so, whatever that looks like.*" (Karla)

Francis echoed this idea as she indicated that:

> *Having that experience of identity as an athlete… I do think back a lot on the control we have on how we identify and that our identities are always growing. I do think about that as a parent of a growing kid. I think about that as a wife, I don't think I realized that at the time, but like always identifying as an athlete and then having to shift that gave me some skills to call back on when I encountered other transitions in life... So, I do think that has roots in like my initial transition from like realizing I'm more than athlete, as the saying goes, to then realizing now like okay, this is my identity now, and these are what's important to me and like how am I nurturing each of those pieces.* (Francis)

In the same way, Kathy shared the importance of maintaining athletic identity, especially in middle-age:

> *We spend longer in our middle age and outside of sport than we spend in sport right, so I mean, most of us, especially women who just don't have a lot of like pro-opportunities really. So, I think you know, anything we can do, I have just had an interest in middle-aged population like what, how do we keep. Women maintain some of that athlete identity or maintain some form of involvement in the in the community, you know with sport. Aside from you know what just becoming you know not just becoming but you know being parents and mothers and all of that, like, how do we, how do we keep the women active and let them still thrive in their sport to even if we can't play pro.* (Kathy)

While our research question focused on understanding the coping response of middle-aged women who were former collegiate athletes during the pandemic, we had to notice in their words—their stories—that this college sport experience left a lasting identity that influenced how they managed and what skills they implemented during COVID-19. This was exemplified in Betsy's account of her experience with identity and how it relates to COVID-19.

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

> *there's a lot wrapped into the sport itself it's not just oh I'm done with college and it's over I'm done... like that concept of, to me, identity as your sport, as your identity and your role in that like is so large that it's hard to, you know, learning how to adapt to after that you know and how do you keep that?... knowing how to you know that's still going to be a part of you, but what you know how do you know how or if you don't get a job you want, or you don't, you know, there is a depression or recession or you know how to navigate it based on what you've learned.* (Betsy)

Discussion

During a worldwide pandemic, this study sought to explore if former collegiate athlete women who were now in middle age were using skills from their college athletic experience to inform their coping response to the pandemic. Through qualitative inquiry, we found that the women who participated in this study were indeed pulling on traits and lessons that they mastered during college athletics and these abilities could be summarized by way of two themes: 1) The ability to pivot which was characterized by their "gritty" athletic nature and 2) being "sticky people" helped them continue or build social connections within their family, friends, or in their community. These findings highlight the potential that continuous involvement and identification with being an elite-level athlete during emerging adulthood (i.e., college) (Arnett, 2000) can have on life skill application in later adulthood developmental periods. Further considerations and implications are discussed below.

Confronting Covid-19

Many women in this study talked about the pivots they made during COVID-19 while balancing work and family life. For example, Adisa et al. (2021) indicate that achieving the elusive work-family balance was much harder for women during the pandemic due to the conflict between their roles as employees, mothers, and caregivers. This role conflict was especially stressful when lockdowns and quarantine restrictions limited social support from friends, coworkers, family, etc. Thus, women were at greater risk for isolation, anxiety, and stress (Venta et al., 2021). In contrast, the current study showed that the former collegiate athlete women that were interviewed were able to cope and respond quite well to the demands of the pandemic.

The women in this study talked about coping with the strain placed on their roles and responsibilities during the pandemic with optimism and hope. Their accounts of challenges brought on by the pandemic were almost always immediately followed by an explanation of how they countered the challenge (a pivot), a commitment to overcome the struggles of the pandemic (grit), or the importance of community and social connection ("sticky people"). Whether the participants' college athletic experiences were considered positive or less favorable, these women emerged from college with transferrable life skills (i.e., life skill transfer). They also shared similar sentiments that these skills and traits were more enduring due to their involvement in college athletics.

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Participants in this study were adamant that participation in college sports, compared to high school or youth sports, uniquely prepared them with skills that others are not as privy to. Prior research supports their sentiments as it is well documented that being an athlete is associated with greater levels of grit and resilience and that playing at higher levels of competition is positively associated with harnessing these traits (Cormier et al., 2021; From et al., 2020; Kitano et al., 2018). However, a scoping review conducted by Cormier et al. (2021) indicated some contradiction about male and female differences. For example, some studies found that male and female athletes do not differ in levels of grit, while other studies noticed that female athletes demonstrated higher levels of grit and resilience compared to their male counterparts. Other research has suggested that female athletes may face a greater number of challenges by being a marginalized group in sports (Cain et al., 2016; Cormier et al., 2021) and as such, institutions and sports programs that have more gender-based inequities may generate more challenges for female athletes. This may account for higher levels of grit among female athletes compared to males. Further study is needed in this area. Future research should also look at the preference given to male sports in terms of resources and status as compared to women's sports activities.

Former Collegiate Athletes as Middle Age Women

Identity refers to a "sense of self" or the self-determined qualities, beliefs, traits, values, and other factors that help to describe a person or group (Erikson, 1956). The concept of "identity" is central to an athlete. Although both college athletes and non-athletes may face similar developmental challenges during college, the development of athletes may include further complexities due to their involvement with the added social context of college athletics as it is documented that sport can influence life span developmental stages (Kratz & Rosado, 2022; Moore, 2016). For female collegiate athletes, their development may be further complicated by their role as women engaging in non-traditional college career paths in sports, which is also typically characterized as a male-dominated industry (Gearity & Metzger, 2017; Steinfeldt, Carter, et al., 2011; Steinfeldt, Zakrajsek, et al., 2011). Thus, the college developmental period of women athletes may be starkly unique, and the identity experiences of both current and former women athletes need further attention.

Previous studies on athletic identity have suggested that there is a loss of athletic identity once athletes stop playing sports, especially for those who have played at elite levels like college (Lavallee et al., 1997; Martin et al., 2014; Menke & Germany, 2018). This idea is apparent even in our everyday language about athletes who previously played at elite levels as they are often referred to as *former* athletes, as we have done throughout this manuscript. However, the women in this current study demonstrate that those characteristics and qualities of their athletic identity are still very much present and functioning effectively in their various roles. Their continued identification, whether intentional or not, suggests that athletic identity may not be lost, and it points to a need for more strength-based language that does not strip away athletic identity. For example, *athletic identity transfer* (instead of *athletic identity loss*).

When athletes finish their playing careers, many of the characteristics associated with an athletic identity remain intact. Former athletes in this study were all able to identify a clear endpoint to their athletic identity. These women recalled a time close to the end of their college athletic career, or shortly after, in which they came to terms with not being a college athlete

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

anymore (i.e., transferring their athletic identity), but then also they recalled how important it was for them to revisit that identity and its importance in remaining intact throughout later adulthood.

Considerations, Limitations, and Strengths

Important considerations of this work should be acknowledged. The results from this study should be considered exploratory and may not be transferable, as is often the situation with qualitative studies investigating new topics with specific populations. In addition, it is important to recognize that the questions were focused on retrospective memories of participants' time in college and that this sample of former college athlete women had an age range that spanned from 31 to 58 years old. This means that they were referencing memories of starkly different societal periods for women's college sports.

The lack of diversity in the sample is a limitation that future research should address since minoritized racial and ethnic women were not well represented in our sample. Black female college athletes, in particular, face unique challenges in the systematically predominantly White space of higher education and this experience are many times further complicated by their intersecting identities as a minoritized group of women in the sports industry (Carter-Francique, 2014; Carter-Francique et al., 2017; Crenshaw, 1989; Simien et al., 2019). The strength of this research is its contribution to the scant literature on this population and this topic specifically in the context of a pandemic: middle-aged women who were college athletes and college athletic skill transfer.

Implications for Sport Social Work

Throughout their lifespan, women and girls are at increased risk for depression, anxiety, eating disorders, and other psychosocial issues compared to their male counterparts (Campbell et al., 2021; Freeman & Freeman, 2013; Lesesne & Kennedy, 2005). Additionally, research on disaster and crises responses has established that for women, socially constructed gender role definitions and expectations are connected to increased risk factors for the development of post-traumatic stress disorder (PTSD) during a disaster (Almeida et al., 2020; Street & Dardis, 2018). Thus, as we consider the continued impact COVID-19 is still having on society, sport social workers are essential for assisting athletes in navigating and preventing psychosocial concerns.

In addition, understanding how female high school athletes negotiate entrance into college sports systems needs additional study. Student-athletes may have additional psychological pressures due to their involvement with college-level sports teams (Author & Author, XXXX). For female collegiate athletes, their development may be further complicated by pursuing a non-traditional college career path—sports, which is typically promoted as a male-dominated industry (Clasen, 2001; Gearity & Metzger, 2017; Messner, 1988). "Mental toughness", a code word for the rigorous physical and psychological preparation that is needed for consistent performance at a top competitive level, is often portrayed as the ability to receive and not react to stressful and demanding critique no matter how abusive coaching strategies may be, and stereotypically, is more commonly recognized as a "male" response. Yet, female collegiate athletes experience similar "character" building coaching approaches, as do male athletes. Hence, the subspecialty of sport social work is in a unique position to lead the scientific

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

study of life skill transfer of women collegiate athletes and steer efforts to inform how best to nurture their strengths once women transition into other adult roles.

Conclusion

The participants in this study shed light on the unique experiences of college athletics for women and how these experiences can lead to positive trait development and life skill transfer. These character traits, lessons, and skills had staying power as all the women in the study were in middle age and they found themselves using these positive developmental outcomes even as they faced a worldwide crisis. Overall, there is a continued need to examine women athletes' psychological and developmental experiences during college that may mediate later life transitional periods.

References

Adisa, T. A., Aiyenitaju, O., & Adekoya, O. D. (2021). The work–family balance of British working women during the COVID-19 pandemic. *Journal of Work-Applied Management*, 241-260. https://doi.org/10.1108/jwam-07-2020-0036

Allen, K., & Frisby, C. (2017). A content analysis of micro aggressions in news stories about female athletes participating in the 2012 and 2016 Summer Olympics. *Journal of Mass Communication & Journalism, 07*, 1-9. https://doi.org/10.4172/2165-7912.1000334

Almeida, M., Shrestha, A. D., Stojanac, D., & Miller, L. J. (2020). The impact of the COVID-19 pandemic on women's mental health. *Archives of women's mental health, 23*(6), 741-748. https://doi.org/10.1007/s00737-020-01092-2

Anderson-Butcher, D., & Bates, S. (2021). Social work and youth sport. *Child and Adolescent Social Work Journal, 38*(4), 359-365. https://doi.org/https://doi.org/10.1007/s10560-021-00777-6

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*, 469-480. https://doi.org/10.1037/0003-066X.55.5.469

Bell, T. R., & Coche, R. (2018). High power kick: Content analysis of the USWNT 2015 world cup victory on American front pages. *Communication & Sport, 6*(6), 745-761. https://doi.org/https://doi.org/10.1177/2167479517734853

Bowes, A., Lomax, L., & Piasecki, J. (2021). A losing battle? Women's sport pre-and post-COVID-19. *European Sport Management Quarterly, 21*(3), 443-461. https://doi.org/https://doi.org/10.1080/16184742.2021.1904267

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology, 3*(2), 77-101. https://doi.org/https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2012). *Thematic analysis*. American Psychological Association. https://doi.org/https://doi.org/10.1037/13620-004

Cain, J., Voss, E., Mayol, M., Dobersek, U., Everett, K., & Beekley, M. (2016). Differences in sport motivation, self-esteem and grit among collegiate swimmers and divers. *Medicine and Science in Sports and Exercise, 51*(6S), 731-732. https://doi.org/10.1249/01.mss.0000485141.71192.3e

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Caldarella, P., Johnson, J. E., Larsen, R. A., Heath, M. A., & Warren, J. S. (2019). Adolescent sports participation and parent perceptions of resilience: A comparative study. *The Physical Educator*, 76(4). https://doi.org/10.18666/TPE-2019-V76-I4-8451 Campbell, O. L., Bann, D., & Patalay, P. (2021). The gender gap in adolescent mental health: a cross-national investigation of 566,829 adolescents across 73 countries. *SSM-population health, 13*, 100742. https://doi.org/10.1016/j.ssmph.2021.100742

Carter-Francique, A. R. (2014). An ethic of care: Black female college athletes and development. *Race in American sports: Essays*, 35-58. https://sujo-old.usindh.edu.pk/index.php/THE-SHIELD/article/view/1017/954

Carter-Francique, A. R., Dortch, D., & Carter-Phiri, K. (2017). Black female college athletes' perception of power in sport and society. *Journal for the Study of Sports and Athletes in Education, 11*(1), 18-45. https://doi.org/https://doi.org/10.1080/19357397.2017.1285872

Clasen, P. R. (2001). The female athlete: Dualisms and paradox in practice. *Women and Language, 24*(2), 36-42. https://go.gale.com/ps/i.do?id=GALE%7CA82352864&sid=googleScholar&v=2.1&it=r&linkaccess=fulltext&issn=87554550&p=LitRC&sw=w&casa_token=8lSBWCxoLEMAAAAA:3Ll1XZjSOTvl1lXMk_cXu68kb8nvv59c4FHToFl4qqGPmMQ2Zm0JwKmXLQb0ZjQ-60YFrn9ymv7GvEc

Cloonan, S. A., Taylor, E. C., Persich, M. R., Dailey, N. S., & Killgore, W. D. (2021). Sleep and resilience during the COVID-19 pandemic. In *Anxiety, Uncertainty, and Resilience During the Pandemic Period-Anthropological and Psychological Perspectives*. IntechOpen. https://doi.org/10.5772/intechopen.98298

Cong, Z., Chen, Z., & Liang, D. (2021). Barriers to preparing for disasters: Age differences and caregiving responsibilities. *International Journal of Disaster Risk Reduction*, 61, 102338. https://doi.org/https://doi.org/10.1016/j.ijdrr.2021.102338

Cormier, D. L., Ferguson, L. J., Gyurcsik, N. C., Briere, J. L., Dunn, J. G., & Kowalski, K. C. (2021). Grit in sport: A scoping review. *International Review of Sport and Exercise Psychology*, 1-38. https://doi.org/https://doi.org/10.1080/1750984X.2021.1934887

Corr, M., McSharry, J., & Murtagh, E. M. (2019). Adolescent Girls' Perceptions of Physical Activity: A Systematic Review of Qualitative Studies. *Am J Health Promot, 33*(5), 806-819. https://doi.org/10.1177/0890117118818747

Crenshaw, K. W. (1989). Demarginalising the intersection of race and gender: a Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago legal forum, 1*(8), 138-167. https://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=1052&context=uclf

Danielsen, A. C., Lee, K. M., Boulicault, M., Rushovich, T., Gompers, A., Tarrant, A., Reiches, M., Shattuck-Heidorn, H., Miratrix, L. W., & Richardson, S. S. (2022). Sex disparities in COVID-19 outcomes in the United States: Quantifying and contextualizing variation. *Social Science & Medicine, 294*, 114716. https://doi.org/https://doi.org/10.1016/j.socscimed.2022.114716

de Haan, D., & Sotiriadou, P. (2019). An analysis of the multi-level factors affecting the coaching of elite women athletes. *Managing Sport and Leisure, 24*(5), 307-320. https://doi.org/https://doi.org/10.1080/23750472.2019.1641139

Dodgson, J. E. (2019). Reflexivity in qualitative research. *Journal of Human Lactation, 35*(2), 220-222. https://doi.org/https://doi.org/10.1177/0890334419830990

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology, 92*, 1087-1101. https://doi.org/10.1037/0022-3514.92.6.1087

Easterlin, M. C., Chung, P. J., Leng, M., & Dudovitz, R. (2019). Association of team sports participation with long-term mental health outcomes among individuals exposed to adverse childhood experiences. *JAMA Pediatrics, 173*(7), 681-688. https://doi.org/10.1001/jamapediatrics.2019.1212

Elmenshawy, A. R., Machin, D. R., & Tanaka, H. (2015). A rise in peak performance age in female athletes. *Age, 37*(3), 1-8. https://doi.org/10.1007/s11357-015-9795-8

Erikson, E. H. (1956). The problem of ego identity. *Journal of the American Psychoanalytic Association, 4*(1), 56-121. https://doi.org/10.1177/000306515600400104

Freeman, D., & Freeman, J. (2013). *The stressed sex: Uncovering the truth about men, women, and mental health*. Oxford University Press.

From, L., Thomsen, D. K., & Olesen, M. H. (2020). Elite athletes are higher on Grit than a comparison sample of non-athletes. *Scandinavian Journal of Sport and Exercise Psychology, 2*, 2-7. https://doi.org/10.7146/sjsep.v2i0.115111

Gao, G., & Sai, L. (2020). Towards a 'virtual' world: Social isolation and struggles during the COVID-19 pandemic as single women living alone. *Gender, Work & Organization, 27*(5), 754-762. https://doi.org/10.1111/gwao.12468

Gearity, B. T., & Metzger, L. H. (2017). Intersectionality, microaggressions, and microaffirmations: Toward a cultural praxis of sport coaching. *Sociology of sport journal, 34*(2), 160-175. https://doi.org/10.1123/ssj.2016-0113

Graupensperger, S., Benson, A. J., Kilmer, J. R., & Evans, M. B. (2020). Social (un) distancing: Teammate interactions, athletic identity, and mental health of student-athletes during the COVID-19 pandemic. *Journal of Adolescent Health, 67*(5), 662-670. https://doi.org/10.1016/j.jadohealth.2020.08.001

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Ectj, 29*(2), 75-91. https://doi.org/https://doi.org/10.1007/BF02766777

Guest, G., MacQueen, K. M., & Namey, E. E. (2012). Themes and codes. Applied Thematic Analysis. Sage Publishing.

Gur, R. E., White, L. K., Waller, R., Barzilay, R., Moore, T. M., Kornfield, S., Njoroge, W. F., Duncan, A. F., Chaiyachati, B. H., & Parish-Morris, J. (2020). The disproportionate burden of the COVID-19 pandemic among pregnant Black women. *Psychiatry research, 293*, 113475. https://doi.org/10.1016/j.psychres.2020.113475

Haines, E. L., Deaux, K., & Lofaro, N. (2016). The times they are a-changing… or are they not? A comparison of gender stereotypes, 1983–2014. *Psychology of Women Quarterly, 40*(3), 353-363. https://doi.org/ https://doi.org/10.1177/0361684316634081

Harrison, C. K., Stone, J., Shapiro, J., Yee, S., Boyd, J. A., & Rullan, V. (2009). The role of gender identities and stereotype salience with the academic performance of male and female college athletes. *Journal of Sport and Social Issues, 33*(1), 78-96. https://doi.org/https://doi.org/10.1177/0193723508328902

Heinecken, D. (2021). The heart of the game firls sports and the limits of "empowerment". *Journal of Sport and Social Issues, 45*(3), 251-271. https://doi.org/10.1177/0193723519898705

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Hess, C., Ahmed, T., Phil, M., Hayes, J. (2020). Providing unpaid household and care work in the United States: Uncovering inequality (Briefing Paper No. IWPR# C487). *Institute for Women's Policy Research.* https://iwpr.org/wp-content/uploads/2020/01/IWPR-Providing-Unpaid-Household-and-Care-Work-in-the-United-States-Uncovering-Inequality.pdf.

Hunter Revell, S. M. (2013). Making meaning in qualitative research with conversational partnerships: A methodological discussion. *Advances in Nursing Science, 36*(2). https://journals.lww.com/advancesinnursingscience/Fulltext/2013/04000/Making_Meaning_in_Qualitative_Research_With.13.aspx

Huston, L. J., & Wojtys, E. M. (1996). Neuromuscular performance characteristics in elite female athletes. *The American journal of sports medicine, 24*(4), 427-436. https://doi.org/10.1177/036354659602400405

Jin, S., Rabinowitz, A. R., Weiss, J., Deshpande, S., Gupta, N., Buford May, R. A., & Small, D. S. (2021). Retrospective survey of youth sports participation: Development and assessment of reliability using school records. *PLoS ONE, 16*(9), 1-8. https://doi.org/10.1371/journal.pone.0257487

Kantamneni, N. (2020). The impact of the COVID-19 pandemic on marginalized populations in the United States: A research agenda. *Journal of Vocational Behavior, 119*, 1-4. https://doi.org/10.1016/j.jvb.2020.103439

Kiliç, K., & İnce, M. L. (2021). Youth athletes' developmental outcomes by age, gender, and type of sport. 212-225. https://doi.org/https://doi.org/10.14198/jhse.2021.161.19

Killgore, W. D., Taylor, E. C., Cloonan, S. A., & Dailey, N. S. (2020). Psychological resilience during the COVID-19 lockdown. *Psychiatry research, 291*, 1-2. https://doi.org/10.1016/j.psychres.2020.113216

Kitano, N., Jindo, T., Nakahara-Gondoh, Y., Sakamoto, S., Gushiken, T., Suzukawa, K., & Nagamatsu, T. (2018). Building grit in Japanese male high-school students: Examining the role of belonging to an organized sports activity. *Journal of Adolescent Health, 62*(2), S123-S124. https://doi.org/10.1016/j.jadohealth.2017.11.251

Kotzé, J., Richardson, A., & Antonopoulos, G. A. (2020). Looking 'acceptably' feminine: A single case study of a female bodybuilder's use of steroids. *Performance Enhancement & Health, 8*(2-3), 1-7. https://doi.org/10.1016/j.peh.2020.100174

Kövesdi, A., Törő, K., Hadhazi, E., & Takács, S. (2020). The protective role of self-efficacy for resilience in the COVID-19 period. *Acta Scientific Neurology, 3*(11), 87-91. https://doi.org/10.31080/asne.2020.03.0276

Kratz, S. E. & Rosado, S. E. (2022). Sport social work. In L. Rapp-McCall, K. Corcoran & A. R. Roberts (Eds.), *Social workers' desk reference* (4th ed.). Oxford University Press.

Lavallee, D., Gordon, S., & Grove, J. R. (1997). Retirement from sport and the loss of athletic identity. *Journal of Personal & Interpersonal Loss, 2*(2), 129-147. https://doi.org/10.1080/10811449708414411

Lesesne, C. A., & Kennedy, C. (2005). Starting early: Promoting the mental health of women and girls throughout the life span. *Journal of Women's Health, 14*(9), 754-763. https://doi.org/10.1089/jwh.2005.14.754

Liddle, S. K., Deane, F. P., & Vella, S. A. (2017). Addressing mental health through sport: a review of sporting organizations' websites. *Early Intervention in Psychiatry, 11*(2), 93-103. https://doi.org/10.1111/eip.12337

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.1-24.

Lindau, S. T., Makelarski, J. A., Boyd, K., Doyle, K. E., Haider, S., Kumar, S., Lee, N. K., Pinkerton, E., Tobin, M., & Vu, M. (2021). Change in health-related socioeconomic risk factors and mental health during the early phase of the COVID-19 pandemic: a national survey of US women. *Journal of Women's Health, 30*(4), 502-513. https://doi.org/10.1089/jwh.2020.8879

Malm, C., Jakobsson, J., & Isaksson, A. (2019). Physical activity and sports-real health benefits: A review with insight into the public health of Sweden. *Sports (Basel, Switzerland), 7*(5), 127. https://doi.org/10.3390/sports7050127

Martin, L. A., Fogarty, G. J., & Albion, M. J. (2014). Changes in athletic identity and life satisfaction of elite athletes as a function of retirement status. *Journal of Applied Sport Psychology, 26*(1), 96-110. https://doi.org/10.1080/10413200.2013.798371

McManama O'Brien, K. H., Rowan, M., Willoughby, K., Griffith, K., & Christino, M. A. (2021). Psychological resilience in young female athletes. *International Journal of Environmental Research and Public Health*, 18(16), 8668. https://doi.org/10.3390/ijerph18168668 Menke, D. J., & Germany, M.-L. (2018). Reconstructing Athletic Identity: College Athletes and Sport Retirement. *Journal of Loss and Trauma, 24*(1), 17-30. https://doi.org/10.1080/15325024.2018.1522475

Messner, M. A. (1988). Sports and male domination: The female athlete as contested ideological terrain. *Sociology of sport journal, 5*(3), 197-211. https://doi.org/10.1123/ssj.5.3.197

Moore, M. A. (2016). Taking a timeout to ensure well-being: Social work involvement in college sports. *Social Work, 61*(3), 267-269. https://doi.org/10.1093/sw/sww020

Mosewich, A. D., Crocker, P. R., & Kowalski, K. C. (2014). Managing injury and other setbacks in sport: Experiences of (and resources for) high-performance women athletes. *Qualitative Research in Sport, Exercise and Health, 6*(2), 182-204. https://doi.org/10.1080/2159676x.2013.766810

Musto, M., & McGann, P. (2016). Strike a pose! The femininity effect in collegiate women's sport. *Sociology of sport journal, 33*(2), 101-112. https://doi.org/10.1123/ssj.2015-0034

Newman, T. J. (2020). Life skill development and transfer: "they're not just meant for playing sports". *Research on Social Work Practice, 30*(6), 643-657. https://doi.org/10.1177/1049731520903427

Newman, T. J., Kim, M., Tucker, A. R., & Alvarez, M. A. G. (2018). Learning through the adventure of youth sport. *Physical Education and Sport Pedagogy, 23*(3), 280-293. https://doi.org/10.1080/17408989.2017.1413708

Nicholls, A. R., Polman, R. C., Levy, A. R., & Backhouse, S. H. (2009). Mental toughness in sport: Achievement level, gender, age, experience, and sport type differences. *Personality and individual differences, 47*(1), 73-75. https://doi.org/10.1016/j.paid.2009.02.006

Otis, C. L., Drinkwater, B., Johnson, M., Loucks, A., & Wilmore, J. (1997). American College of Sports Medicine position stand. The female athlete triad. *Medicine and Science in Sports and Exercise, 29*(5), i-ix. https://doi.org/10.1097/00005768-199705000-00037

Pate, R. R., Trost, S. G., Levin, S., & Dowda, M. (2000). Sports participation and health-related behaviors among US youth. *Archives of pediatrics & adolescent medicine, 154*(9), 904-911. https://doi.org/10.1001/archpedi.154.9.904

Persich, M. R., Smith, R., Cloonan, S. A., Woods-Lubbert, R., Strong, M., & Killgore, W. D. (2021). Emotional intelligence training as a protective factor for mental health during the

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

COVID-19 pandemic. *Depression and Anxiety, 38*(10), 1018-1025. https://doi.org/10.1002/da.23202

Pierce, S., Scheadler, T. R., Anderson-Butcher, D., Amorose, A., & Wade-Mdivanian, R. (2022). Social skill transfer from a sport-based positive youth development program to the school setting. *Sport Social Work Journal, 1*, 78-95. https://doi.org/https://doi.org/10.33043/SSWJ.1.1.78-95

Power, K. (2020). The COVID-19 pandemic has increased the care burden of women and families. *Sustainability: Science, Practice and Policy, 16*(1), 67-73. https://doi.org/10.1080/15487733.2020.1776561

Ranji, U., Frederiksen, B., Salganicoff, A., & Long, M. (2021). Women, work, and family during COVID-19: Findings from the KFF Women's Health Survey. *Women's Health Policy*. https://www.kff.org/womens-health-policy/issue-brief/women-work-and-family-during-covid-19-findings-from-the-kff-womens-health-survey/

Ravera, F., Iniesta-Arandia, I., Martín-López, B., Pascual, U., & Bose, P. (2016). Gender perspectives in resilience, vulnerability and adaptation to global environmental change. *Ambio, 45*(3), 235-247. https://doi.org/10.1007/s13280-016-0842-1

Seefeldt, V. D., & Ewing, M. E. (1997). *Youth sports in America: An overview*. President's Council on Physical Fitness and Sports Research Digest. 3-12. https://eric.ed.gov/?id=ED413324

Şenışık, S., Denerel, N., Köyağasıoğlu, O., & Tunç, S. (2021). The effect of isolation on athletes' mental health during the COVID-19 pandemic. *The Physician and Sportsmedicine, 49*(2), 187-193. https://doi.org/10.1080/00913847.2020.1807297

Simien, E. M., Arinze, N., & McGarry, J. (2019). A portrait of marginality in sport and education: Toward a theory of intersectionality and raced-gendered experiences for Black female college athletes. *Journal of Women, Politics & Policy, 40*(3), 409-427. https://doi.org/10.1080/1554477x.2019.1614865

Simon, A. E., & Uddin, S. F. (2018). Sports team participation among US high school girls, 1999-2015. *Clinical Pediatrics, 57*(6), 637-644. https://doi.org/10.1177/0009922817732145

Steinfeldt, J. A., Carter, H., Benton, E., & Steinfeldt, M. C. (2011). Muscularity beliefs of female college student-athletes. *Sex Roles, 64*(7), 543-554. https://doi.org/10.1007/s11199-011-9935-2

Steinfeldt, J. A., Zakrajsek, R., Carter, H., & Steinfeldt, M. C. (2011). Conformity to gender norms among female student-athletes: Implications for body image. *Psychology of Men & Masculinity, 12*(4), 401. https://doi.org/10.1037/a0023634

Street, A. E., & Dardis, C. M. (2018). Using a social construction of gender lens to understand gender differences in posttraumatic stress disorder. *Clinical psychology review, 66*, 97-105. https://doi.org/10.1016/j.cpr.2018.03.001

Szczypińska, M., Samełko, A., & Guszkowska, M. (2021). Strategies for coping with stress in athletes during the COVID-19 pandemic and their predictors. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.624949

Tanaka, M. J., LiBrizzi, C. L., Rivenburgh, D. W., & Jones, L. C. (2021). Changes in U.S. girls' participation in high school sports: implications for injury awareness. *Phys Sportsmed, 49*(4), 450-454. https://doi.org/10.1080/00913847.2020.1852861

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.

Thibaut, F., & van Wijngaarden-Cremers, P. J. (2020). Women's mental health in the time of Covid-19 pandemic. *Fronteirs in Global Women's Health, 1*, 1-6. https://doi.org/10.3389/fgwh.2020.588372

Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 C.F.R. https://www.justice.gov/crt/title-ix-education-amendments-1972#Sec.%201681.%20Sex

Ueda, M., Nordström, R., & Matsubayashi, T. (2022). Suicide and mental health during the COVID-19 pandemic in Japan. *Journal of Public Health, 44*(3), 541-548. https://doi.org/10.1093/pubmed/fdab113

Venta, A., Bick, J., & Bechelli, J. (2021). COVID-19 threatens maternal mental health and infant development: possible paths from stress and isolation to adverse outcomes and a call for research and practice. *Child Psychiatry & Human Development, 52*(2), 200-204. https://doi.org/10.1007/s10578-021-01140-7

Vescovi, J. D., Canavan, P. K., & Hasson, S. (2008). Effects of a plyometric program on vertical landing force and jumping performance in college women. *Physical Therapy in Sport, 9*(4), 185-192. https://doi.org/http://dx.doi.org/10.1016/j.ptsp.2008.08.001

Voelker, D. K., Petrie, T. A., Huang, Q., & Chandran, A. (2019). Bodies in Motion: An empirical evaluation of a program to support positive body image in female collegiate athletes. *Body Image, 28*, 149-158. https://doi.org/10.1016/j.bodyim.2019.01.008

Voepel, M. (2021). *NCAA's Dan Gavitt apologizes to women's basketball teams for disparity in NCAA weight-training facilities*. ESPN. https://www.espn.com/womens-college-basketball/story/_/id/31095607/ncaa-dan-gavitt-apologizes-women-basketball-teams-disparity-ncaa-weight-training-facilities

Walton, Q. L., Campbell, R. D., & Blakey, J. M. (2021). Black women and COVID-19: The need for targeted mental health research and practice. *Qualitative Social Work, 20*(1-2), 247-255. https://doi.org/10.1177/1473325020973349

Wang, Y., Kala, M. P., & Jafar, T. H. (2020). Factors associated with psychological distress during the coronavirus disease 2019 (COVID-19) pandemic on the predominantly general population: A systematic review and meta-analysis. *PLoS ONE, 15*(12), 1-27. https://doi.org/10.1371/journal.pone.0244630

World Association of Basketball Coaches. (n.d.). *2.1.8 Pivoting*. https://wabc.fiba.com/manual/level-1/l1-player/l1-2-offensive-basketball-skills/2-1-basic-movement-skills/2-1-8-pivoting/

Yarrington, J. S., Lasser, J., Garcia, D., Vargas, J. H., Couto, D. D., Marafon, T., Craske, M. G., & Niles, A. N. (2021). Impact of the COVID-19 pandemic on mental health among 157,213 Americans. *Journal of Affective Disorders, 286*, 64-70. https://doi.org/10.1016/j.jad.2021.02.056

Zanin, A. C., Avalos, B. L., Town, S. S., Tracy, S. J., & Stanley, B. L. (2021). Discursive, communal, and individual coping strategies: How US adults co-constructed coping during preliminary COVID-19 stressors. *Health Communication*, 1-15. https://doi.org/10.1080/10410236.2021.2010347

Zuckerman, S. L., Tang, A. R., Richard, K. E., Grisham, C. J., Kuhn, A. W., Bonfield, C. M., & Yengo-Kahn, A. M. (2021). The behavioral, psychological, and social impacts of team sports: A systematic review and meta-analysis. *The Physician and Sportsmedicine, 49*(3), 246-261. https://doi.org/10.1080/00913847.2020.1850152

© 2023 Rosado, Fogel, Kratz & Nourie. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org. https://doi.org/10.33043/SSWJ.4.1.1-24.

Sport Social Work Journal

Early Adolescent Girls Develop their Self-Worth through Participation and Achievement

Erin Nau
School of Social Work, Monmouth University

2022 marked 50 years since the passing of Title IX, which allowed girls and women to have equal opportunities to participate in sports. One of the impacts this bill has had on girls is that participation and achievement in sports help early adolescent girls develop their self-worth. A finding from a recent phenomenological study on early adolescent girls' self-worth found that girls develop self-worth through feeling competent in important capacities in their lives. This article will focus especially on the development of self-worth as it connects participation in sports to the impact of Title IX on girls. Furthermore, the participants' related understanding of misogyny, violence against women, and achievement in a patriarchal society will be discussed in order to improve safety and inclusion for girls in sports.

Keywords: Title IX, girls in sports, self-worth

Adolescence is a time when many girls struggle to develop positive self-worth. Girls entering early adolescence experience a significant drop in how they feel about themselves; scholars and girls are unable to understand the cause of this drop (Biro et al., 2006; Robins & Trzesniewski, 2005; Steiger et al., 2014). The decrease in feelings of self-worth has a long-lasting impact on their mental health (Steiger et al., 2014; Trzesniewski et al., 2006). A recent phenomenological study of how adolescent girls understand self-worth found that a significant way early adolescent girls develop their self-worth is through their participation in and excelling at sports. Before 1972 this participation would not have been possible.

Title IX which was enacted in 1972, is the federal law prohibiting sex discrimination in education. This law was enacted to not only ensure that girls are not discriminated against in school but also that girls and women had equal rights to participate in sports at institutions that receive federal funding and that they were free from discrimination in the arena of sports (Title IX, 2018). According to the Women's Sports Foundation (2019), since the enactment of this law "there has been a 545% increase in the percentage of women playing college sports and a 990% increase in the percentage of women playing high school sports". This law has greatly impacted

generations of women and girls for whom this opportunity has shaped their life, including as an avenue for developing their self-worth.

Girls in Sports: The Longterm Impact of Title IX

Many studies report the impact sports have on how girls feel about themselves: the finding of the current study furthers this research by providing an understanding of the importance of sports in the development of self-worth (Bang et al., 2020; Daniels & Leaper, 2006; DeBate et al., 2009; Zarrett et al., 2018). The generation of girls who participated in this study was raised in a world where girls are encouraged to excel in sports by the adults in their lives. This could be in part because their mothers were the first to feel the joy of being an athlete due to Title IX of the Education Amendments Act of 1972 2 (2018). Title IX paved the way for equity and introduced new opportunities for girls and women while also significantly increasing the participation of girls in sports. The increase in opportunity and female athletes may have also influenced the importance of excelling in academics and sports. Since girls' self-worth is developed through participation and achievement in sports the importance of Title IX is paramount for the preservation of self-worth in girls.

Title IX has three main provisions for schools that receive federal funding. First, accommodations are based on student interest and abilities. Second, scholarships for all athletes. Finally, a significant list of benefits for the athletes includes but is not limited to access to equipment and supplies, per diem for travel, training facilities, coaches and trainers, and publicity (Women In Sports Foundation, 2019). Another significant part of the act is protection against sexual harassment. This area of the act states that all students including student-athletes are protected from sexual harassment and assault by coaches, faculty and administrators, and other students (Education Amendments Act of 1972, 2018). It goes on to state that harassment based on gender is an explicit violation (Education Amendments Act of 1972, 2018). This ideal set forth by Title IX was not how the participants understood the world they live in, a world filled with misogyny. Girls as young as 11 expressed concerns about being assaulted during their lifetime. Safely participating in sports is important in developing positive self-worth and ideally is protected under Title IX (Education Amendments Act of 1972, 2018).

The protections of Title IX have laid the groundwork for girls and women to participate in sports for more than a generation. There has been a significant increase in participation in sports since the enactment of Title IX. Within the first 20 years of Title IX girls' participation in high school sports increased from 1 in 27 to 1 in 3 (Stevenson, 2007). Other research has found that participation in sports has a positive impact on self-esteem (Bang et al., 2020; Daniels & Leaper, 2006; DeBate et al., 2009; Zarrett et al., 2018). This phenomenological study set out to answer the question: "How do early adolescent girls understand self-worth?" One key finding suggests that participation and success in sports is a key to development of self-worth.

Methods

Inclusion Criteria

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.

The inclusion criteria for this phenomenological study were cisgender early adolescent girls between the ages of 11 and 14. This study focused specifically on cisgender girls because transgender girls will have vastly different experiences with their self-worth. Their experiences should be explored in a separate study of their unique experiences.

Sample Size

Adolescence is described in three parts: early (10–13), middle (14–17), and late (18 to early 20s) (Smetana et al., 2006). According to the American Community Survey (2016) there are just over 10 million early adolescents (10- to 14-year-old) girls in the United States. The sample for this study was 20 girls aged 11–14 recruited from across the United States. At this number of participants themes were confirmed and saturation was reached.

The participants were chosen using a purposive sampling method. This sampling method is used when the researcher seeks specific information that can only be provided by a specific population (Padgett, 2016). The age breakdown for the sample was five 11-year-old girls, seven 12-year-old girls, three 13-year-old girls, and five 14-year-old girls. The grade level breakdown was as follows: one 5th grader, four 6th graders, eight 7th graders, two 8th graders, and five 9th graders. The racial breakdown was as follows: five identified as Black or African American, one identified as Black and Native American, one identified as Latina, and 13 were White. This racial breakdown mirrors that of the adolescent population of the United States of America. Half of the participants were from New York State, with eight being from the NYC Metropolitan area. Four participants were from Colorado. Three participants were from Texas. One participant was from Minnesota, one from Tennessee, and one from Pennsylvania. There were two sets of sisters among the participants and one group of cousins.

Semi-Structured Interview

The interview was piloted on two early adolescent girls, both age 11, specifically to make sure that all questions were easily understood by the youngest age in the sample. They both agreed that the questions were clear. The interview guide started with the least sensitive questions, building toward more sensitive, personal questions. Questions about demographics and general questions were asked to begin developing a rapport. Once a rapport was developed, the researcher began to ask questions related to the research question. The first group of questions were about relationships. Each participant filled out a diagram (what kind of diagram), visually describing her relationships; the participant was in the center of the circles, with people in her life arranged in order of closeness of relationships. Questions about friendships and relationships with adults occurred in this section. Next, to gain an understanding of the phenomenon of self-worth, developmentally appropriate language was used to ask questions about how the participant felt about herself, her understanding of the construct of self-worth, and how safety influenced feelings of self-worth. The research used Exploring New Options image cards (https://visualsspeak.com/product/exploring-new-options/) to assist the participants if they were struggling to find the words to describe what they were feeling. The cards had photos and drawings with different images. Next were general questions about what it was like to be an adolescent girl. Once the interview questions were complete, the researcher asked the participant

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.25-34.

to fill out a second diagram describing a perfect support system. At the end of the interview, the researcher asked the participant if they had any final thoughts.

Data Analysis and Triangulation

The phenomenological approach was used to analyze the data using four phases: stating the researcher's experiences with self-worth, developing a textual description, developing a structural description, and writing the essence of the phenomena based on the textual and structural descriptions.

Triangulation was used to ensure the validity of this phenomenological study. The data used in triangulation were the interviews, the field notes, and consulting with other scholars. The audio recordings of the interviews were transcribed directly after the interviews. The field notes were used to confirm the information transcribed. The researcher also consulted with other scholars as themes were emerging.

In Phase I, the researcher stated her own experience with self-worth so the focus was on the participants' experiences (Creswell & Poth, 2007). This included the researcher's full description of her experience with self-worth, as an adolescent girl and as a female clinician working with adolescent girls (Moustakas, 1994). This is an important part of heuristic, phenomenological research.

During Phase II, the researcher identified a list of significant statements about the phenomenon based on the transcripts from the individual interviews. Once the statements began to take shape, she created a code book listing the statements ensuring that they were not duplicated (Moustakas, 1994). The list helped to form the meaning units, and the essence of the phenomena began to emerge (Creswell & Poth, 2007). Finally, these codes/themes were further textualized using the researcher's reflections on the interviews (Moustakas, 1994).

Phase III, a structural description of the phenomena, was developed. The researcher considered the context, including the age and race of the participant, and the setting of the phenomenon (Creswell & Poth, 2007). Based on what emerged, further questions were added to the following interviews.

In Phase IV, the researcher wrote the essence of the phenomenon based on the participants' similar experiences (Moustakas, 1994). The structural description of the themes helped the researcher to identify not only the essence of the phenomena but the ways in which the participants interacted with it. An impactful part of the phenomena that emerged was the development of self-worth. The development of self-worth was understood using the participant's discussions about the influential areas of their lives, including sports, and how this impacted their self-worth.

Findings

Developing Self-Worth Through Participation in Sports

The participants of this study indicated that participation and success in sports was key to their development of self-worth. They also had a keen understanding of the misogyny and

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.25-34.

violence they face as girls and women; they discussed their worries about being assaulted at some point in the future. They also expressed shock at the inequity in sports. These findings highlight the importance of the enforcement of Title IX and the rules set out to create safe and equitable places for girls to participate in sports. This key to the development of self-worth would not be possible without the rights ensured by Title IX.

Early adolescent girls develop self-worth through feeling competent, and excelling in important capacities in their lives. This article will focus on the development of self-worth through participation, and excellence in sports examining the impact of Title IX on girls. Participants reported the importance of doing well enough to serve a purpose. This happens through not just the achievement of the goal, but also from the determination to achieve the goal. Goals evolve, making achievement a constant aspect of the lives of these participants. This is evidenced by the participants communicating that when they cannot compete at their highest level, they will have less interest in participating. Furthermore, girls' current level of self-worth also affects their achievement and the degree of competence in the activities they love.

All the participants described activities they really enjoyed. Achieving success, contributing, and being capable in these areas of their lives were among the things that helped them to develop their self-worth. Feeling good about themselves helped them to be able to achieve in sports. Inversely, doing well in sports also made them feel good about themselves: it gave them a sense of pride and of purpose. This connection between success and how they feel about themselves is a two-way street running throughout their lives. They also reported that just thinking you are bad at something can actually make you do poorly. Participant 17, a 14-year-old white girl from Texas, said that how she feels about herself impacts her mood "If I'm in a really bad mood, then I play really poorly in soccer." She also describes how her mood can impact soccer.

> *If things aren't going too well in soccer and like if I was having a really bad game or practice, it'll make me feel like I'm not very good or… it makes me feel like I'm not, like I don't belong on the team I am. And then I have to prove myself like over the week at practice and I just have to try and keep improving and then I go back to being better like in my head.*

This quote is an example of how achievement impacts self-worth and how self-worth impacts achievement; it is also an example of the drive to achieve the things a girl loves. Participant number 12, a 12-year-old Black girl gives another example of how participating in sports influences her feelings and mood

When I, if we win games, if we win tournaments, um, or if my coach tells me that I've been doing good, I feel a lot better. Um, it just kinda like increases mine (sic) mood, I guess.

The development of self-worth was discovered to come from competence in capacities that were valued by the participants. Playing sports was valued among most of the participants. This happened in various ways, including it bringing them joy. Participant number 5, a twelve-year-old African American girl from NY stated: "Playing sports like makes me happy and I just know that every day after school I do something that makes me happy and that's fun."

The participants independently discussed a drive to excel in sports that came from within themselves. Excelling improved their feelings of self-worth and made them feel competent,

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.

which came from within. The access to sports given by Title IX had an unintentional impact on the ways girls feel about themselves and the way they develop their self-worth.

Understanding of Misogyny and Its Impact on Sports

The definition of misogyny is currently being debated by feminist scholars (Wrisley, 2021). In this article when discussing misogyny the definition will be "'serve[s] to police and enforce a patriarchal order, instantiated in relation to other intersecting systems of domination and disadvantage that apply to the relevant class of girls and women" as it relates to girls and specifically their experiences with sports (Wrisley, 2021).

The participants expressed an awareness that females were seen as inferior to males. They knew that women are not paid equitably, that they are not able to play all the sports boys are, and that if they did, they were seen as female athletes instead of simply athletes. An 11-year-old girl from New York City, Participant 1, talked about the difference between boys and girls and sports.

> *The teachers wouldn't let us play football because they said the boys were too strong for us. And like when we did like the track tryouts and stuff, they had separated by boys and girls and like who's the fastest out of a boy? Or like there's this thing, it was a poster that I thought was really cool. And it was of Serena Williams and it says the best female athlete, but then it crossed out.*

This quote addresses the ways that women are subjugated in sports, as it was understood by an 11-year-old girl.

Another participant, a 12-year-old girl explains feeling empowered by her experience and a friend's experience playing non-traditional female sports.

Yeah. I feel really empowered by my friends and especially I have one good friend, she is in wrestling and I'm in golf and … we both kind of have not a lot of women ... So, we're still trudging through and so is she, because a lot of people do don't believe that… people like girls should be wrestling. And so, I'm very close with her and I feel really empowered and we both empower each other.

The lens of sports is what the participants used to voice their understanding of the inequities faced by girls. This was shown by their interpretation of the 2019 Women's World Cup. At this time the media was highlighting the pay disparity between the men's and women's soccer teams. The participants reported that this was an injustice, and they were in disbelief that others did not also see this was wrong. Participant 12, a 12-year-old from Texas talks about this injustice.

> *I feel like, um, girls are underestimated a lot and guys are given more opportunities. Like the women's soccer team, they get paid less or at least are getting paid less, less than the men's team and they've won more games…the woman's team is a lot better than the men's team.*

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.25-34.

These findings pose questions about the ways that girls internalize the messages they receive about the differences between girls and boys. The participants learned by hearing messages at school, seeing who can play what sport, and how people were chosen for sports. Will girls decide at some point that they are not as good as boys and not continue to strive for success in sports?

Understanding Violence Against Women and Girls and Its Impact on Sports

Another significant finding from this research that has an impact on how we can improve Title IX is the deep, specific, and prominent concern early adolescent girls have about misogyny and gender-based violence. An explicit violation of Title IX is harassment based on gender (Title IX, 2018). The participants communicated a striking awareness of misogyny and patriarchal oppression in girls and women. A 14-year-old from New York distills this understanding.

> *I mean on one hand I can wear a dress and then I can wear pants. And even though if I wore a skirt, I would have to worry about if that skirt is like showing off too much or like if anybody looks at me the wrong way. But I mean they get to wear like a dress and a boy doesn't, so that's nice…I just feel like a boy has less to worry about overall and a girl does.*

Some mentioned fears of being attacked in the future and not being believed if they were to tell someone about it. A 12-year-old White girl from upstate NY, Participant 13, talked about this when answering, what it is like to be a girl right now.

> *When I get older you know, I [will] have to worry about people slipping things into my drinks cause then I [won't] be able to go alone and I [will] have to like go in a group.... My mom told me that, uh, when you get older and you go to a bar, you always want to make sure you have at least two people with you. So then when you go, when you get up to go to the bathroom, nobody changes your drink or put something in your drink to like convince you to go with them.*

The researcher was struck by the specificity of the girls' understanding of their place in the world and how this impacts their understanding of the violence against women. The specificity of the participant's understanding of the violent nature of what it is like to be female in the world was remarkable. Their understanding of this was supported by the statistics that one in four women will experience sexual violence, assault, or stalking by an intimate partner during their lifetime (Smith et al., 2018). This specific understanding of the misogyny and gender-based violence they face highlights the importance of sports being a safe place for girls. Recently Larry Nassar was sentenced to prison for years of sexual assault on the USA gymnastics team (Dyer, 2018). Such instances are an abuse of power and take away a place where adolescent girls create positive self-worth. Title IX provides protection for people who have been abused in an academic setting (including athletics) by addressing sexual assault as a civil rights violation (Morton, 2016). Upholding and enhancing Title IX while helping girls understand its protections can empower girls with the knowledge that they are meant to be safe while playing sports at

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.

school. Extending a similar set of regulations to ensure safety in all sports, including those played outside of school, would help all female athletes feel safe while playing sports. Self-worth cannot be developed while girls are feeling unsafe or willing to participate due to fear.

Implications

Development of Self-Worth

The development of self-worth was discovered to come from competence in capacities that were valued by the participants and through the development of trusting relationships. The development of self-worth happens within the context of competence in activities participants enjoy. The participants discussed a drive to excel in sports that came from within themselves. This finding was unexpected due to the researcher not explicitly asking questions about sports. Excelling improved their feelings of self-worth and made them feel competent. The desire to participate and excel in sports is likely influenced by their increased access to participation in sports which is directly related to Title IX.

Reducing Bias

The findings indicate that Title IX's (1972) improvement of the inclusion of girls in sports has had an impact on the ways that girls navigate the world and develop their self-worth. While this study supports that there has been an increase in girls participating in sports, there are still things that can be done to improve this inclusion. Several girls discussed hearing and seeing implicit bias surrounding girls and sports, such as girls being unable to play football. During the 2021 NCAA basketball championship, these biases were seen on a national stage. Women athletes reported and shared photos of their weight room which was understocked especially in comparison to the men's. Mandating implicit bias training surrounding gender and sports would be a good step in reducing girls' experience of feeling inferior to boys in sports. This would be a welcomed addition to Title IX. Exploring what equal actually means. It is fair to say that the example listed above would be understood as unequal. Furthermore, offering opportunities for boys and girls to participate in sports together in school and competitive sports would show that it is important for everyone to engage in sports equitably. Allowing boys and girls to participate in sports that are primarily geared toward one gender or another (for example, wrestling and football for girls, or field hockey and rhythmic gymnastics for boys) would help to normalize participation regardless of gender.

Creating Safe Spaces in Sports

Title IX provides protection for people who have been abused in an academic setting (including athletics) by addressing sexual assault as a civil rights violation (Morton, 2016). Upholding and enhancing Title IX while helping girls understand its protections can empower girls with the knowledge that they are meant to be safe while playing sports at school. Extending a similar set of regulations to ensure safety in all sports, including those played outside of school, would help all female athletes feel safe while playing sports. Self-worth cannot be developed

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.25-34.

while girls are feeling unsafe or willing to participate due to fear. In fact, the more instances of violence and harassment against women that occur while they participate in sports the less willing to participate, they will be.

Limitations

The parents of the participants needed to give consent for their daughters to participate, creating a possible limitation that parents who are likely to be involved in their daughter's life would also support their involvement in sports and in this study.

Future Directions of Research

The Impact of Sports on the Development of Self-Worth

The effect of participation in sports on the development of self-worth is an area for further research. It would add new information to the importance of sports in a girl's life. It would also provide a deeper understanding of the ways self-worth is developed. Sports emerged as one of the most important capacities in a girl's life. A qualitative study on the ways that participation in sports affects self-worth would not only deepen the understanding of the importance of sport but also how it impacts the development of self-worth.

This research is a good starting point for future research about adolescent girls and the ways in which women are experiencing and understanding self-worth. More research into the overall impact sports have on how girls and women feel about themselves would support the importance of Title IX and the need to uphold and enhance its rules.

Conclusion

Girls' participation and working towards and achieving goals in sports is essential for their development of self-worth. The protections and rights guaranteed by Title IX helped to create the environment for this development. More can be done to ensure that girls are protected against the misogyny and implicit biases they face that keep them from achieving at their desired level of achievement.

References

Bang, H., Won, D., & Park, S. (2020). School engagement, self-esteem, and depression of adolescents: The role of sport participation, volunteering activity, and gender differences. *Children and Youth Services Review*, 105012. https://doi.org/10.1016/j.childyouth.2020.105012

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.25-34.

Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications.

Daniels, E., & Leaper, C. (2006). A longitudinal investigation of sport participation, peer acceptance, and self-esteem among adolescent girls and boys. *Sex Roles*, *55*(11-12), 875-880. https://doi.org/10.1007/s11199-006-9138-4

DeBate, R. D., Pettee Gabriel, K., Zwald, M., Huberty, J., & Zhang, Y. (2009). Changes in psychosocial factors and physical activity frequency among third- to eighth-grade girls who participated in a developmentally focused youth sport program: A preliminary study. *Journal of School Health*, *79*(10), 474-484. https://doi.org/10.1111/j.1746-1561.2009.00437.x

Education Amendments Act of 1972, 20 U.S.C. §§1681 - 1688 (2018).

Morton, H. O. (2016). License to abuse: Confronting coach-inflicted sexual assault in American Olympic sports. *The William & Mary Journal of Women and the Law, 23*, 141.

Moustakas, C. (1990). *Heuristic research: Design, methodology, and applications*. Sage Publications.

Padgett, D. K. (2016). *Qualitative methods in social work research* (Vol. 36). Sage Publications.

Smetana, J. G., Campione-Barr, N., & Metzger, A. (2006). Adolescent development in interpersonal and societal contexts. *Annual Review of Psychology*, *57*, 255-284. https://doi.org10.1146/annurev.psych.57.102904.190124

Stevenson, B. (2007). Title IX and the evolution of high school sports. *Contemporary Economic Policy, 25*(4), 486-505. https://doi.org/10.1111/j.1465-7287.2007.00080.x

Wrisley, S. P. (2021). Feminist theory and the problem of misogyny. *Feminist Theory*, 14647001211039365.

Zarrett, N., Veliz, P., & Sabo, D. (2018). *Teen sport in America: Why participation matters. A Women's Sports Foundation report*. Women's Sports Foundation.

© 2023 Nau. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.25-34.

Sport Social Work Journal

Post-Sport Male Athlete Nutrition and Mental Health

Nafees Alam
School of Social Work, Boise State University

This publication aims to bring to light the experiences of current and former adult male athletes and their nutrition and mental health. Although there is literature on female athlete nutrition, there is a general gap in literature on male athlete nutrition. Thus, we've decided to conduct a qualitative case study research design to begin studying this topic. The goal of this study was to collect, analyze, and disseminate data related to this topic in order to further research and hopefully set the table for quantitative studies on this topic in the future. We've collected detailed accounts from 5 current and former adult male athletes about their a) nutrition in relation to health, b) nutrition in relation to sport performance, c) access to information and advisement related to nutrition, d) changes in nutrition through the course of sport and life, e) post-sport nutrition, and f) post-sport health.

Keywords: Nutrition, Sports, Male Athletes

This publication aims to achieve the goal of bringing the experiences of current and former adult male athletes and their nutrition and mental health to light. Although there is literature on female athlete nutrition, there is a general gap in literature on male athlete nutrition. Thus, we've decided to conduct a qualitative case study research design to begin studying this topic. The goal of this study was to collect, analyze, and disseminate data related to this topic in order to further research and hopefully set the table for quantitative studies on this topic in the future. We've collected detailed accounts from 5 current and former adult male athletes about their a) nutrition in relation to health, b) nutrition in relation to sport performance, c) access to information and advisement related to nutrition, d) changes in nutrition through the course of sport and life, e) post-sport nutrition, and f) post-sport health.

Literature Review

Due to a general scarcity of relevant literature with overlapping themes in the pursuit of synthesis, this section reads more like an annotated bibliography sorted chronologically than a literature review. Critical connections relating articles together are made where possible for the purpose of analysis and synthesis, but the fact remains that the majority of existing research on

this topic pertains either to a) international athletes and/or b) female athletes. Thus, the aim of this literature review is to indirectly triangulate the state of male athlete nutrition in the general absence of existing literature. A tabular summary is included as an appendix.

International Athletes

Ruiz et al. (2005), studied nutritional intake in soccer players of different ages with a sample of four soccer teams in Spain. Based on the results, it was recommended that nutritional education should be given to soccer players at an early age and should continue throughout adolescence, not only with a view to improving performance but also to promoting more healthy dietary practices in the long term.

Jessri et al. (2010), studied Iranian college athletes' sport nutrition knowledge with a sample of sixty-six basketball and one-hundred-forty-one soccer players in Iran. Findings suggest that sport nutrition knowledge among Iranian athletes may be inadequate. This substandard level of knowledge may contribute to poor dietary behaviors and it's recommended that these athletes could benefit from nutrition-related training and education.

Walsh et al. (2011), studied the body composition, nutritional knowledge, attitudes, behaviors, and future education needs of senior schoolboy rugby players with a sample of two-hundred-three in Ireland. Findings suggest that most players had a healthy body fat percentage but despite positive attitudes toward nutrition, poor nutritional knowledge and dietary practices were observed in many players. Young athletes' nutritional knowledge and dietary practices may benefit from appropriate nutritional education.

Russell & Pennock (2011), analyzed the diets of young professional soccer players for one week during the competitive season with a sample of ten in the United Kingdom. Findings suggest that the nutritional practices of the sampled group of professional youth soccer players were inadequate to sustain optimized performance throughout training and match play. Youth soccer players should therefore seek to ensure that their diets contain adequate energy through the increased total caloric intake, while also optimizing the proportion of energy derived from carbohydrates and ensuring that enough fiber-rich foods are consumed.

Aerenhouts et al. (2011), studied the energy and macronutrient intake in adolescent sprint athletes as a follow-up study with a sample of sixty in the United Kingdom. Findings suggest that the dietary habits of adolescent sprint athletes are not always according to guidelines and are relatively stable but repeated advice can induce moderate improvements.

Spendlove et al. (2012), evaluated general nutrition knowledge in elite Australian athletes with a sample of three-hundred-fourty-four in Australia. Findings suggest that nutrition knowledge among elite athletes should be improved, particularly in pertaining to diet-disease relationships and procedural knowledge associated with choosing everyday foods.

Folasire et al. (2015), studied the nutrition knowledge and practice of athletes translating to enhanced athletic performance as a cross-sectional study amongst Nigerian undergraduate athletes with a sample of one-hundred-ten in Nigeria. Findings suggest that having good nutrition knowledge or practice did not directly determine athletic performance. However, there is a need for nutrition education interventions, to improve athlete's performance by promoting adequate energy intake, lean muscle mass, and appropriate weight gain in athletes.

Sedek & Yih (2014), studied the dietary habits and nutrition knowledge among athletes and non-athletes in the National University of Malaysia (UKM) with a sample of two-hundred in

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.35-43.

Malaysia. Findings suggest that non-athletes displayed healthier dietary habits than athletes but no significant difference in nutrition knowledge between both groups.

Alaunyte et al. (2015), studied nutritional knowledge of professional rugby league players on how knowledge translates to practice with a sample of twenty-two in the United Kingdom. The study identified adequate general nutritional knowledge in professional rugby league players with the exception of recommendation for starchy and fibrous foods. Players who scored higher in nutritional knowledge test were more likely to consume more fruits, vegetables and carbohydrate-rich foods.

Delvin & Belski (2015), explored general and sports nutrition and food knowledge in elite male Australian athletes with a sample of forty-six in Australia. Findings suggest that broad nutrition messages and recommendations appear to be well understood; however, gaps in nutrition knowledge are evident. A better understanding of nutrition knowledge in athletes will allow nutrition education interventions to target areas in need of improvement.

Spronk et al. (2015), studied the relationship between general nutrition knowledge and dietary quality in elite athletes with a sample of one-hundred-one in Australia. Findings suggest that given the importance of nutrition to health and optimal sport performance, intervention to improve nutrition knowledge and healthy nutrition is recommended, especially for young males athletes.

Couture et al. (2015), evaluated sports nutrition knowledge and recommendations among high school coaches with a sample of forty-seven in Quebec. Findings suggest that the two most popular nutrition practices that coaches recommend to improve athlete performance were hydration and the consumption of protein-rich foods. Recommendation for nutritional supplements use was extremely rare and was suggested only by football coaches, a nonleanness sport. Findings from this study indicate that coaches need sports nutrition education and specific training.

Trakman et al. (2016), conducted a systematic review of athletes' and coaches' nutrition knowledge and reflections on the quality of current nutrition knowledge measures with a sample of thirty-six studies in Australia. Findings suggest that nutrition knowledge can influence dietary choices and impact on athletic performance.

Tawfik et al. (2016), studied the patterns of nutrition and dietary supplement use in young Egyptian athletes through a community-based cross-sectional survey with a sample of three-hundred-fifty-eight in Egypt. Findings suggest that there is a necessity for comprehensive nutrition education programs targeting not only athletes and parents, but also coaching staff, health trainers, and all sport team officials.

Debnath et al. (2019), studied the prediction of athletic performance through nutrition knowledge and practice as a cross-sectional study among young team athletes with a sample of ninety in India. Findings suggest that good nutrition knowledge may improve the nutritional habits and dietary patterns of athletes. Body composition and nutrient intake can predict athletic performance. Intervention studies should emphasize nutrition education aiming for improved athletic performance.

Posthumus et al. (2021), student competition nutrition practices of elite male professional rugby union players with a sample of thirty-four in New Zealand. Findings suggest that players fell short of daily sports nutrition guidelines for carbohydrate and appeared to "eat to intensity" by increasing or decreasing energy and carbohydrate intake based on the training load. Despite

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.

recommendations and continued education, many rugby players select what would be considered a "lower" carbohydrate intake. Although these intakes appear adequate to be a professional RU player, further research is required to determine optimal dietary intakes.

Sunuwar et al. (2021), studied the association of nutrition knowledge, practice, supplement use, and nutrient intake with athletic performance among Taekwondo players with a sample of two-hundred-ninety-three in Nepal. The results suggest that nutritional knowledge and nutrient intake both were poor among TKD athletes. Height, weight, BMI, nutritional knowledge, energy, and fat intake showed a positive correlation with athletic performance. Future studies can build on the premise of this study to identify the robust relationship between nutritional knowledge, practice, different supplement use, and nutrient intake among athletes.

Female Athletes

Cupisti et al. (2002), studied nutrition knowledge and dietary composition in Italian adolescent female athletes and non-athletes with a sample of sixty athletes and fifty-nine non-athletes (all adolescent females) in Italy. Findings suggest that the overall recalled dietary intake and nutrition knowledge of the studied adolescent females show some misconceptions and nutrient deficiencies.

Mullinix et al. (2003), studied the dietary intake of female US soccer players with the sample as the Under-21 (U-21) United States women's national soccer team in the United States. Findings from the pilot study suggest that these young female soccer players should be encouraged to eat small, high-carbohydrate, nutrient-dense meals, frequently throughout the day and they should be provided with appropriate nutrition counseling.

Martin et al. (2006), studied the nutritional practices of national female soccer players, including analysis and recommendations, with a sample of sixteen in England. Recommendations for female soccer players are to encourage the consumption of carbohydrate-electrolyte beverages to enhance carbohydrate intake and increase fluid intake and ensure sufficient iron-rich foods are included in the diet to meet the DRI.

Rash et al. (2008), studied nutrition-related knowledge, attitude, and dietary intake of college track athletes with a sample of one-hundred-thirteen in the United States. The researchers identified adequate intake and knowledge (carbohydrates), poor intake and knowledge (vitamin E), and adequate intake and lack of knowledge (vitamin C and protein). Future research should explore factors other than knowledge and attitude that may have a primary influence on dietary intake among college athletes.

Gibson et al. (2011), studied the nutrition status of junior elite Canadian female soccer athletes with a sample of thirty-three in Canada. Findings suggest that a high proportion of players were not in energy balance, failed to meet carbohydrate and micronutrient recommendations, and presented with depleted iron and vitamin D status. Suboptimal nutrition status may affect soccer performance and physiological growth and development. More research is needed to understand the unique nutrition needs of this population and inform sport nutrition practice and research.

Manore et al. (2017), studied sport nutrition knowledge, behaviors, and beliefs of high school soccer players with a sample of five-hundred-thirty-five in the United States. Findings suggest that adolescent athletes, especially females and Latinos, would benefit from sport nutrition education that enhances food selection skills for health and sport performance.

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.35-43.

Braun et al. (2018), studied the nutrition status of young elite female German football players with a sample of fifty-six in Germany. Findings suggest that a remarkable number of players failed to meet the energy balance and the recommended carbohydrate and protein intakes. Low iron and 25-hydroxyvitamin D serum levels were observed showing a suboptimal nutrition status of some young female football players. As a consequence, strategies have to be developed for better information and application of sport nutrition practice among young female football players.

Dobrowolski & Wlodarek (2019), studied the dietary intake of Polish female soccer players with a sample of forty-one in Poland. Findings suggest that the participants demonstrated low energy intakes, and consequently, low consumption of macronutrients and a large number of micronutrients.

Jenner et al. (2020), assessed the nutrition knowledge of professional female Australian football (AFLW) athletes with a sample of twenty-six in Australia. This study assessed the nutritional knowledge (NK) of AFLW athletes and found athletes had average NK, with room for improvement particularly regarding supplement knowledge. Future research should assess the efficacy of online and group education to improve athletes' NK and dietary intake.

Dobrowolski et al. (2020), studied the nutrition for female soccer players, including recommendations, in Poland. Findings suggest that the right amount of fluid intake, consistent with the player's needs, is crucial in maximizing exercise performance. The diet of female practicing soccer is usually characterized by low energy values, which increases the risk of various health consequences related to low energy availability. Monitoring the diets of female soccer players is, therefore, necessary.

Renard et al. (2020), evaluated nutrition knowledge in female Gaelic games players with a sample of three-hundred-twenty-eight in Ireland. Findings suggest that future education interventions with female Gaelic games players may lead to beneficial changes in dietary behavior and would likely benefit from stratifying content based on athletes' demographic characteristics, given the differences observed.

Gomez-Hixson et al. (2020), studied the significant differences in dietary intake of NCAA Division III soccer players compared to recommended levels with a sample of seventy-five in the United Stated. This study evaluated dietary intake patterns of NCAA Division III soccer players compared to recommended levels. Based on the results of the present study, increased efforts should be put into the development of nutrition education programs for NCAA Division III athletes.

Jagim et al. (2021), studied the influence of sport nutrition knowledge on body composition and perceptions of dietary requirements in collegiate athletes with a sample of forty-two in the United States. Findings suggest that Division III collegiate athletes have a low level of sport nutrition knowledge, which was associated with a higher BF%. Women athletes with a higher body weight, BF% and BMI were more likely to select weight loss as a body weight goal. Athletes also significantly underestimated their energy and carbohydrate requirements based upon the demands of their sport, independent of sex.

Methodology

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.35-43.

Five current and former male athletes were recruited for this study. Of these, four are former athletes and one is a current athlete. The concepts studied were a) nutrition in relation to health, b) nutrition in relation to sport performance, c) access to information and advisement related to nutrition, d) changes in nutrition through the course of sport and life, e) post-sport nutrition, and f) post-sport health. All interviews were conducted via Zoom between February 1st, 2021 and January 10th, 2022 (IRB Protocol Number: 000-SB21-004; Boise State University). The purpose of this qualitative case study is to begin addressing the gap in literature by furthering research and setting the table for future quantitative studies.

Results and Findings

Athlete J is an Olympic track and field athlete who still competes at the time of the interview. He notes a high level of importance placed on nutrition in relation to health. His nutrition in relation to sport performance focuses on physical health. When asked about his access to information and advisement related to nutrition, he stated that coaches and trainers micromanage his nutrition and training, focusing on endurance and recovery. He also stated that shaming language is sometimes employed as coaches need to keep their jobs and thus, get away with saying a lot to male athletes. Since Athlete J is still competing, there was no data gathered on post-sport topics.

Athlete L is an NFL football player who last competed one year prior to the interview. While competing, he noted a high level of importance placed on nutrition in relation to health. His nutrition in relation to sport performance focused on physical and mental health (including mood and focus). When asked about his access to information and advisement related to nutrition, he stated that team chefs, nutritionists, and dieticians emphasized nutrition for sport performance and individual plans were created and regularly adapted for each player (including micronutrients (vitamins)) with a focus on hydration and consideration for allergies. He stated that his nutrition has changed through the course of sport and life, especially post-sport. Currently, his post-sport nutrition consists of less structure, red meat, pork and more fish, gluten-free pasta, organic tomatoes, and pizza. His post-sport health consists of weightlifting three times per week and cardio twice per week.

Athlete M is an MLB baseball player who last competed two years prior to the interview. While competing, he noted a high level of importance placed on nutrition in relation to health. His nutrition in relation to sport performance focused on physical health. When asked about his access to information and advisement related to nutrition, he stated that strength coaches and nutritionists emphasized nutrition (grocery lists) for sport performance while in the MLB, however there was no mention of nutrition when he played professional baseball in Mexico, despite the league being comprised predominantly of ex-MLB baseball players. He stated that his nutrition has not changed through the course of sport and life, with no significant changes post-sport. Currently, his post-sport nutrition is a continuation of eating clean, though he is less strict and now has begun consuming alcohol socially. He wished not to answer any questions related to his post-sport health.

Athlete C is a college track and field athlete who last competed seven years prior to the interview. While competing, he noted a low level of importance placed on nutrition in relation to health. His nutrition in relation to sport performance focused on physical, mental, and emotional health, as well as stress reduction and sleep quality. When asked about his access to information

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.

and advisement related to nutrition, he stated that coaches provided scientific, evidence-based approaches to nutrition for sport performance, emphasizing quicker healing and recover in the pursuit of medals. He stated that his nutrition changed through the course of sport and life, especially post-sport. Currently, his post-sport nutrition consists of eating breakfast, drinking coffee, and more fruits, bagels, waffles, and smoothies than when he was competing. He also adopted a plant-based diet post-sport. His post-sport health consists of light yoga, martial arts, swimming, and playing with his kids.

Athlete K is a high school track and field athlete who last competed twelve year prior to the interview. While competing, he noted a high level of importance placed on nutrition in relation to health. His nutrition in relation to sport performance focused on physical and mental health. When asked about his access to information and advisement related to nutrition, he stated that certified coaches highly emphasized nutrition for sport performance and shaming language was used by coaches and teammates if caught with soda or Kentucky Fried Chicken after practices. He stated that his nutrition changed through the course of sport and life, especially post-sport. Currently, his post-sport nutrition consists of more vegetables, fish, white meat, and less red meat than when he was competing. His post-sport health consists of thirty minutes to an hour of exercise per day.

Thematic Analysis

Overall, sport performance seems to be the focal point of nutrition for the athletes studied. Most noted changes to their post-sport nutrition with no post-sport nutrition "debriefing" by their coaches and trainers. There was a pleasantly surprising amount of emphasis placed on nutrition for the purpose of athletes' mental health, though juxtaposed by micromanagement and the reported use of shaming language as a tool for behavioral conditioning. Finally, an international focus could yield significantly different data as international athletes at all levels may be coaches and trained differently in relation to US athletes.

Conclusion and Recommendations

Based on the literature reviewed and the data collected and analyzed, it's clear that more research is needed on the topic of male athlete nutrition and mental health. Particularly in relation to mental health, there seem to be several promising avenues for future research. The case studies here and the subsequent thematic analysis suggests that graduating into a quantitative study would require the addition of variables, including the use of shaming language and comparisons between a national and international sample-set.

References

Aerenhouts, D., Deriemaeker, P., Hebbelinck, M., & Clarys, P. (2011). Energy and macronutrient intake in adolescent sprint athletes: A follow-up study. *Journal of Sports Sciences*, *29*(1), 73-82.

Alaunyte, I., Perry, J. L., & Aubrey, T. (2015). Nutritional knowledge and eating habits of professional rugby league players: does knowledge translate into practice?. *Journal of*

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.

the International Society of Sports Nutrition, *12*(1), 18.
Braun, H., von Andrian-Werburg, J., Schänzer, W., & Thevis, M. (2018). Nutrition status of young elite female German football players. *Pediatric exercise science*, *30*(1), 157-167.
Couture, S., Lamarche, B., Morissette, E., Provencher, V., Valois, P., Goulet, C., & Drapeau, V. (2015). Evaluation of sports nutrition knowledge and recommendations among high school coaches. *International journal of sport nutrition and exercise metabolism*, *25*(4), 326-334.
Cupisti, A., D'Alessandro, C., Castrogiovanni, S., Barale, A., & Morelli, E. (2002). Nutrition knowledge and dietary composition in Italian adolescent female athletes and non-athletes. *International journal of sport nutrition and exercise metabolism*, *12*(2), 207-219.

Debnath, M., Chatterjee, S., Bandyopadhyay, A., Datta, G., & Dey, S. K. (2019). Prediction of athletic performance through nutrition knowledge and practice: a cross-sectional study among young team athletes. *Sport Mont*, *17*(3), 13-20.
Devlin, B. L., & Belski, R. (2015). Exploring general and sports nutrition and food knowledge in elite male Australian athletes. *International journal of sport nutrition and exercise metabolism*, *25*(3), 225-232.
Dobrowolski, H., Karczemna, A., & Włodarek, D. (2020). Nutrition for female soccer players—recommendations. *Medicina*, *56*(1), 28.
Dobrowolski, H., & Włodarek, D. (2019). Dietary intake of polish female soccer players. *International Journal of Environmental Research and Public Health*, *16*(7), 1134.
Folasire, O. F., Akomolafe, A. A., & Sanusi, R. A. (2015). Does nutrition knowledge and practice of athletes translate to enhanced athletic performance? Cross-sectional study amongst Nigerian undergraduate athletes. *Global journal of health science*, *7*(5), 215.
Gibson, J. C., Stuart-Hill, L., Martin, S., & Gaul, C. (2011). Nutrition status of junior elite Canadian female soccer athletes. *International journal of sport nutrition and exercise metabolism*, *21*(6), 507-514.
Gomez-Hixson, K., Biagioni, E., & Brown, M. L. (2022). Significant differences in dietary intake of NCAA Division III soccer players compared to recommended levels. *Journal of American College Health*, *70*(1), 150-157.
Jagim, A. R., Fields, J. B., Magee, M., Kerksick, C., Luedke, J., Erickson, J., & Jones, M. T. (2021). The influence of sport nutrition knowledge on body composition and perceptions of dietary requirements in collegiate athletes. *Nutrients*, *13*(7), 2239.
Jenner, S. L., Devlin, B. L., Forsyth, A. K., & Belski, R. (2020). Assessing the nutrition knowledge of professional female Australian football (AFLW) athletes. *Science and Medicine in Football*, *4*(3), 240-245.
Jessri, M., Jessri, M., RashidKhani, B., & Zinn, C. (2010). Evaluation of Iranian college athletes' sport nutrition knowledge. *International journal of sport nutrition and exercise metabolism*, *20*(3), 257-263.
Manore, M. M., Patton-Lopez, M. M., Meng, Y., & Wong, S. S. (2017). Sport nutrition knowledge, behaviors and beliefs of high school soccer players. *Nutrients*, *9*(4), 350.
Martin, L., Lambeth, A., & Scott, D. (2006). Nutritional practices of national female soccer

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.

players: Analysis and recommendations. *Journal of sports science & medicine*, *5*(1), 130.
Mullinix, M. C., Jonnalagadda, S. S., Rosenbloom, C. A., Thompson, W. R., & Kicklighter, J. R. (2003). Dietary intake of female US soccer players. *Nutrition Research*, *23*(5), 585-593.
Posthumus, L., Fairbairn, K., Darry, K., Driller, M., Winwood, P., & Gill, N. (2021). Competition nutrition practices of elite male professional rugby union players. *International Journal of Environmental Research and Public Health*, *18*(10), 5398.
Rash, C. L., Malinauskas, B. M., Duffrin, M. W., Barber-Heidal, K., & Overton, R. F. (2008). Nutrition-related knowledge, attitude, and dietary intake of college track athletes. *Sport J*, *11*(1), 48-55.
Renard, M., Kelly, D. T., Chéilleachair, N. N., & Catháin, C. Ó. (2020). Evaluation of nutrition knowledge in female gaelic games players. *Sports*, *8*(12), 154.
Ruiz, F., Irazusta, A., Gil, S., Irazusta, J., Casis, L., & Gil, J. (2005). Nutritional intake in soccer players of different ages. *Journal of sports sciences*, *23*(3), 235-242.
Russell, M., & Pennock, A. (2011). Dietary analysis of young professional soccer players for 1 week during the competitive season. *The Journal of Strength & Conditioning Research*, *25*(7), 1816-1823.
Sedek, R., & Yih, T. Y. (2014). Dietary habits and nutrition knowledge among athletes and non-athletes in National University of Malaysia (UKM). *Pakistan Journal of Nutrition*, *13*(12), 752.
Spendlove, J. K., Heaney, S. E., Gifford, J. A., Prvan, T., Denyer, G. S., & O'Connor, H. T. (2012). Evaluation of general nutrition knowledge in elite Australian athletes. *British Journal of Nutrition*, *107*(12), 1871-1880.
Spronk, I., Heaney, S. E., Prvan, T., & O'Connor, H. T. (2015). Relationship between general nutrition knowledge and dietary quality in elite athletes. *International journal of sport nutrition and exercise metabolism*, *25*(3), 243-251.
Sunuwar, D. R., Singh, D. R., Bohora, M. P., Shrestha, V., Karki, K., & Pradhan, P. M. S. (2021). Association of nutrition knowledge, practice, supplement use and nutrient intake with athletic performance among Taekwondo players in Nepal.
Tawfik, S., El Koofy, N., & Moawad, E. M. I. (2016). Patterns of nutrition and dietary supplements use in young Egyptian athletes: a community-based cross-sectional survey. *PloS one*, *11*(8), e0161252.
Trakman, G. L., Forsyth, A., Devlin, B. L., & Belski, R. (2016). A systematic review of athletes' and coaches' nutrition knowledge and reflections on the quality of current nutrition knowledge measures. *Nutrients*, *8*(9), 570.
Walsh, M., Carwright, L., Corish, C. Sugrue, S. & Wood-Martin, R. (2011). The body composition nutritional knowledge, attitudes, behaviors, and future education needs of senior schoolboy rugby players in Ireland. *International journal of sport nutrition and exercise metabolism, 21*(5), 365-376.

© 2023 Alam. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.35-43.

Sport Social Work Journal

Kickstart: A Mixed Methods Analysis of a Group Activity Program for Persons with Serious Mental Illness

Elicia Cruz
Department of Occupational Therapy, University of Tennessee Chattanooga

Karissa Peyer
Department of Health and Human Performance, University of Tennessee Chattanooga

Bethany Womack
Department of Social Work, School of Professional Studies, University of Tennessee Chattanooga

Betsy Myers
Department of Physical Therapy, University of Tennessee Chattanooga

---

Introduction: *The purpose of this study was to explore the social and emotional impact of participation in the Kickstart program (KS), which provides adults experiencing serious mental illness with weekly soccer-based sessions.* ***Methods:*** *A mixed method approach to collecting and analyzing data was utilized. Observation and focus group data was analyzed into themes describing perceived social and emotional effects of KS attendance. Physical activity was assessed with accelerometers. Self-reported mood was measured before and after each session.* ***Findings:*** *Soccer players, walkers, and inactive participants accrued 36.8 ± 10.8, 32.1 ± 15.2 and 26.4 ± 10.0 minutes of activity, respectively. All participants demonstrated improvements in mood. Caregivers noted attendees had higher energy levels and increased morale and confidence. All three groups had significant improvements in mood after KS sessions. Change in mood scores was not correlated with steps nor minutes of physical activity.* ***Conclusion:*** *All participants had significant improvements in mood after a KS session. Although soccer players had statistically significantly better moods after KS than walkers and inactive participants, the differences in moods among attendees was small and may be irrespective of chosen activity. Changes in mood may be related to meaningfulness, rather than physical activity.*

Keywords: Serious Mental Illness, Sports, Mixed Methods, Group Activity

Serious mental illnesses are often complex and chronic, with recurring exacerbations of acute symptoms amidst ongoing chronic symptoms that can interfere with daily functioning, well-being, and quality of life. Recovery, for persons experiencing serious mental illness (SMI), is not a status achieved by the absence of illness or its symptoms. Instead, recovery is an ongoing, personal process through which individuals develop agency over their own lives and their ability to engage in meaningful activities and social relationships (Vanderplasschen et al., 2013; Substance Abuse and Mental Health Services Administration (SAMHSA), 2012, p. 3). Participation in physical activity and team-based sports have been studied as strategies not only to improve symptomatology, but also to provide opportunities for social interaction and community engagement, which are pivotal to ongoing recovery for persons experiencing SMI (Anderson et al., 2019; Carless & Douglas, 2008). Research about the relationship between physical activity and health and well-being among persons experiencing SMI is lacking (Lamont et al., 2017). This research explored the social and emotional benefits of a soccer-based exercise program for adults experiencing SMI.

The Kickstart (KS) Soccer Program was started to improve the health and well-being of people experiencing SMI (Operation Get Active, 2020). Soccer has been shown to improve cardiovascular health (Milanovic et al., 2015) and health-related quality of life (Battaglia et al., 2013) among players. Group-based activity programs, including soccer, basketball, and walking programs have also had positive impacts on psychosocial and physical health experiences of participants with mental illnesses that can impact opportunities for socialization (Andersen et al., 2018; Carless and Douglass, 2007; Lamont, 2017; Mittleman et al., 2018; Swinson et al., 2018). Relevant theory on the improvement of symptoms and psychosocial interventions suggests that the normalization of social aspects of team and group physical activities leads to improvement in mood and mental health symptoms (Lamont, 2017; Moloney and Rohde, 2016; Such et al., 2018). Further, research suggests that despite evidence about the value of physical activity for improved health and well-being, adults with mental illness continue to have low levels of moderate and vigorous physical activity, higher levels of sedentary time and are less likely to meet the physical activity guidelines than those without mental illness (Chapman et al., 2016; Vancampfort et al., 2017). Few high-quality studies are available that assess the effectiveness of physical activity interventions in this population using objective physical activity monitors (Ashdown-Franks et al., 2018). Evaluating physical activity and the psychosocial experience of KS attendees will increase the knowledge of the value of physical activity and team-based sports for persons experiencing SMI.

The purpose of this study was to explore the social and emotional impact of participation in the KS program, which provides adults who live at a residential center with weekly two-hour soccer sessions. The study assessed the dose of physical activity provided by KS sessions (Independent variable, IV), as well as changes in daily mood (dependent variable, DV), and attendees' psychosocial experiences related to participation in KS (DV).

Methods

Researchers used a mixed method approach to understand levels of physical activity and reported changes in social engagement and perceived emotional states at the beginning of, during, and after the KS program. Quantitative measures of physical activity and pre-post self-

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

reported mood scales were used to collect attendee-specific information, and ethnographic observation and a focus group were used to qualitatively capture information about session activities and perceptions of attendees' mood and participation.

Procedures

The Intervention

The study protocol was approved by the university's institutional review board and informed consent/assent was obtained from all participants. Conservator consent was obtained for those individuals who were incapable of providing informed consent. Study participants were residents of a local residential program for persons experiencing SMI. Three staff members from the group homes actively participated in weekly KS sessions. At each session, attendees chose to play soccer, walk laps on a track around the soccer field (soccer and walking = active participation), or remain inactive (inactive participation). Attendees were allowed to change activities each week. The field was located at a YMCA satellite site but was not professionally groomed and consisted of both even and uneven ground, the latter made walking and running difficult for some KS attendees. The track around the soccer field was 244 yards per lap. Soccer drills included such activities as dribbling approximately 10 yards, shooting goals, and defending the goal, on a half-field. See Figure 1 for a description of the activity options.

Data Collection Overview

To answer the research question "what dose of physical activity does KS provide," researchers used physical activity monitors to quantitatively track the amount of physical activity residents performed. To answer the research question "how do participants feel after participating in KS" a researcher distributed mood rating scales to attendees before and after each session as a quantified pre-post measure. Qualitative data provided further insight into both questions through participant-observation and a focus group with agency caregivers, all but one of whom also attended the KS program. These qualitative data provided caregiver attendees' perceptions of how KS attendance impacted the residents' social and emotional experience and self-directed physical activity.

Data Collection – Attendees' Experience

One researcher took overt ethnographic field notes at each of the 10 KS sessions (Savin-Baden and Major, 2013). This researcher gathered these field notes while conducting participant observation, which allows a researcher to understand the program from a different perspective than that which is provided by interviews and surveys (Patton, 2015). These notes captured activities, perceived mood and energy levels of KS attendees. The researcher was a direct observer of the KS sports activities while acting as a participant observer during times when KS attendees were socializing, organizing and setting up the field, and either walking, playing soccer, or cheering other players on. The researcher made field notes including observations about the session activities, such as who participated, how they chose to participate, as well as

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

conversations and social interactions between attendees. These field notes were used to create qualitative, narrative data.

At each session, attendees completed pre and post mood surveys. They were asked to report their mood using an adapted version of the Ottawa Mood Scale (Cheng, 2011; Wong, 2020). The scale assesses mood on a ten point Likert Scale using faces to indicate mood (1: Sad, depressed, down; 5: In the middle, not happy nor sad; or 10: Happy, awesome, great). This assessment was repeated at the end of each session. Mood surveys yielded quantitative data reflecting changes in self-perceptions of mood pre and post activity.

Two researchers conducted a 40-minute focus group with four caregivers to gather their perceptions of how KS impacted the attendees during and after the sessions. Written data was collected during the session via two note-taking strategies. One of the researchers took notes on large flip chart paper that all participants could read and build upon as ideas were offered. Additionally, a graduate student took notes of the discussion in a notebook. The focus group was scheduled during a time when no residents were present in order to ensure conversation could flow freely and caregivers would not face the dilemma of trying to participate in a focus group when residents needed them for supervision or care. The focus group yielded qualitative, narrative data.

Data Collection - Physical Activity

Study participants were instructed to wear an Actigraph GT3x+ (ActiGraph, Pensacola, FL) triaxial accelerometer during three KS activity sessions. Participants wore the Actigraph over their right hip using an elastic waist belt and were assisted with positioning of the belt by a member of the research team. The GT3x+ is a small device that provides activity measurement in counts that are compared to established intensity cut points to classify activity behaviors (Eston et al., 1998; Evenson et al., 2008; Freedson et al., 2005; Mattocks et al., 2007; Pate et al., 2006; Puyau et al., 2002; Sirard et al., 2005; Treuth et al., 2004; Trost et al., 2011; Vanhelst et al., 2012). The Actigraph was initialized at 30 Hz and data were exported in 1-second epochs. While the Actigraph has been validated for wear on both the hip and wrist, the hip location was selected for this study because it was believed that it would be less bothersome to the participants since it would not contact or rub on the skin.

Analytic Strategy

Qualitative Analysis

Focus group notes were first coded separately by two researchers with experience in qualitative data collection and analysis, using a descriptive coding approach (Saldaña, 2021). The researchers then compared these initial codes to collapse codes into themes. There was a high level of agreement between the two coders about what elements of attendee experience the focus group respondents attributed to participation in KS, in this case physical, emotional, and social effects. To code field notes, researchers worked collaboratively to identify activities and circumstances during the KS sessions that supported the concepts that emerged during the focus groups, as well as those that were unique to the field note observations. The goal of this stage of

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

analysis was to identify and describe the elements of the KS program associated with the changes in attendees perceived by caregivers.

Quantitative Analysis

Actigraph data were downloaded using ActiLife (version 6.13.4) and saved in raw format as GT3X files. These files were then converted to 1-second epoch AGD format and time filtered to include only the time frame of the KS practice. AGD files were scored using cutpoints established by Troiano and colleagues (Troiano et al., 2008). Using these cutpoints, behaviors were classified as sedentary (0-99 counts per minutes [CPM]), light (100-2019 CPM), moderate (2020-5998 CPM), or vigorous (5999+ CPM). Data for each attendee for each KS session was exported to CSV files with breakdown of time spent in sedentary, light, moderate and vigorous activities and step count. These data were then aggregated based on the attendee's primary activity for the KS session (soccer, walking, inactive). Step count and minutes of each activity intensity were averaged across all attendees and all three sessions for each activity. The primary outcome was minutes of light-moderate-vigorous activity (LMVPA). Light intensity activity was added to the traditional moderate-to-vigorous physical activity (MVPA) in consideration of relative intensity, given the expected low levels of physical fitness in the attendees.

Wilcoxon Sign-Rank test was used to determine changes in mood reported on the surveys from the start of a KS session to the end of the session. Kruskal-Wallis ANOVA was used to determine differences in mood between the three groups (soccer players, walkers, and inactive participants) before and after KS sessions. Spearman's rank correlation was used to determine if there was a relationship between changes in mood during a KS session and steps or the amount of LMVPA.

Findings

Physical Activity Dose

A total of 41 observations were made with Actigraph during KS practices (23 soccer, 4 inactive, 14 walk). For all observations, the average dose of physical activity was 15.2 ± 9.9 minutes of MVPA, 17.7 ± 6.4 minutes of light activity, and 1951 ± 971.8 steps. On average, attendees who were playing soccer accrued the most activity with 19 ± 8.4 minutes of MVPA, 17.7 ± 5.6 minutes of light activity, (36.8 ± 10.8 minutes of LMVPA) and 2276 ± 765.2 steps. This was followed by walkers with 14.7 ± 11.7 minutes of MVPA, 14.7 ± 7.71 minutes of light activity (32.1 ± 15.2 minutes of LMVPA) and 1956 ± 1215.9 steps and those who were inactive with 7.1 ± 4.3 minutes of MVPA, 19.3 ± 6.3 minutes of light activity (26.5 ± 10.0 minutes of LMVPA) and 1097 ± 422.2 steps per session.

The Attendee Experience

Wilcoxon Sign-Rank test revealed significant improvements in mood after KS sessions for all groups: soccer ($Z = 5.736$, $p<0.001$, effect size = 0.77), walkers ($Z = 4.497$, $p<0.001$,

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

effect size = 0.41), and inactive participants (Z = 2.673, p = 0.008, effect size = 0.74). Effect sizes of 0.1-0.3 were considered small, 0.3-0.5 were considered medium, and above 0.5 were considered large (Pallant 2011). Effect sizes indicate a large effect for soccer players and inactive participants and a medium effect size for walkers.

Kruskal-Wallis ANOVA revealed no significant difference in mood prior to KS sessions between soccer players, walkers, and inactive participants, H(2) = 5.51, p = 0.06. However, there was a significant difference between groups in mood after KS sessions, H(2) = 12.47, p = 0.002. Post hoc analysis using a Mann-Whitney test with a Bonferroni correction of alpha = 0.015 revealed that soccer players (*Md* = 10, *n* = 56) had significantly better moods after KS sessions compared to the walkers (*Md* = 9, *n* = 42) U = 830.50, *z* = 3.01, *p* = 0.003, with a medium effect size *r* = 0.36, and inactive participants (*Md* = 8, *n* = 13) U = 185.50, *z* = 2.68, *p* = 0.007, with a small effect size *r* = 0.27.

Using the Spearman's rank correlation, there was no significant correlation between change in mood scores (pre-KS session minus post-KS session mood scores) and either steps (r = 0.13, p = 0.423) nor minutes of LMVPA (r = 0.21, p = 0.212).

Qualitative data yielded four themes (physical, emotional, social, and structural aspects of KS) that provided insight into the attendees' experience and how KS influenced their health and well-being.

Physical Benefits of KS

The physical benefits of KS included personal experiences related to physical health and some changes in health-related behaviors. Some attendees and staff perceived that there were physical benefits, such as feeling more alert and energetic. One attendee stated, "I have a terrible headache, but I always feel better after I leave here (KS) 'cause the air and being here clears my head of all the things, ya know, going on," and another said, "I walk as many laps as I can. It feels good all over."

Staff reported changes in both the types of activity and levels of activity that KS attendees chose to engage in outside of program time. In general, staff perceived that those who engaged in both soccer and walking demonstrated higher activity levels outside of the KS sessions. For example, some participants began to go on walks while at the day program or group homes. One participant joined a gym and began to work out 3 times a week. Staff also reported that some participants were not "laying around" as much as they did prior to KS. Another health-related behavior that seemed to be influenced by participation in KS was smoking. Staff reported attendees did not smoke as much, and one soccer participant stated, "It keeps my mind off of smoking." Staff also reported that some residents demonstrated increased appetites after they began to participate in the KS program, which seemed to be an ongoing concern of the staff nutritionist.

Emotional Aspects of KS

Focus group participants connected KS participation to improved overall emotional states of attendees while the program was active. KS attendees expressed pride in their accomplishments. After playing soccer, one participant said, "It's my best day. I walk at home to

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

practice. I'm the best player here now." Another participant shared her pride in walking, saying, "I walked 3 laps today! I'm gonna walk another before I leave." Staff reported that attendees were proud of their accomplishments to be part of KS, saying that many were proud to be part of something bigger than themselves.

KS participation also seemed to relate to attendees' emotional states, while the KS program was in session. Staff reported that attendees demonstrated lighter and happier moods, increased motivation to engage in the residential community, higher energy levels, and increased morale and confidence. They found that some attendees were calmer after returning from KS sessions. Staff also reported that some attendees demonstrated improved self-regulation skills after KS sessions.

Social Aspects of KS

Focus group members expressed that KS benefited attendees' socially in terms of both their individual social behaviors and the social context of their residential community overall. During practice and soccer games, participants and staff cheered each other on, which staff believed helped build their sense of community. KS attendees shared in community lunches together after practice, which allowed KS attendees to share a meal with other KS attendees who reside in different houses. The sense of community was also shaped by attendees' continued conversations after practice. KS attendees reminisced about soccer practice and how the game went. According to staff, they talked about this even days later.

Staff also reported that attendees' social behaviors seemed to be shaped by participation in KS. Staff found attendees to have fewer behavior problems. For example, staff reported that one attendee typically demonstrated physical and social intrusiveness, and that this behavior was less of a problem while the resident attended KS activities.

The Influence of the Structure of the KS Program

The structure of the KS program overall seemed to influence attendees' social and emotional experiences. In general, the KS program possessed an egalitarian nature that was not driven by staff-to-attendee power dynamics. Staff acted as attendees and allowed all attendees to choose their activity for the day with no judgment or encouragement to select one activity over another. For example, they did not argue if an attendee opted to walk or sit and observe rather than play soccer. Attendees were given the space for agency over their engagement in the activity. Another factor that contributed to the supportive and equitable environment was that winning the soccer games was not emphasized. While they kept score, staff did not promote competition or provide awards for teams that scored more in games. Attendees reflected this atmosphere by celebrating goals, no matter what team scored them.

Staff set up and adhered to a specific routine for each session, which seemed to promote comfort with involvement and to promote agency, as attendees knew what to expect and did not rely on instructions from staff to move on to the next activity in the session. This routine let attendees know what to expect and provided cues for behavioral expectations, which seemed to promote participation and comfort with the setting, no matter the activity in which attendees engaged.

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

Discussion

It appears that attendance at KS is associated with improvements in mood and a modest dose of physical activity. Previous intervention studies in adults experiencing SMI have found that providing adequate social support is an important factor in achieving sufficient levels of MVPA (Bartels et al., 2013; Firth, Carney, et al., 2016). The dose of physical activity during KS practice was not directly related to changes in mood, and so it is likely that factors other than physical activity are driving these changes. Participation in any portion of the program was associated with improvements in mood as measured by the Ottawa scale, and focus group participants described improvements in KS members' social and emotional behavior while the KS program was running. This study adds to the literature describing the experience of a group-based, physical activity program as having value to psychosocial quality of life outcomes independent of physical performance targets for level of activity. This finding is also consistent with previous studies describing positive associations between membership in a group physical activity and social and psychological health (Andersen et al., 2019; Firth, Rosenbaum et al., 2016; Mittleman, 2018; Moloney & Rohde, 2017); as well as findings about arts-based inclusive group activities (Lawson et al., 2014). Other studies exploring the concept of 'meaningfulness' in activities among adults experiencing SMI have highlighted the importance of inclusive support from others and choice of activities in positive outcomes (Argentzell et al., 2012; Ikiugu et al., 2016). The notion of meaningfulness in activities may be important to the understanding of the value of programs such as KS. Meaningful activity has been defined as activity in which people perceive they have a choice to participate, and that tap into their self-worth, sense of accomplishment, agency, and competency (Ikiugu et al., 2016). Some qualities of the KS program activities reflect this conceptualization of meaningful activity. For example, it affords free choice, a sense of accomplishment, a sense of being part of something bigger than themselves, and respite from day-to-day routines. The meaning of the KS program to attendees might have contributed to its benefits in terms of mood and social engagement. Further research about the relationship between meaningfulness of activity and its benefits for adults experiencing SMI may help explain the role of group-based activity in health and wellness.

It may be surprising that attendees were active for only approximately thirty minutes per session, but this is less alarming when taken in context. Much of the early part of each KS session was relatively inactive while waiting for all attendees to arrive and taking care of "housekeeping tasks." Additionally, the small and uneven field surface necessitated slower paces in many of the attendees. When compared to school physical education (PE) sessions in elementary schools, the dose of physical activity is lower, but not drastically. Despite calls for students to be active at least 50% of the time that they are in PE class (Pate & Dowda, 2019), a 2016 meta-analysis of PE sessions found an average of 44% of time to be spent in MVPA (Hollis et al., 2016). When limited to studies that used accelerometry to measure physical activity intensity, as the current study does, this percentage dropped to less than 33%. While the dose of physical activity documented in the current study is modest, it is likely important to the health and well-being of attendees.

Unfortunately, we are unable to compare overall physical activity levels on days with KS to that on days without KS. While Actigraphs were distributed twice throughout the study with

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

the intention of measuring free-living physical activity, adherence to the monitors was extremely low and data were not usable. A recent meta-analysis found that approximately one-quarter of included adult studies reported some type of physical activity compensation in response to a physical activity intervention (Swelam et al., 2022). Compensation occurs when an individual engages in less physical activity than they normally would in their free time when they are also involved in a physical activity intervention. Increased fatigue, less free time, lack of motivation, and fear of overtraining may all contribute to this compensation (Gray et al., 2018). While the researchers are unaware of any studies that have investigated compensation in adults experiencing SMI, it is possible that the physical activity dose provided by KS was offset by lower physical activity levels during the remainder of the day or week. While future studies should attempt to assess this phenomenon, special consideration must be given to issues of comfort to improve adherence to activity monitors in this population.

Lessons Learned

During the data collection process, researchers noted several issues that shaped how the research was carried out. Awareness of these issues might prove useful in future research of this type and will be presented here. Coordinating with facilities was crucial to attendee well-being. The soccer field was located on a YMCA campus, about 50 yards from the building. Several attendees needed to use the restroom at some point during each session, which, according to caregivers, was a common side effect of medication. While YMCA staff were willing to allow attendees to use the soccer field at their complex, restrooms were only available to field users when a sports complex staff member was available to unlock the doors. Attendees had to walk a long distance, and sometimes had to also get a KS staff member to find YMCA staff to unlock the restroom doors. Access to shade at the field also became an issue because there was only one shaded bench at the field. This was a concern for attendees whose medications increased their sensitivity to sunlight and heat. Researchers compensated by providing several umbrellas for shade.

Coordinating with KS attendees' residential communities was also important to how KS was carried out. To adjust to the concerns about the sun and heat, KS staff tried to move sessions to earlier in the morning, but this change was not possible due to the residential facilities' schedules for morning routines, such as meals and medication administration. Consistent participation in KS was sometimes a challenge given the realities of transportation from attendees' homes. The vans available for KS transportation were also needed for transportation to residents' medical appointments. As a result, all attendees from one of the homes missed 4 of the 10 KS sessions.

Limitations

Limitations to the study include the small sample size, ability to self-select an activity at each session, and inconsistent attendance. There were also inconsistencies in adherence to the schedule for wearing physical activity monitors, as discussed above. Because KS was an outdoor activity, the schedule was affected by weather. Several sessions had to be canceled and

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

rescheduled due to rain or extreme heat, which extended the schedule and necessitated changes in data collection plans and may have influenced the results.

Conclusion

Soccer players, walkers, and inactive participants all had significant improvements in mood at the end of a KS session. Although soccer players had statistically significantly better moods after KS than walkers and inactive participants, the differences between moods among attendees was small and may be irrespective of chosen activity. The opportunity to engage in a meaningful activity, such as the KS program, may be relevant to attendees' experience and to changes in their mood. Improvements in mood were unrelated to both the number of steps and the amount of physical activity during sessions. Our findings contribute to knowledge about the benefits of physical activity programs for persons with serious mental illness. Findings about the potential benefits of KS, despite the relatively low levels of physical activity, suggest further research is needed about the value of group-based activity that is meaningful, social, and engaging.

References

Andersen, M. H., Ottesen, L., & Thing, L. F. (2019). The social and psychological health outcomes of team sport participation in adults: An integrative review of research. *Scandinavian Journal of Public Health, 47*, 832-850. https://doi.org/10.1177/1403494818791405

Argentzell, E. Håkansson, C., & Eklund, M. (2012). Experience of meaning in everyday occupations among unemployed people with severe mental illness. *Scandinavian Journal of Occupational Therapy, 19*(1), 49-58. https://doi.org/10.3109/11038128.2010.540038

Ashdown-Franks, G., Williams, J., Vancampfort, D., Firth, J., Schuch, F., Hubbard, K., Craig, T., Gaughran, F., & Stubbs, B. (2018). Is it possible for people with severe mental illness to sit less and move more? A systematic review of interventions to increase physical activity or reduce sedentary behaviour. *Schizophrenia Research*, *202*(201 8), 3–16. https://doi.org/10.1016/j.schres.2018.06.058

Bartels, S. J., Pratt, S. I., Aschbrenner, K. A., Barre, L. K., Jue, K., Wolfe, R. S., Xie, H., MgHugo, G., Santos, M., Williams, G. E., Naslund, J. A., & Mueser, K. T. (2013). Clinically significant improved fitness and weight loss among overweight persons with serious mental illness. *Psychiatric Services*, *64*(8), 729–736. https://doi.org/doi.org/10.1176/appi.ps.003622012

Battaglia, G., Alesi, M., Inguglia, M., Roccella, M., Caramazza, G., Bellafiore, M., & Palma, A. (2013). Soccer practice as an add-on treatment in the management of individuals with a diagnosis of schizophrenia. *Neuropsychiatric Disease and Treatment, 9*, 595-603. https://DOI:10.2147/NDT.S44066

Carless, D. & Douglass, K. (2008). The role of sport and exercise in recovery from serious mental illness: Two case studies. *International Journal of Men's Health, 7*(2), 137-156. https://DOI:10.3149/jmh.0702.137

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

Chapman, J.J., Fraser, S.J., Brown, W.J., & Burton, N.W. (2016). Physical activity preferences, motivators, barriers and attitudes of adults with mental illness. *Journal of Mental Health, 25*(5), 448-454. https://DOI:10.3109/09638237.2016.1167847

Cheng, M. (2011). The Ottawa Mood Scales. Ottawa: Michael Cheng.

Eston, R.G., Rowlands, A.V., & Ingledew, D.K. (1998). Validity of heart rate, pedometry, and accelerometry for predicting the energy cost of children's activities. *Journal of Applied Physiology, 84*(1), 362–371. https://doi.org/10.1152/jappl.1998.84.1.362

Evenson, K.R., Cattellier, D., Gill, K., Ondrak, K., & McMurray, R. (2008). Calibration of two objective measures of physical activity for children. *Journal of Sports Science, 26*, 1557–1565. https://doi.org/10.1080/02640410802334196

Firth, J., Carney, R., Elliott, R., French, P., Parker, S., McIntyre, R., McPhee, J. S., & Yung, A. R. (2016). Exercise as an intervention for first-episode psychosis: A feasibility study. *Early Intervention in Psychiatry*, *12*(3), 307–315. https://doi.org/10.1111/eip.12329

Firth, J., Rosenbaum, S., Stubbs, B., Gorczynski, P., Yung, A. R., & Vancampfort, D. (2016). Motivating factors and barriers towards exercise in severe mental illness: A systematic review and meta-analysis. *Psychological Medicine*, *46*(14), 2869–2881. https://doi.org/10.1017/S0033291716001732

Freedson, P.S., Pober, D., & Janz, K.F. (2005). Calibration of accelerometer output for children. *Medicine and Science in Sport and Exercise, 37*(11, Suppl. 1), S523–S530. https://doi.org/10.1249/01.mss.0000185658.28284.ba

Gray, P., Murphy, M., Gallagher, A., & Simpson, E. E. A. (2018). A qualitative investigation of physical activity compensation among older adults. *British Journal of Health Psychology*, *23*(1), 208–224. https://doi.org/10.1111/bjhp.12282.

Hollis, J. L., Williams, A. J., Sutherland, R., Campbell, E., Nathan, N., Wolfenden, L., Morgan, P. J., Lubans, D. R., & Wiggers, J. (2016). A systematic review and meta-analysis of moderate-to-vigorous physical activity levels in elementary school physical education lessons. *Preventive Medicine*, *86*, 34–54. https://doi.org/10.1016/j.ypmed.2015.11.018

Ikiugu, M. N., Hoyme, A. K., Mueller, B., & Reinke, R. (2016). Difference between meaningful and psychologically rewarding occupations: Findings from two pilot studies. *Journal of Occupational Science, 23*(2), 266-277. https://doi.org/10.1080/14427591.2015.1085431

Lamont, E., Harris, J., McDonald, G., Kerin, T., & Dickens, G. L. (2017). Qualitative investigation of the role of collaborative football and walking football groups in mental health recovery. *Mental Health and Physical Activity, 12*, 116-123. http://dx.doi.org/10/1016/j.mhpa.2017.03.003

Lawson, J., Reynolds, F., Bryant, W., & Wilson, L. (2014). 'It's like having a day of freedom, a day off from being ill': Exploring the experiences of people living with mental health problems who attend a community-based arts project, using interpretative phenomenological analysis. *Journal of Health Psychology, 19*(6), 765-777. http://doi.org/10.1177/1359105313479627

Mattocks, C., Leary, S., Ness, A., Deere, K., Saunders, J., Tilling, K., Kirkby, J., Blair, S.N., & Riddoch, C. (2007). Calibration of an accelerometer during free-living activities in children. *International Journal of Pediatric Obesity, 2*(4), 218–226. https://doi.org/10.1080/17477160701408809

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

Milanović, Z., Pantelić, S., Čović, N., Sporiš, G., & Krustrup, P. (2015). Is recreational soccer effective for improving VO2max? A systematic review and meta-analysis. *Sports Medicine, 45*(9), 1339-1353. https://doi.org/10.1007/s40279-015-0361-4

Mittleman, J., Iuchtman, A., & Yatzker, U. (2018). Basketball as psycho-social therapy for adolescents in psychiatric hospitalization. *Palaestra (Macomb, Ill.), 32*(3), 28-34.

Moloney, L. & Rohde, D. (2016). Experiences of men with psychosis participating in a community-based football programme. *Irish Journal of Occupational Therapy, 45*(2), 100-111. https://DOI:10.1108/IJOT.06.2017.0015

Operation Get Active. (2020). *2019 end of year report. https://operationgetactive.org/*

Pallant, J. (2011). Survival manual. *A step by step guide to data analysis using SPSS*, *4*, 4.

Pate, R.R., Almeida, M.J.,McIver, K.L., Pfeiffer, K.A., & Dowda, M. (2006). Validation and calibration of an accelerometer in preschool children. *Obesity, 14*(11), 2000–2006. https://doi.org/10.1038/oby.2006.234

Pate, R. R., & Dowda, M. (2019). Raising an active and healthy generation: A comprehensive public health initiative. *Exercise and Sport Sciences Reviews*, *47*(1), 3–14. https://doi.org/10.1249/JES.0000000000000171

Patton, M.Q. (2015). *Qualitative research & evaluation methods: integrating theory and practice*. SAGE Publications, Inc.

Puyau, M.R., Adolph, A.L., Vohra, F.A., & Butte, N.F. (2002). Validation and calibration of physical activity monitors in children. *Obesity Research, 10*, 150–157. https://doi.org/10.1038/oby.2002.24

Saldaña, J. (2021). *The coding manual for qualitative researchers*, 4th ed. Sage Publications, Inc.

Savin-Baden, M. & Major, C. H. (2013). *Qualitative research: The essential guide to theory and practice.* Routledge.

Sirard, J.R., Trost, S.G., Pfeiffer, K.A., Dowda, M., & Pate, R.R. (2005). Calibration and evaluation of an objective measure of physical activity in preschool children. *Journal of Physical Activity and Health, 2*(3), 345–357. https://doi.org/10.1123/jpah.2.3.345

Substance Abuse and Mental Health Services Administration (2012). SAMHSA's working definition of recovery. [Brochure.] Retrieved from http://store.samhsa.gov/product/SAMHSA-s-Working-Definition-of-Recovery/PEP12-RECDEF

Such, E., Burton, H., Copeland, R. J., Davies, R., Goyder, E., Jeanes, R., Kesterton, S., Mackenzie, K., & Magee, J. (2018). Developing a theory-driven framework for a football intervention for men with severe, moderate or enduring mental health problems: A participatory realist synthesis. *Journal of Mental Health, 29*(3), 277-288. https://doi.org/10.1080/09638237.2019.1581339

Swelam, B. A., Verswijveren, S. J. J. M., Salmon, J., Arundell, L., & Ridgers, N. D. (2022). Exploring activity compensation amongst youth and adults: A systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, *19*(1), 1–25. https://doi.org/10.1186/s12966-022-01264-6

Swinson, T., Wenborn, J., & Sugarhood, P. (2018). Green walking groups: A mixed-methods review of the mental health outcomes for adults with mental health problems. *British Journal of Occupational Therapy, 83*(3), 162-171, https://doi.org/10.1177/0308022619888880

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

Treuth, M.S., Schmitz, K., Catellier, D.J., McMurray, R.G., Murray, D.M., Almeida, M.J., Going, S., Norman, J.E., & Pate, R. (2004). Defining accelerometer thresholds for activity intensities in adolescent girls. *Medicine & Science in Sports & Exercise, 36*(7), 1259–1266. https://doi.org/10.1249/01.MSS.0000074670.03001.98

Trost, S.G., Loprinzi, P.D., Moore, R., & Pfeiffer, K.A. (2011). Comparison of accelerometer cut points for predicting activity intensity in youth. *Medicine & Science in Sports & Exercise, 43*(7), 1360–1368. https://doi.org/10.1249/MSS.0b013e318206476e

Troiano, R. P., Berrigan, D., Dodd, K. W., Masse, L. C., Tilert, T., & McDowell, M. (2008). Physical activity in the United States measured by accelerometer. *Medicine and science in sports and exercise*, *40*(1), 181-188. https://doi.org/10.1249/mss.0b013e31815a51b3

Vancampfort, D., Firth, J., Schuch, F. B., Rosenbaum, S., Mugisha, J., Hallgren, M., Probst, M., Ward, P. B., Gaughran, F., De Hert, M., Carvalho, A. F., & Stubbs, B. (2017). Sedentary behavior and physical activity levels in people with schizophrenia, bipolar disorder and major depressive disorder: a global systematic review and meta-analysis. *World Psychiatry*, *16*(3), 308–315. https://doi.org/10.1002/wps.20458

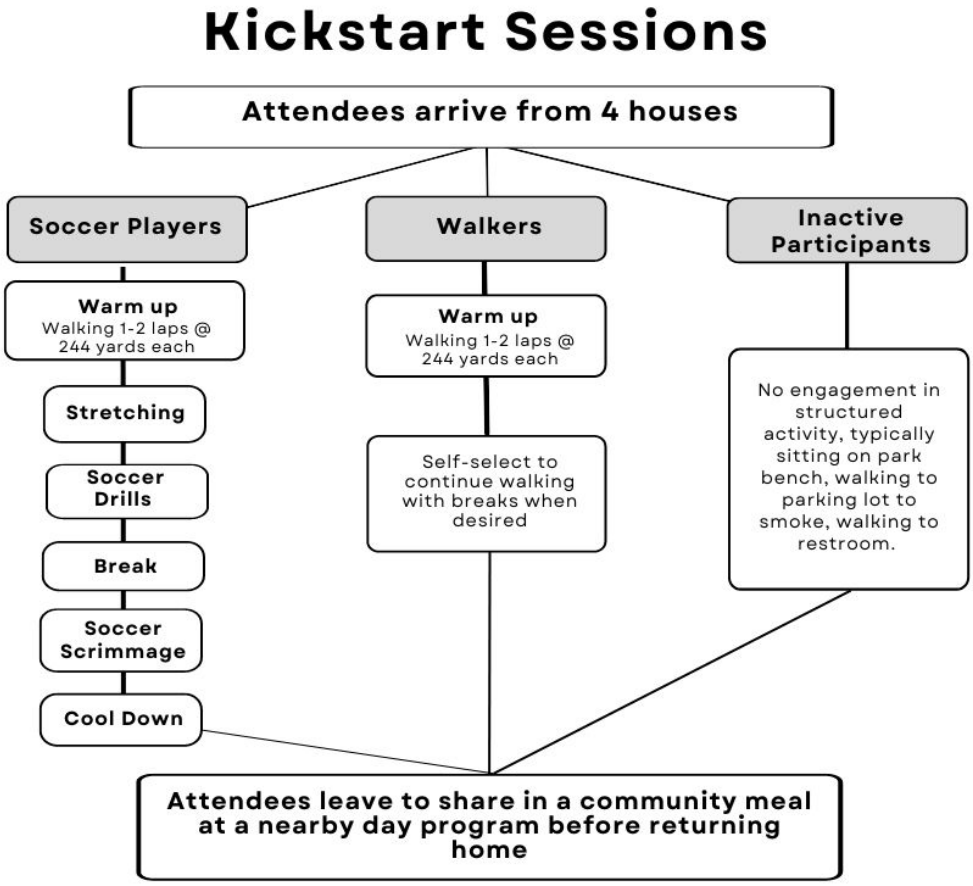
Vanderplasschen, W., Rapp, R.C., Pearce, S., Vandevelsde, S., & Broekaert, E. (2013). Mental health, recovery, and the community. *The Scientific World Journal*, 926174-3. https://doi.org/10.1155/2013/926174

Vanhelst, J., Mikulovic, J., Bui-xuan, G., Dieu, O., Blondeau, T., Fardy, P., & Béghin, L. (2012). Comparison of two ActiGraph accelerometer generations in the assessment of physical activity in free living conditions. *BMC Research Notes, 5*, 187. https://doi.org/10.1186/1756-0500-5-187

Wong, M-Y., Croarkin, P. E., Lee, C. K., & Lee, P. F. (2021). Validation of pictorial mood assessment with Ottawa Mood Scales and the positive and negative affect scale for young adults. *Community Mental Health Journal, 57*, 529-539. https://doi.org/10.1007/s10597-020-00679-4

Figure 1: KS Program Participation Options

© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.



© 2023 Cruz, Peyer, Womack, & Myers. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.44-56.

Sport Social Work Journal

Looking Back to Move Forward: A Book Review of *Roll Red Roll* to Inform Sport Social Work

Emily Nothnagle
The Ohio State University, College of Social Work

This book review provides an overview of Roll Red Roll: Rape, Power, and Football in the American Heartland (Roll Red Roll) by Nancy Schwartzman and Nora Zelevansky (2022). The review describes how this book can inform sport social work education, research, policy, and practice. Roll Red Roll describes the rape culture that existed in Steubenville, Ohio, and on the Steubenville High School football team that contributed to the assault of Jane Doe in 2012 by high school football players. Through power theory and feminist perspectives, sport social workers can examine the mechanisms that contribute to rape culture in sport contexts. With a greater understanding of the construction of rape culture, sport social work practice and interventions can aim to dismantle toxic masculinity and support survivors of sexual violence.

Keywords: Sexual Assault, Adolescent, Sport, Athlete

Social workers commit themselves to social justice and human rights, aiming to serve socially vulnerable populations and intervene to address social issues. The book *Roll Red Roll: Rape, Power, and Football in the American Heartland* illuminates how one community turned a blind eye to sexual assault in the context of sport. This book is especially relevant to the social work profession as it not only describes the predictors and hidden factors contributing to rape cultures, but also provides a context for how organizations, administrators, coaches, athletes, and sport social workers can work together to advocate for the liberation of sexual assault survivors and act as allies in the rape culture movement. This book review will provide an overview of *Roll Red Roll: Rape, Power, and Football in the American Heartland* and describe how this book can inform sport social work education, research, policy, and practice.

Overview of the Book

In 2022, filmmaker Nancy Schwartzman adapted her 2018 documentary *Roll Red Roll* into the book *Roll Red Roll: Rape, Power, and Football in the American Heartland* with author and journalist Nora Zelevansky. The book discusses the nationally recognized 2012 sexual assault case that occurred in Steubenville, Ohio, involving several members of the Steubenville

High School football team, known as "Big Red." The authors describe the incident and the town's response from a historical perspective before dissecting how Steubenville's social climate allowed a hidden rape culture to fester.

The book begins by describing how a 2012 high school party spiraled out of control in Steubenville as teenagers, including several members of Big Red, drank alcohol and sexually assaulted a sixteen-year-old Jane Doe from another school while documenting the night on their cellphones. Jane Doe was too intoxicated to consent, and perpetrators assaulted her in the backseat of a car and the basement of a house as teammates and friends watched, took and shared pictures and videos, and joked about her degradation. Evidence of the assault circulated through text messages and posts on social media. Jane Doe's parents gathered the digital evidence on a hard drive and submitted it to the police. The investigation resulted in the arrest, and eventual rape conviction in juvenile court, of Big Red players Trent Mays and Ma'lik Richmond.

Notably, the authors chose to engage the reader in perspective-taking about the social context of this community rather than focusing explicitly on Jane Doe's experiences. This is relevant to social work's commitment to contextualizing social issues within the frameworks of systems theory and the person-in-environment perspective. *Roll Red Roll* explores the social mechanisms that enabled the so-called Steubenville "Rape Crew" to sexually assault Jane Doe without fear of repercussions by examining court records, online sources, and interviews from the 2018 *Roll Red Roll* documentary. Through this lens, the authors explore rape culture as it exists in the American Heartland and its implications for the United States as a whole.

Using Steubenville as a sort of case study, the authors describe how the community and climate of the town's football program created a rape culture and led to this event. Steubenville is a small, economically depressed town that still holds true to social norms comparable to when townsmen held steady jobs at the steel plants. As steel production became outsourced, many people lost their jobs, and the town still feels the economic reverberations of this workforce disruption. While many felt their identities change alongside job loss, Big Red Football remained constant. The authors detail how Steubenville residents pack into the stands of the 10,000-seat stadium to cheer on the high school football team on Friday nights. Big Red players earned a celebrity-like status in Steubenville, regularly playing in front of thousands of people. Consistent with systems and person-in-environment theories, the behaviors of Big Red players relate to the surrounding social environment described in *Roll Red Roll*. For example, idolizing young football players can provide the impression that these boys should be afforded certain privileges, including a lack of accountability for prior incidents, creating a sense of invincibility. For social workers reading this book, the intersection of power and status and lack of accountability within the community for males, especially football players, begins to contextualize the environment in which Jane Doe's rape occurred.

Moreover, the authors document additional individual, relational, and community factors that precipitated this event that coincide with power theory and feminist perspectives. Adolescent boys on the Big Red Football team are socialized and taught to prioritize the team and its members above anything or anyone else. This creates significant pressure to protect the in-group football team, leading to groupthink. Big Red players did not speak out against wrongdoing like the assault of Jane Doe in 2012. Instead, many encouraged the perpetrators and later protected them with lies, protecting the in-group football team rather than the outsider Jane Doe.

© 2023 Nothnagle. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.57-61.

The "us versus them" mentality that exists on the field is exacerbated by language centered on destroying the opponent or "enemy" and the expectation to be the dominant male, promoting hegemonic masculinity (Murnen & Kohlman, 2007). Football is an overwhelmingly male sport with little opportunity for female participation. The exclusion of females in football inherently devalues them, suggesting that females are unworthy of inclusion unless they are hyper-sexualized as cheerleaders dressed in revealing uniforms (Tom, 2010). The devaluation and hyper-sexualization of females combined with hegemonic masculine rhetoric contributes to the creation of rape culture as football players perceive entitlement to sexually conquer women and girls (Tom, 2010; Tredinnick et al., 2023).

Importantly, teenagers were not the only people who tried to protect the perpetrators. Several adults including parents, coaches, and school administrators deleted digital evidence and refused to cooperate with police to protect their football players. Religion also impacted how Steubenville residents perceived the situation as the Catholic ideal of purity tainted opinions of Jane Doe. Many adults and adolescents alike engaged in debates arguing that Jane Doe's supposed promiscuity led to her assault; others claimed she was making false accusations.

The final chapters of *Roll Red Roll* are a call to action to dismantle rape culture through educational programs and access to support for survivors. The authors provide several resources for survivors of sexual or gender-based violence and highlight several violence prevention programs.

Schwartzman and Zelevansky offer a convincing explanation of how rape culture is created through football's promotion of groupthink and toxic masculinity. However, this book does not explore the LGBTQIA+ community in the discussions of gender-based violence. While it is briefly mentioned in the latter chapters, there is little discussion about the disproportionate number of LGBTQIA+ people who experience sexual assault (Human Rights Campaign, n.d.; Messinger & Koon-Magnin, 2019). The inclusion of LGBTQIA+ people in the discussion of sexual violence would strengthen the quality of *Roll Red Roll* as it would provide a more comprehensive overview of rape culture and its survivors. Additionally, the authors did not discuss whether the school had policies in place to discourage these behaviors and penalize athletes for smaller transgressions. Also missing from the book was whether the school engaged students in bystander interventions or if adults working with adolescents received training to respond to sexual assault crises.

Takeaways for Sport Social Workers

Schwartzman and Zelevansky's *Roll Red Roll* offers several key takeaways for sport social work education, research, policy, and practice.

Sport Social Work Education

Roll Red Roll has several takeaways for sport social work education. Sport social workers could host bystander-to-upstander intervention trainings in athletic departments and build more effective reporting structures by increasing athlete and coach awareness of who to contact when issues arise, as suggested by the National Collegiate Athletic Association (NCAA, 2023). More comprehensive sexual assault prevention programs are needed, requiring sport social workers to have a sophisticated understanding of rape culture in athletic contexts. Also, sport social workers

© 2023 Nothnagle. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.57-61.

must advocate for mandatory prevention trainings and increased accountability structures in athletic departments. Sport social workers may also work with male athletes to challenge and deconstruct toxic masculinity in athletics as well as work with survivors to address trauma and mental health concerns associated with sexual assault.

Sport Social Work Research

This book has implications for sport social work research as well. Sport social work researchers should study the existing structures within athletic departments that contribute to rape culture. A more thorough understanding how rape culture is created would allow sport social workers to design evidence-based intervention and prevention programs that challenge toxic masculinity and notions of acceptability regarding sexual violence in sport contexts. In addition to creating evidence-based intervention and prevention programs, sport social work researchers could also evaluate existing programs. Such evaluations could include studying the effectiveness of sexual violence intervention and prevention programs offered specifically in athletic contexts. Additionally, researchers could examine the implementation fidelity and transferability of sexual violence intervention and prevention programs designed for other, non-sport settings to be used in athletic contexts.

Sport Social Work Policy

Additionally, there are takeaways for sport social work policy, including the need to advocate for laws and policies that protect survivors of sexual violence. The Alliance of Social Workers in Sport's (ASWIS) Policy Platform states that "athletes and those around them deserve to be able to compete and live without fear for their personal safety" (ASWIS, n.d.). This includes improving awareness of, response to, and prevention of sexual violence. Laws regarding sexual violence vary by state in the United States, and sport social workers can advocate for reform within the legal system to advocate for survivors' rights. Sport social workers should also establish clear policies and guidelines for athletic departments when instances of sexual violence occur. Policies outlined by the NCAA in the *Sexual Violence Prevention: An Athletics Tool Kit for a Healthy and Safe Culture* could be used as a guide when considering high school sport programs (NCAA, 2023).

Sport Social Work Practice

Another takeaway for sport social workers is the need to support coaches regarding sexual violence and conduct bystander-to-upstander interventions for student-athletes, especially males. Reflecting upon an interview with the head coach of Big Red, the authors recognize that "as a football coach, and not a social worker, he wasn't trained to support the needs of modern teenagers navigating a sexually charged culture" (Schwartzman & Zelevansky, 2022, p. 197). Instead of just responding to these issues as they arise, sport social workers must do preventative work with coaches and athletes, such as establishing clear expectations for behavior regarding sexual violence as suggested by the NCAA (2023). Coach education rarely emphasizes social-emotional well-being or positive youth development (Atkinson et al., 2022), and sport social

© 2023 Nothnagle. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.57-61.

workers can establish education programs to prepare coaches to report sexual violence and cultivate a culture of care with their athletes that respects women and condemns rape. This book allows sport social workers to consider prevention and intervention tactics aligning with social work values, ethics, and commitments to vulnerable populations and social justice (National Association of Social Workers, 2021).

After reading *Roll Red Roll: Rape, Power, and Football in the American Heartland,* I would recommend this book to high school coaches, school social workers, parents of athletes, and high school athletes. Throughout the course of the book, the authors engage in an accessible, conversational tone characteristic of journalists. This text is easily digested and would be impactful for those who work with adolescent athletes and athletes themselves as they are invited to reflect on their own experiences in sport and how they can create a safer environment for all.

References

Alliance of Social Workers in Sport. (n.d.). *Policy platform*. https://www.aswis.org/policy-platform.

Atkinson, O., Bates, S., Anderson-Butcher, D., Mack, S., & Goodway, J. (2022). Mapping school-based coach education requirements in the United States. *International Sport Coaching Journal*, *10*(2), 276-288.

Human Rights Campaign. (n.d.). *Sexual assault and the LGBTQ community*. https://www.hrc.org/resources/sexual-assault-and-the-lgbt-community.

Messinger, A. M., & Koon-Magnin, S. (2019). Sexual violence in LGBTQ communities. In W. T. O'Donohue & P. A. Schewe (Eds.), *Handbook of sexual assault and sexual assault prevention* (pp. 661–674). Springer International Publishing.

Murnen, S. K., & Kohlman, M. H. (2007). Athletic participation, fraternity membership, and sexual aggression among college men: A meta-analytic review. *Sex Roles*, *57*(1–2), 145-157.

National Association of Social Workers. (2021). *NASW code of ethics*. https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English.

National Collegiate Athletics Association. (2023). *Sexual violence prevention: An athletics tool kit for a healthy and safe culture* (No. 3). https://ncaaorg.s3.amazonaws.com/ssi/violence/SSI_SexualViolencePreventionToolkit.pdf.

Schwartzman, N., & Zelevansky, N. (2022). *Roll red roll: Rape, power, and football in the American heartland* (First edition). Hachette Books.

Tom, E. (2010). Flip skirt fatales: how media fetish sidelines cheerleaders. *PLATFORM: Journal of Media and Communication*, *2*, 52-70.

Tredinnick, L., Newman, T., Bosetti, R., Hyzak, K., Reynolds, J., & Weaver, R. (2023). Conformity to masculine norms and attitudes toward sexual behavior: A study among college students involved in sport. *Sport Social Work Journal*, *3*(1), 77–94.

© 2023 Nothnagle. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.57-61.

Sport Social Work Journal

Ultraendurance Sports: A Call to Action

Nicolas D. Silva
University of Texas at El Paso

Ultraendurance sports are becoming increasingly popular around the world and have a history and future that should not be forgotten or overlooked. For example, according to UltraRunning Magazine, in 2022 there were 2682 races in North America and approximately 67% male runners and 33% female runners participated with 116,578 total finishes. Social workers are poised to support, develop, and train the next generations of athletes, coaches, families, and support systems of ultraendurance athletes. This commentary is a call to action for more research, best practice development, and advocacy for ultraendurance sports.

Keywords: Ultraendurance, Sport, Athlete, Action

From 50km to 5000km of running to ultramarathon swims and deca triathlons, ultradistance athletes have gained somewhat of a notoriety as a new sort of "Forrest Gump" or "Marathon Maniac." What is the motivation for going so long? What is the reason people keep training and spending money on grueling and uncomfortable experiences? Injury, dropping out of races, hallucinations, and serious medical complications like electrolyte imbalance can occur when a person goes beyond their limits. As a former ultra-runner, there was nothing like long training days in the hyper-technical trails and mountains of El Paso, Texas, Las Cruces, New Mexico, and elsewhere, on the track, or doing endurance swims when my tendons were not interested in getting "rock massages."

As social workers, promoting health, wellness and a client's highest potential is a major skill and goal, but in the realm of ultraendurance sports, more specialized research, care, training, and consultation with professionals and experienced practitioners is warranted. For example, running the Badwater 135 race in Death Valley through extreme temperatures is a different goal than making the 24-hour running Olympic Team than finishing the longest certified foot race in the world: Sri Chinmoy's 3100-mile race. Also, there are gender differences in endurance exercise, but the bulk of guidelines for ultramarathons are established on research that has excluded women (Kelly, 2023). Notwithstanding, clinically, many athletes need to break training and mental barriers such as the marathon distance and overcome gastrointestinal distress and significant pain and suffering during racing. For example, after a fall that turns bloody at mile ninety of Cocodona 250 hosted by Aravaipa Running an athlete is going to need support.

Medically, of interest, is acute kidney injury and a recent case report finds the potential catastrophic effects of warming temperatures, muscle damage, and electrolyte imbalance on renal failure in ultramarathoners. This imbalance calls to action medical social work expertise, eco-social work futures, and climate interventions (Pasternak et al., 2023). Nutrition, especially for amateur ultramarathoners, is an important field to contribute to. A recent study states ultrarunning is increasingly popular among beginners and knowledge about optimized and appropriate nutrition is needed (Kosendiak et al., 2023). This begs our discipline to refer and educate athletes of all training styles to be mindful and evidence-based with their nutrition and hydration strategies.

A rich area of research is the qualitative and quantitative markers of ultraendurance success and failure to ensure safety and performance skills over the lifespan. Subjects such as justice, equity, diversity, and inclusion could also be fertile to bring to light the successes and experiences of athletes and racers like multiple Guinness World Record holding Masters Centurion racewalker and first African American to finish the Sri Chinmoy Self Transcendence 3100-mile race, Yolanda Holder. Gender and diet, such as plant-based diets, are also important to factor in as many athletes like record-smashing Courtney Dauwalter, Camille Herron, Harvey Lewis and Suprabha Beckjord of 3100-mile race fame continue to inspire and give us frisson inducing performances.

Age is also an interesting factor in ultraendurance racing as there are many wise and elder ultramarathoners showing how it is done to the new devotees of the sport in races such as “A Race for the Ages.” It is important to note the Global Organization of Multiday Ultrarunners (GOMU) has stepped in to honor the records of multiday ultrarunning distances when the International Association of Ultrarunners (IAU) neglected to honor the distances, like the 5000km. In conclusion, this commentary is a call to action for all sport social workers, athletes, and sport social workers to research, develop best practices, and advocate for the sustainability and heart of ultraendurance sports. More specifically:

1. Volunteer and consult with ultramarathons in your area to get front line experience.
2. Develop and conduct research to promote success and medical knowledge in ultraendurance.
3. Advocate for best practice development in sustainability such as cupless races, race directing, sport social work, and sports medicine for the longevity and health of the sport.
4. Increase Continuing Education Units for sport social workers interested in the practice of ultraendurance.
5. Build community in social work and complementary disciplines such as physical therapy and medicine to support the whole lifespan of an ultraendurance athlete.
6. Promote health and wellbeing not only of athletes and their support systems but of our environments and ecosystems.

References

Kelly C. P. M. G. (2023). Is there evidence for the development of sex-specific guidelines for ultramarathon coaches and athletes? A Systematic Review. *Sports Medicine, 9*(1), 6.

© 2023 Silva. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.62-64.

Kosendiak, A., Król, M., Ligocka, M., & Kepinska, M. (2023). Eating habits and nutritional knowledge among amateur ultrarunners. *Frontiers in Nutrition, 10*, online.

Pasternak, A. V., Newkirk-Thompson, C., Howard, J. H., Onate, J. C., & Hew-Butler, T. (2023). Four cases of acute kidney injury requiring dialysis in ultramarathoners. *Wilderness & Environmental Medicine*, *34*(2), 218–221.

UltraRunning Magazine. (2023). *North American ultrarunning participation.* https://ultrarunning.com/calendar/stats/ultrarunning-finishes.

© 2023 Silva. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.62-64.

Sport Social Work Journal

The Impact of Post-Collegiate Playing Opportunities on DI Field Hockey Players and Their Athletic Identity

Gina Caravaglia
Department of Political Science, Ball State University

Jerry Reynolds
Department of Social Work, Ball State University

Matt Moore
Department of Family Science and Social Work, Miami University

---

Olympic sports tend to lack professional playing opportunities compared to league and revenue sports. This study evaluated how the lack of professional playing opportunity for Olympic sports might impact athlete identity. This study collected data from NCAA DI field hockey players utilizing the 10-item Athlete Identity Measurement Scale (AIMS) questionnaire. Researchers hypothesized the number of years playing field hockey, student-athlete grade level/graduation year, and the belief of playing at the next level would significantly impact athlete identity. Results refuted both hypotheses; however, results elicit further conversation about NCAA competition levels, the belief of playing at the next level, and the impact of youth sport development. The current study found athlete identity is complex and efforts at the micro-, mezzo-, and macro-levels to understand and assist student-athletes navigate their athlete identity is important for overall well-being. The study concludes with suggestions for future research and practical implications for exploring the complexities of athlete identity.

Keywords: athlete identity, student-athlete, college sport, field hockey

Brewer et al. (1993) defines athlete identity as "the degree to which an individual identifies with the athlete role" (p. 237). Athlete identity is a self-schema or a set of beliefs, which can negatively or positively influence an athlete's well-being. Research by Brewer et al. (1993) set the stage for understanding the positive and negative consequences of having a strong athlete identity. Having a strong athlete identity can help an individual develop a robust sense of self, positively impacting performance, and improving psychological and overall well-being. A

strong and healthy athlete identity can be beneficial to student-athletes as they transition out of sport as well and can utilize the resilience, competitiveness, and other skills learned to excel in their careers (Kidd et al., 2018; Menke & Germany, 2019). These are qualities one would want especially when competing in more elite environments; however, there are negative consequences to a strong athlete identity. Negative consequences include emotional difficulty transitioning out of sport, vulnerability to depression when experiencing an injury, and excessive training (Brewer et al., 1993; Cox et al., 2017; Kidd et al., 2018; Storch et al., 2005; Yang et al., 2007). These negative consequences impact at a micro- mezzo-, and macro-level.

From a micro-level perspective, athlete identity is an individual experience, but what shapes athlete identity is more complex. External and social factors do impact a person's self-schema (Brewer et al., 1993). Appraisal and attention from family, friends, media, colleges, and universities from a mezzo perspective reinforces the athlete role. From a macro perspective, policies created by the NCAA (National Collegiate Athletic Association) for example shape the well-being of a student-athlete (Moore et al., 2018). Athlete identity is a concept that continues to receive frequent attention in current literature and it is important to take a closer look at some of the variables shaping athlete identity.

Athletic Identity and NCAA Competition Level

The NCAA is critical to understanding collegiate athletes and athlete identity. The NCAA (2022a) is an organization that oversees more than 520,000 student-athletes across three divisions. Across all three divisions, there is a difference in the amount of time spent in athletics. NCAA highlights that DI student-athletes are expected to give 33 hours a week towards athletics, while DII gives 31 hours and DIII gives 28 hours (NCAA, 2022a). Due to this variation in demand across the three divisions, research explored athlete identity of student-athletes in relation to NCAA competition level. Research in this area is not ubiquitous. Some researchers concluded that no significant difference of athlete identity exists across NCAA divisions and DI student-athletes have similar athlete identity levels as DIII student-athletes (Richards & Aries, 1999; Sturm et al., 2011). However, most research supported the idea that the more time a student-athlete spends involved in their sport (such as a DI student-athlete), the stronger their athlete identity will be (Brewer & Petitpas, 2017; Harrison et al., 2011; Kidd et al, 2018; Yukhymenko, 2014).

Huml (2018) evaluated student-athletes at every division level by utilizing the AIMS (7-item scale) questionnaire and the results of the study suggested there is a similarity in athlete identity strength between DI and DII student-athletes (p=.752). However, DIII athletes as compared to DI athletes scored significantly lower (p=.039). Huml (2018) pointed to increased opportunities for career development, decreased commitment to sport for DIII athletes, and lack of professional opportunities as a potential explanation for these results. Additional research of athlete identity between NCAA competition level display similar findings (Elaskey, 2006; Harrison et al., 2011). Huang et al. (2015) focused on semi-professional athletes in Taiwan by examining athlete identity in comparison to career self-efficacy, career barriers, and college experiences. Athletes with a stronger athlete identity had fewer experiences (social or academic) outside of sport compared to those who identified with a weaker athlete identity.

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

Athletic Identity and Grade Level

Researchers investigated athlete identity of student-athletes at every grade level and found no significant difference between underclassmen (first-year and sophomore students) and upperclassmen (junior, senior, and graduate students). These results suggest athlete identity remains consistent across each year in school (Potuto & O'Hanlon, 2006; Sturm et al., 2011).

In conflicting research, college juniors and seniors reported a difference and a moderate level of athlete identity compared to first-year and sophomores (Huang et al., 2015; Paule-Koba & Farr, 2013). Lally and Kerr (2005) investigated this difference in athlete identity strengths utilizing in-depth interviews. Findings suggest juniors and seniors invest less time in their athletic role identities because they begin to consider professional occupations and perhaps may come to realize the unlikeliness of playing at the professional level. Student-athletes considering and anticipating the end to a collegiate career and other potential avenues can be important for a healthy transition out of sport (Menke & Germany, 2019).

The third possibility when it comes to athlete identity and grade level is the potential for athlete identity to increase as a student-athlete progresses through college. Instead of a student-athlete viewing the end of their athletic career as a threat, they may embrace their identity and view it as a protective factor. Researchers refer to this as identity promotion and believe athletes may report higher exclusivity of athlete identity towards the end of their collegiate careers as a way to cope or protect their identities (Alicke & Sedikides, 2009; Benson et al., 2015; Hogg, 2000). However, despite it being a protective factor, this coping mechanism may make the transition out of sport more difficult (Alfermann et al., 2004).

Athlete Identity, Youth Athletics, and Belief of Playing

Studies suggested athlete identity can peak and plateau for individuals along their continuum in participation of sport (Edison et al., 2021), and for many a peak tends to occur between the ages of 10 and 15. Therefore, research supports the idea athlete identity is formulated and relevant throughout adolescence (Houle et al., 2010). This is important for the present study as this is between the ages when elite competition begins to formulate in sports, particularly around ages 14 and 15. For example, the Olympic pipeline or "Futures" program through USA field hockey begins as early as age 14. Wendling et al. (2018) evaluated solely USA elite youth athletes focusing on what components contribute to the continual involvement in youth athletics. An important facilitator and deterrent from continual participation in youth athletics are college and professional aspirations and competence beliefs. Those with low competence beliefs often deter from participation in youth athletics. As mentioned earlier, those with a strong athlete identity have a strong sense of self, which likely means a higher level of competence (Babić et al., 2015; Brewer et al., 1993; Settles et al., 2002). This study highlights the possible negative impacts of having a weak athlete identity; however, one major concern is the belief in playing at a collegiate or professional level.

Many researchers explore the consequences of sport specialization. Youth athletes often receive encouragement to specialize in sports at a young age as a way to maximize sport

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

performance (Brenner, 2016; Jayanthi et al., 2013; Moore & Sullivan, 2022; Myer et al., 2015). Yet, there are many consequences to this including injury, burnout, mental illness, increased resentment towards sport, and more (Jayanthi et al., 2013; Moore & Sullivan, 2022). With the potential of playing a sport at an elite level, youth athletes are not only starting sports earlier, but they may be formulating their athlete identity around a single sport entirely. It raises question as to whether sport systems such as the Olympic development or "pipeline" track where youth athletes are expected to partake in intensive training may inadvertently be encouraging sport specialization.

Following the Olympic Pipeline

Like many other Olympic sports in the U.S., USA field hockey has an "Olympic pipeline" (USA Field Hockey, 2022). The Olympic "talent pipeline" or Olympic Development Program (ODP) is the development route that Olympic hopefuls follow. The Olympic Development Pathway Program or "Futures" is the model specifically developed and implemented by U.S.A. field hockey. Futures was established in 1990 and develops players in U-14, U-16, and U-19 age categories. This metaphorical "pipeline" starts in youth athletics for all Olympic sports (United States Olympic & Paralympic Committee [USOPC], 2022). The steps taken by athletes in this pipeline varies slightly from sport to sport, but it usually involves partaking in USA sanctioned tournaments or events where Olympic prospects perform and compete. Despite the varying steps from sport to sport, they all feed into one goal - to become an Olympic athlete. With 82% of Team USA's athletes competing at the collegiate level, collegiate sports are essential for shaping the next generation of Olympians (USOPC, 2022). Decisions about the health and well-being of collegiate athletes, including focus on athlete identity, is essential for the success of the USA on the biggest stage in sports.

Field hockey offers a unique perspective for the present study and is not often explored in research studies. The sport of field hockey exists at the youth, high school, collegiate, and Olympic levels. Field hockey lacks professional league playing opportunities. Between the years 2018-2019, regular participation in the sport of field hockey saw a 19.6% increase for children ages 6-12 and a 7.6% increase in ages 13-17 (USA Field Hockey, 2023). The number of youth field hockey players continue to grow around the country and USA field hockey and the NCAA led efforts to add field hockey programs to all NCAA divisions (NCAA, 2022b; USA Field Hockey, 2023).

The Present Study

The goal of this study was to understand athlete identity in a new light and within a context previously understudied. Many sports and in particular, Olympic sports often lack professional playing opportunities compared to revenue producing sports such as football and basketball. The Olympic development system starts in youth athletics and for many student-athletes, by the time they reach their collegiate years they usually know whether they will or will not play professionally. Most collegiate athletes will not play beyond college, but does the anticipation of the future and eventual termination of athletic involvement impact a student-athlete's athlete identity? Does the number of years playing the sport, year in school, and belief

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

of playing at the elite level impact athlete identity? The present study utilizes NCAA DI field hockey players as a way to explore these questions.

RQ: Are the number of years playing field hockey (IV), grade level/graduation year (IV), and the belief of playing at the next level (IV) significant predictors of athlete identity (DV)?

H1: Athletes with more years of playing experience, upperclassmen, and athletes with higher post-college playing belief will be a significant predictor for athlete identity.

Methods

Research Design

In order to answer the questions, the researchers employed an exploratory, cross-sectional, web-based survey design. From this survey, they collected information from current DI field hockey student-athletes. The researchers first selected the statistical test needed to determine the desired sample size and answer the research questions. The researchers completed a multiple regression to explore the research question. The researchers used a statistical power of 0.80 and a medium effect size of 0.35. The researchers used confidence intervals of 0.05. The desired sample size for this study was a minimum of 33 student-athletes (Faul et al., 2007). The final sample included 43 DI field hockey players and exceeded these established standards.

To obtain the desired number of responses from field hockey student-athletes, researchers used an availability sample. The first author sent study information to all DI field hockey coaches (n = 78) via email. The coaches email addresses were public email addresses found on universities' official athletic websites. To be eligible for this study, participants were current DI field hockey players at an NCAA member institution. Participants had to be 18 years of age or older and identify as female. Researchers excluded all other individuals from this study. The original email to DI field hockey coaches contained a copy of the informed consent and a link to the web-based survey. Two reminder emails bolstered the response rate. The researchers sent reminders every 30 days during the data collection period (May 2022 – September 2022). The final response rate was 5%. The study received approval from the primary researcher's university institutional review board.

Study Participants

The researchers collected demographic information about a student-athletes academic standing, race and/or ethnicity, age, financial aid, belief about becoming a professional athlete, whether their college or university was public or private, and length of time playing field hockey. The largest percentage of field hockey student-athletes were juniors (n = 18, 42%) and identified as white (n = 38, 88%). The mean age was 20 with a range of 18-23. The largest type of financial aid for field hockey student-athletes were athletic scholarships (n = 36, 84%), family contributions (n = 30, 70%), and academic scholarships (n = 24, 56%). The vast majority of participants reported they are somewhat to extremely unlikely to play field hockey at the professional level (n = 33, 78%). Exactly 50% of participants identified their college as private

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

and the other 50% as public. The average number of years playing field hockey was 12 with a range of 6-19 years. See Table 1 for a complete breakdown of demographics.

Table 1

Athlete Demographics (N = 43)

Demographic Characteristic	*N*	*%*
Class Standing		
Freshman	5	12%
Sophomore	5	12%
Junior	18	42%
Senior	11	25%
Graduate	4	9%
Race		
White	38	88%
Black	1	2%
Multi-racial	1	2%
Hispanic	2	5%
Latina	1	2%
Age (M)	20	
Largest Type of Financial Aid		
Athletic Scholarships	36	84%
Family Contribution	30	70%
Academic Scholarships	24	56%
Likelihood To Play At Professional Level		
Somewhat-Extremely Likely	33	78%
Neither Likely Nor Unlikely	4	8%
Somewhat Likely	5	12%
Extremely Likely	0	0%
Institution Type		
Public	21	50%
Private	21	50%
Years Played (M)	12	

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

Measures and Instruments

The researchers used the Athletic Identity Measurement Scale (AIMS; Brewer et al., 1993) for the web-based survey because of its high reliability and validity scores. The AIMS is an instrument that measures the degree to which an individual identified with their athletic role (Brewer et al., 1993). The subsections of the AIMS measure an athlete's self-identity, social identity, exclusivity, and negative affectivity. The AIMS has a high internal consistency (α = 0.56 to 0.89) and test-retest reliability (α = 0.79 to 0.81) (Brewer et al., 1993). Confirmatory factor analyses indicated an acceptable model of fit (CFI > 0.95) (Brewer et al., 1993). The AIMS has 10 questions and used a 7-point Likert scale with endpoints (1 = Strongly Disagree) to (7 = Strongly Agree) and contains a range of possible scores from 10-70.

Researchers used the AIMS because of its long-standing existence in peer-reviewed literature. Paule-Koba and Farr (2013), Huang et al. (2015), and Huml (2018) examined student-athletes across all three NCAA divisions utilizing the AIMS. These researchers made comparisons of athlete identity between DI and DIII utilizing AIMS (Sturm et al., 2011). Additional use of the AIMS for student-athletes explored gender identity and biological sex (Mignano et al., 2006; Murray, 2001). Studying solely DI student-athletes utilizing AIMS is also common in the existing peer-reviewed literature (Ballesteros et al., 2022; Melendez, 2009).

In addition to answering the AIMS, field hockey student-athletes answered the previously mentioned sport-related and demographic questions. The entire survey took approximately 10-15 minutes to complete in the Qualtrics™ system.

Data Analysis

Researchers entered collected data into SPSS for data analysis. Researchers used descriptive statistics to summarize major findings. Researchers used a multiple regression to examine the effect of multiple independent variables (years of playing field hockey, grade level/graduation year, and belief of playing at the next level) on the dependent variable (athlete identity). The use of a multiple regression estimates a model of multiple factors that best predict the criterion (athlete identity).

Results

Descriptive Statistics

The total mean score of the AIMS with the current sample was 53.99. Researchers broke down the 10-item AIMS scale into four subsections including social identity (items 3 and 7), self-identity (items 1 and 2), negative affectivity (items 8 and 10), and exclusivity (items 4, 5, and 9). Item 1 ("I consider myself an athlete") scored the highest in the current sample (M = 6.67, SD = .644). Item 8 (“I feel badly about myself when I do poorly sport”) scored the second highest in the current sample (M = 6.21, SD = .914). Item 9 (“Sports is the only important thing in my life”) scored the lowest in the sample (M = 2.86, SD = 1.552), while item 5 (“I spend more

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

time thinking about sport than anything else") scored the second lowest (M = 4.72, SD = 1.548) in the present study (see Table 2).

Table 2

AIMS Summary Scores

AIMS Questions	*M*	*SD*
1. I consider myself an athlete.	6.67	.644
2. I have many goals related to sport.	6.12	1.005
3. Most of my friends are athletes.	6.12	1.117
4. Sport is the most important part of my life.	4.98	1.520
5. I spend more time thinking about sport than anything else.	4.72	1.548
6. I need to participate in sport to feel good about myself.	4.98	1.655
7. Other people see me mainly as an athlete.	5.77	.922
8. I feel badly about myself when I do poorly in sport.	6.21	.914
9. Sports is the only important thing in my life.	2.86	1.552
10. I would be very depressed if I were injured and could not compete in sport.	5.56	1.501

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

*Total AIMS $M = 53.99$

Multiple Regression

Evaluation of Assumptions

The researchers ran a multiple regression to estimate a linear equation that best predicts levels of athletic identity based on three factors: current grade level, years playing field hockey, and the likelihood of playing professional field hockey. Before the conduction of the analysis, several descriptive statistics and graphs examined the test assumptions. The test assumptions included normality of distributions, any linear relationships between athletic identity and factors, homoscedasticity, normality of residuals, and multicollinearity.

Measures of skewness and kurtosis, histograms, and Q-Q plots show the shapes of distribution of variables approaches that of a normal curve. A linear relationship existed between athletic identity and all factors using Pearson's correlation coefficients and scatterplots. Inspections of both the normal probability plots of the residuals and the histogram indicate that errors were normally distributed. Moreover, examination of the scatterplot of predicted scores against the residuals confirms the assumption of homoscedasticity was met. Finally, the assessment of the correlation matrices and both tolerance values and VIF show no multicollinearity exists among the three factors.

Results of the Multiple Regression

The multiple regression analysis results revealed none of the three factors emerged as significant predictors of athletic identity ($F = 1.019$, $p > 0.05$). Overall, the model only explained 9% of the variance in athletic identity *(*$R = 0.273$).

Discussion

The researchers hypothesized athletes with more years of playing experience, grade level, and athletes with higher post-college playing belief will be significant predictors for athlete identity. Results from the study indicate that years of playing experience, grade level, and belief of playing professionally did not significantly impact athlete-identity. Results showed these variables only impact a small parentage (9%) of athlete identity.

Significant Findings

Researchers explored three independent variables and their relation to athlete identity. The first independent variable explored was the number of years of playing the sport of field hockey. Participants number of years played ranged from 6 years to 19 years of playing. Some may hold the assumption that the longer an athlete has played a specific sport, the more successful they will be in that sport (DiFori et al., 2017; Vaeyens et al., 2009). However, the present study indicates that may not be the case. Researchers in the present study found that the number of years playing field hockey was not a significant predictor of athlete identity. Former

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

research studies provide a potential explanation for these results. Research on youth athletes who did specialize in a particular sport indicated a higher athlete identity compared to youth athletes who did not specialize early (Christino et al., 2021). Although athletes who specialize in a particular sport most likely play it for a longer period of time than their peers, perhaps the more appropriate question for this study would be when and if the participants specialized in field hockey in their youth. Therefore, it may not necessarily be the amount of time or years playing field hockey, rather the intensity and sole dedication to the sport that impacts the strength of athlete identity.

The second independent variable explored was grade level and athlete identity. Researchers hypothesized upperclassman would have a stronger athlete identity. Varying research exists around this specific variable and athlete identity. The present study found grade level is not a significant predictor of athlete identity. Some research suggests that athlete identity likely remains consistent across each year in school (Sturm et al., 2011; Potuto & O'Hannon, 2006) and the current studied yielded similar findings. Another potential reason that athlete identity was not impacted by grade level could be due to athlete identity salience. Salience of an identity means a "commitment to the role and actions associated with an identity" (Meyer, 2019). Collegiate athletes must take on many roles but positive "situations or interactions can increase the salience of an identity" (Lu et al., 2018). An example of a "positive situation" that may increase salience would be an athlete receiving media attention for their accomplishments. University cultures that embrace and reinforce the importance of athletics can influence an athlete's identity salience as well (Lu et al., 2018). This identity reinforcement on campuses, teams, and more can, but not always, lead the student-athlete to internalize their athlete identity to point of being "engulfed" in this role and can be pragmatic (Kidd et al., 2018). This variable is essential in the formation of athlete identity and can vary wildly not just across NCAA competition level but DI NCAA competition itself. The athlete identity of participants in the present study may be influenced be experiencing identity reinforcement from external factors previously mentioned not grade level. Unlike previous research, the present study evaluated a sport not yet studied independently in this context and only included DI female-identifying field hockey players. Conflicting research found that juniors and seniors reported a lower athlete identity level compared to underclassmen (Huang et al., 2015; Paule-Koba & Farr, 2013; Lally & Kerr, 2005).

The final independent variable explored in the present study was the belief of playing professional field hockey. The belief of playing professional field hockey was not a significant predictor of athlete identity. However, it could still mean that a strong athlete identity was formulated, reinforced, and facilitated at a young age for the participants in the present study (Houele et al., 2010; Wendling et al., 2018). Researchers from the present study evaluated the belief of playing professional field hockey and did not investigate the participants involvement and experiences in youth field hockey, potential sport specialization, and beliefs of playing collegiate field hockey (Brenner, 2016; Moore & Sullivan, 2022; Myer et al., 2015). Future research should explore these factors. In addition, professional field hockey, is not usually viable as a career path by itself.

Given the lack of significant findings, this research challenges researchers to further investigate what factors formulate and regulate athlete identity. One possible factor for additional exploration is competition level. For example, the mean of the total AIMS score in the present

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

study (M = 53.99) suggests NCAA competition might impact athlete identity. Aligned with previous research, DI student-athletes (in this case field hockey players) do score significantly higher on the AIMS compared to DIII student-athletes (Elaskey, 2006; Harrison, et al., 2011; Huang et al., 2015; Huml, 2018). For example, Elaskey (2006) reported when comparing athlete identity between DI student-athletes and DIII student-athletes, DI student-athletes overall had a higher AIMS mean (M = 50.41) than DIII athletes (M = 47.73). Not only does the present study have a higher AIMS mean total compared to DIII student-athletes, but also a higher total compared to other DI student-athletes.

Although there is a plethora of foundational research regarding athlete identity, researchers must continue to investigate athlete identity to better understand the changing landscape. Within the last several years, the current landscape and demands changed. Rule changes, social media, and cultural influence are bound to impact athlete identity (Harris et al., 2021). For example, with the passing of Name, Image, and Likeness (NIL) in collegiate sports, student-athletes have more opportunities and freedom than ever (Berst, 2021). Policies like NIL passed by the NCAA are critical when exploring athlete identity but more immediate influences like athletic and team cultures at DI institutions could influence athlete identity. For example, what does it mean to be a field hockey player at different DI institutions across the United States? Exploration of this type of cultural influence could give insight as to how athlete identity may differ or be similar across institutions.

Practical Implications

Athlete identity is complex and what shapes it may not be the factors we expect. Athlete identity is a self-schema, it is a way athletes see themselves and with it comes a set of beliefs about oneself that is vital to the psychological and overall well-being of an athlete not just on the field but in everyday life as well (Babić et al., 2015; ; Brewer et al., 1993; Settles et al., 2002). This self-schema, can be influenced by athletic culture, environment of the institution and more. Therefore, the weight and importance of this identity deserves the attention and support at the micro-, mezzo-, and macro-levels.

At the micro-level, athletes should have access to mental health professionals and resources and healthy support system to guide them through this aspect of their identity at all levels of sport. For collegiate student-athletes, access to sports psychologists and sport social workers can be important for the success of a student-athlete. Professionals can help student-athletes navigate this aspect of their identity by helping student-athletes maintain a healthy level of athlete identity and mediate schemas that surround student-athletes within their particular environment and athletic culture. Professionals can assist them with transition in and out of sport because it is not uncommon for collegiate athletes to feel a sense of "loss" when they transition out of collegiate sports and into the next phase of their lives (Kidd et al., 2018). In addition, professionals can help athletes navigate burnout, performance, and more.

At the mezzo-levels, for collegiate sports the colleges and universities that the student-athletes attend is crucial for helping support their student-athletes. Athletic departments at colleges and universities have the power to provide education and support resources to help student-athletes understand their multiple roles. Organizations such as USA field hockey are vital for the future of field hockey. They have the capacity to create conversations with athletes

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

of all levels, coaches, parents, referees, and fans about the entire well-being of their athletes and educate about the consequences of both a very strong or weak athlete identity. Education about athlete identity is important as well as encouraging athletes to prioritize balance in their lives and understand how athlete identity fits into a larger part of their overall identity. Other variables such as achieving good grades, having a healthy social life, family relationships, access to non-field hockey opportunities and more can indicate balance in an athlete's life.

At the macro-levels, the NCAA is very influential. NCAA policies oversee not just collegiate sports but also inadvertently impact how youth sports and even professional sports operate. Policies that specifically address athlete identity as a subset of mental health and a continual push for mental health resources impact the future success of student-athletes. The NCAA continues to address some of the best practices for understanding and supporting student-athlete mental health (NCAA, 2020).

Study Limitations

Individuals should interpret results while considering limitations. As previously mentioned, the present study focused on a particular NCAA division, sport, and gender demographic. Due to the particularity of the sample, the overall sample size was smaller compared to other research conducted on athlete identity. The small sample size limited the extent of the multivariate statistical use. The sample used self-reported, quantitative data. Previous research determined athlete identity is complex and influenced by many variables. To gain a deeper understanding of athlete identity requires qualitative data (Newton et al., 2020).

Future Research

Future research should not only recruit a larger sample size but also consider studying other demographics within intercollegiate sports including Olympic and non-Olympic sports. Future research should also compare the AIMS scores reported by female student-athletes from past literature to determine if there is any change in the strength of athlete identity. Finally, future studies could utilize both the AIMS questionnaire and in-depth interviews with student-athletes and ask specific questions about youth athletic experiences, interpersonal relationships, social influence, cultural influence and more to construct an accurate and well-rounded representation of athlete identity that one would not otherwise determine in a survey alone. Through an intensive interview process, researchers can learn more about the formation of athlete identity and the "self-schemas" and how specific experiences and sociocultural influences either strengthen and reinforce identity or hinder or weaken athlete identity.

Conclusion

Factors such as the number of years playing a sport, grade level, and belief of playing professionally are not significant predictors of athlete identity. Athlete identity is more complex than imagined and researchers should continue to explore what shapes athlete identity. Understanding what athlete identity is and the consequences of it is important for athletes

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

spanning from youth to professional levels. Micro-, mezzo-, and macro-level work are essential for athletes to formulate and maintain a healthy athlete identity throughout their lives.

References

Alfermann, D., Stambulova, N., & Zemaityte, A. (2004). Reactions to sport career termination: A cross-national comparison of German, Lithuanian, and Russian athletes. *Psychology of Sport and Exercise, 5*, 61–75.

Alicke, M. D., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology, 20*, 1–48.

Babić, V., Šarac, J., Missoni, S., Sindik, J. (2015). Athletic engagement and athletic identity in top Croatian sprint runners. *Collegium Antropologicum, 39*(3)**,** 521–528.

Ballesteros, J. S., Capielo, C., Blom, L. C., Buckman, L., & Kroot, A. (2022). Block and tackle or interfere: Student-athletes' identities and well-being. *Journal for the Study of Sports and Athletes in Education, 16(2).* https://doi.org/10.1080/19357397.2022.2060704.

Benson, A. J., Surya, M., Evans, M. B., Martin, L. J, & Eys, M. A. (2015). Embracing athlete identity in the face of threat. *Sport, Exercise, and Performance Psychology, 4*(4), 303-315.

Berst, D. (2021, November 22). The landscape of college athletics is an ever-changing game. *Dimensional Innovations.* https://dimin.com/insights/the-landscape-of-college-athletics-is-an-ever-changing-game

Brenner, J. S. (2016). Sports specialization and intensive training in young athletes. *Council on Sports Medicine and Fitness, 138*(3), 1-9.

Brewer, B. W., & Petitpas, A. J. (2017). Athletic identity foreclosure. *Current Opinion in Psychology, 16*, 188-122.

Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International Journal of Sport Psychology, 24*(2), 237-254.

Christino, M. A., Coene, R. P., O'Neil, M., Daley, M., Williams, K. A., Ackerman, K. E., Kramer, D. E., & Stracciolini, A. (2021). Sport specialization, athlete identity, and coping strategies in young athletes. *Orthopaedic Journal of Sports Medicine, 14*(9), 2.

Cox, C. E., Ross-Stewart, L., & Foltz, B. D. (2017). Investigating the prevalence and risk factors of depression symptoms among NCAA Division I collegiate athletes. *Journal of Sports Science, 5*, 14-28.

DiFori, J. P., Brenner, J. S., Comstock, D., Côté, J., Güllich, A., Hainline, B., & Malina, R. (2017). Debunking early single sport specialisation and reshaping the youth sport experience: an NBA perspective. *British Journal of Sports Medicine, 51*(3), 142.

Edison, B. R., Christino, M. A., & Rizzone, K. H. (2021). Athletic identity in youth athletes: A systematic review of the literature. *International Journal of Environmental Research and Public Health, 18*(14), 7331.

Elasky, M. E. (2006). *Athletic identity and its relation to life satisfaction: Comparing division-I and division-III athletes and gender*. (Publication No. 1154543424). [Master's thesis, Miami University]. OhioLINK Electronic Theses and Dissertations Center. http://rave.ohiolink.edu/etdc/view?acc_num=miami1154543424.

Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexiable statistical

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.

power analysis program for the social, behavioral, and biomedical science. *Behavior Research Methods, 39*, 175-1919.

Harris, H., Brison, N. T., & Dixon, M. A. (2021). Hidden consequences: Examining the impact of NIL on athlete well-being. *Journal of Applied Sport Management, 13*(2), 29-35. https://doi.org/10.7290/jasm13r7xo

Harrison, L., Sailes, G., Rotich, W., & Bimper, A. Y. (2011). Living the dream or awakening from the nightmare: Race and athletic identity. *Race Ethnicity and Education, 14*(2), 91–103.

Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European Review of Social Psychology, 11*, 223–255.

Houle, J. L., Brewer, B. W., & Kluck, A. S. (2010). Developmental trends in athletic identity: A two-part retrospective study. *Journal of Sport Behavior, 33*(2), 146–159.

Huang, C. J., Chou, C. C., & Hung, T., M. (2015). College experiences and career barriers among semi-professional student-athletes: The influence of athletic identity and career self-efficacy. *The Career Development International, 21*(6), 571-586.

Huml, M. R. (2018). A factor structure examination of athletic identity related to NCAA divisional differences. *Journal of College Student Development, 59*(3), 376-381.

Jayanthi, N., Pinkham, C., Dugas, L., Patrick, B., & LaBella, C. (2013). Sports specialization in young athletes: Evidence-based recommendations. *Sports Health, 5*(3), 215-257.

Kidd, V. D., Southall, R. M., Nagel, M. S., Reynolds II, J. F., Scheyett, A. M., & Anderson, C. K. (2018). Profit-athletes; athletic role set and post-athletic transitions. *Journal of Intercollegiate Athletics, 11*, 115-141.

Lally, P. S., & Kerr, G. (2005). The career planning, athletic identity, and student role identity of intercollegiate student athletes. *Research Quarterly for Exercise and Sport, 76*(3), 275-285.

Lu, L. D., Heinze, K. L., & Soderstrom, S. (2018). Playing multiple positions: Student-athlete identity salience and conflict. *Journal of Intercollegiate Sport, 11*, 214-241. https://doi.org/10.1123/jis.2018-0034

Melendez, M. (2009). Psychosocial influences on college adjustment in division I student-athletes: The role of athletic identity. *Journal of College Student Retention, 11*(3), 345-361.

Menke, D. L., & Germany, M. L. (2019). Reconstructing athletic identity: College athletes and sport retirement. *Journal of Loss and Trauma, 24*(1), 17-30. https://doi.org/10.1080/15325024.2018.1522475

Meyer, J. (2019). *Identity matters: An exploratory, mixed methods case study to examine the influence of athlete and student identity salience on the giving patterns of student-athletes at a highly selective midewestern private university.* (Publication No. 13808577). [Master's thesis, University of Kansas]. ProQuest Dissertations Publishing. https://www.proquest.com/dissertations-theses/identity-matters-exploratory-mixed-methods-case/docview/2272213326/se-2

Mignano, A., C., Brewer, B., W., Winter, C., & Van Raalte, J., L. (2006). Athletic identity and student involvement of female athletes at NCAA division III women's and coeducational colleges. *Journal of College Student Development, 47*(4), 457-464.

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

Moore, M. A. & Sullivan, M. (2022). The impact of sport specialisationn on the lived experience and development of collegiate softball players. *Qualitative Research in Sport, Exercise and Health, 14*(1), 151-162.

Moore, M. A., Ballesteros, J., Hansen, C., J., (2018). The role of social work values in promoting the functioning and well-being of athletes. *Journal of Social Work Values and Ethics, 15*(2), 48-61.

Murray, A. E. (2001). A comparison of athletic identity, gender role orientation, and drinking behavior in women from the United States and Australia. *University of Wisconsin-La Crosse Journal of Undergraduate Research, 4,* 71–79.

Myer, G. D., Jayanthi, N., Difiori, J. P., Faigenbaum, A. D., Kiefer, A. W., Logerstedt, D., & Micheli, L. J. (2015). Sport specialization, part I: Does early sports specialization increase negative outcomes and reduce the opportunity for success in young athletes? *Sports Health, 7*(5), 437-442.

National Collegiate Athletic Association. (2022). *Guide for the College-Bound Student-Athlete.* http://fs.ncaa.org/Docs/eligibility_center/Student_Resources/CBSA.pdf

National Collegiate Athletic Association. (2022b). *Division I field hockey*. https://www.ncaa.org/sports/2013/11/6/division-i-field-hockey.aspx.

National Collegiate Athletic Association. (2020). Interassociation concensus document: Mental health best practices understanding and supporting student-athlete mental wellness. *NCAA Sport Science Institute*, 1-36.

Newton, J., Gill, D. L., & Reifsteck, E. (2020). Athletic identity: Complexity of the "iceberg". *Journal of Athlete Development and Experience, 2*(2), 69-82. https://doi.org/10.25035/jade.02.02.01.

Paule-Koba, A. L., & Farr, N. E. (2013). Examining the experiences of former DI and DIII nonrevenue athletes. *Journal of Issues in Intercollegiate Athletics*, *6*, 194-215.

Potuto, J. R., & O'Hanlon, J. (2007), National study of student-athletes regarding their experiences as college students. *College Student Journal, 41*(4), 947-966.

Richards, S., & Aries, E. (1999). The division III student-athlete: Academic performance, campus involvement and growth. *Journal of College Student Development, 40*(3), 211-218.

Settles, I. H., Sellers, R. M., & Damas, A., Jr. (2002). One role or two? The function of psychological separation in role conflict. *Journal of Applied Psychology, 87,* 574- 582.

Storch, E. A., Storch, J. B., Killiany, E. M., & Roberti, J. W. (2005). Self-reported psychopathology in athletes: A comparison of intercollegiate student-athletes and non-athletes. *Journal of Sport Behavior, 28*(1), 86-97.

Sturm, J. E., Feltz, D. L., & Gilson, T. A. (2011). A comparison of athlete and student identity for Division I and Division III athletes. *Journal of Sport Behavior, 34*(3), 295–306.

USA Field Hockey. (2023, April 13). *Moving NCAA field hockey forward*. https://www.teamusa.org/USA-Field-Hockey/Features/2023/April/13/Moving-NCAA-Field-Hockey-Forward.

USA Field Hockey. (2022). *About USA field hockey*. https://www.teamusa.org/usa-field-hockey/about.

United States Olympic & Paralympic Committee. (2022). *Sport advancement talent pipeline*. https://2021impactreport.teamusa.org/sport-advancement/talent-pipeline.html#gsc.tab=0

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

Vaeyens, R., Guellich, A., & Philippaerts, E. (2009). Talent identification and promotion programmes or Olympic athletes. *Journal of Sports Scienecs, 27*(13), 1367-1380.

Wendling, E., Flaherty, M., Sagas, M., & Kaplanidou, K. (2018). Youth athletes' sustained involvement in elite sport: An exploratory examination of elements affecting their athletic participation. *International Journal of Sports Science & Coaching, 13*(5), 658-673.

Yang, J., Peek-Asa, C., Corlette, J. D., Cheng, G., Foster, D. T., & Albright, J. (2007). Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes. *Clinical Journal of Sports Medicine, 17*(6), 481-487.

Yukhymenko, M. (2014). Students and athletes? Development of the Academic and Athletic Identity Scale (AAIS). *Sport, Exercise, and Performance Psychology, 3*(2), 89-101.

© 2023 Caravaglia, Reynolds, & Moore. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.65-80.

Sport Social Work Journal

The Future of Mental Health in Sport: CBT and Athletes

Cali Werner
Baylor University

Danielle Parrish
Baylor University

Elizabeth McIngvale
Baylor University

Collegiate and elite athletes are at higher risk of developing anxiety disorders, depressive disorders, and substance abuse disorders. These competitive athletes often struggle with unique stressors such as balancing social life with sport and mental health stigma due to expectation of mental toughness. Research suggests these vulnerabilities amongst competitive athletes may make them hesitant to seek mental health resources. Cognitive-Behavioral Therapy (CBT) is an evidence-based approach that promotes skill development that reduces symptoms of anxiety, depression, substance use and other mental health struggles. CBT strategies may also enhance athletic performance. Combined, CBT skills for athletes may have promise as a primary prevention strategy for mental health symptoms, a secondary prevention strategy by offering referral for more serious symptoms and may earn buy in from coaches and athletes due to the potential for enhancing athletic performance. This paper provides empirical and theoretical rationale and framework for such an approach.

Keywords: Sport psychology, mental health, athletes, CBT, stigma

It is well documented that participation in sport can yield many positive physical, behavioral, and mental health outcomes (Eime et al., 2013; Malm, et al., 2019). Athletic participation has been associated with increased academic success, decreased risk of dropping out of school, and fewer mental health risks (Bartko & Eccles, 2003; Cordero et al., 2014; Lumpkin & Favor, 2013; McNeal, 1995; Sitkowski, 2008; Wretman, 2017). However, research also suggests that athletic participation may contribute to negative sociological and psychological outcomes for some youth and young adults (Moore, 2016). The mixed literature documenting both protective and risk factors associated with collegiate and elite athletic competition, as well as emerging public awareness and literature documenting the mental health risks associated with high levels of athletic performance (e.g., Gústafsdóttir, 2021; Küttel &

Larsen, 2020; McLoughlin et al., 2021), suggest an urgency to better understand and prevent mental health risks within this population. Collegiate and elite athletes – who have engaged more seriously and at an advanced level in sport - face multiple, unique risk and contextual factors that may increase vulnerability to mental health symptoms. Improved understanding of such risk and contextual factors for collegiate and elite athletes is warranted to promote mental wellbeing and better inform the provision of primary and secondary prevention strategies in sport (Kisling & Das, 2021).

This manuscript reviews current literature on mental health among elite athletes and offers ideas for the prevention of mental health symptoms, improved identification and referral for mental health problems, and an integrated prevention model that could also enhance athletic performance. Such a model would perhaps reduce stigma and increase acceptability of such a prevention approach among athletes, coaches, and other athletic staff.

Collegiate Athletes

Collegiate athletes face pressures in sport that may negatively impact their general wellbeing, including the commercialization of college athletics, academic demands on top of the pressures of practice and competition, longer playing seasons and pressure from coaches to succeed in competition (Brown et al., 2014; Gill, 2008). Collegiate athletes that participate in higher revenue sports tend to have lower grade point averages due to the increased social pressures, and expectations to dedicate time for success in sport (James, 2010). On average, a Division I Collegiate athlete dedicates 40 hours a week to their sport, not including time spent in rehabilitation for injuries or injury prevention, leaving limited time for academics (Wolverton, 2008). As success or time spent in collegiate sport increases, research has shown academic performance decreases (Chung, 2013). Higher athletic identity over academic identity may also contribute to lower grades (Paskus, 2012). Therefore, the demands and challenges balancing academic and athletic goals often poses a stressor that can impact the wellbeing of collegiate athletes.

Elite Athletes

While elite athletes have been defined in disparate ways Rankinen et al., 2000; Williams et al, 2017; Swann et al., 2015), for purposes of this paper, elite athletes are individuals competitively selected to play on professional teams, compete internationally in high level competition (e.g., Olympics), paid for participation in sport, or who receive sponsorship or other supports, such as paid coaches, for training. Elite athletes struggle with stressors such as pressure to succeed and obtain funding/salary based off performance, societal demands that come with being celebrated, and upholding an invincible reputation (Gordin & Henschen, 2012; Howells & Lucassen, 2018). According to Hammond and colleagues (2013), the higher the athletic status of an elite athlete, the more of these pressures they experience. When the stakes are higher for winning, more intense pressure to succeed follows (Hammond et al., 2013). A 6-month perspective study consisting of 257 young elite athletes reported about 12% of the athletes struggled with symptoms of burnout and 9% reported depressive symptoms (Gerber et al., 2018). Perfectionism, low levels of social support and autonomy, elevated trait anxiety, unrealistic goal

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

setting, negative environments, overidentifying with athletic identity, and lack of adequate coping skills are common characteristics that contribute to burnout in elite athletes (Gustafsson et al., 2017a).

When analyzing the hierarchy of competitive sport, many believe that Olympic athletes are the best athletic performers in the world. Therefore, the stressors and pressures Olympic athletes face may be unlike any other, especially given the unique celebrity-like status and opportunity and pressure to represent their country that this affords them. Olympic athletes have been identified as struggling with post-Olympic blues (POB) after returning home from competition (Gústafsdóttir, 2021; Howells & Lucassen, 2018). Athletes describe experiencing these blues as feelings of isolation, emptiness, loneliness, and a loss of motivation following years of focused effort on such the specific athletic goal of Olympic success (Gústafsdóttir, 2021). In essence, "all of the eggs have been put in one basket" for so long, that regardless of outcome, it is unclear what comes next. A study conducted leading up to the 2016 Summer Olympic Games found that during last month leading up to the Olympics, all athletes reported experiencing a form of illness (e.g., upper respiratory), reflecting the common stress of this event (Drew et al., 2018). Findings also indicated that the main factor contributing to mental illness included anxiety and poor states of stress-recovery on the body throughout the training and preparation process. This study reflects the significant amount of dedication and stress put on the body during the buildup to the Olympics (Drew et al., 2018). One can imagine that when an athlete dedicates a significant amount of their life preparing for one event that is over within a day, the lifestyle change that takes place post-competition may be a sudden and drastic adjustment to adapt to.

The POB are widely recognized and normalized as a part of Olympic culture, leaving athletes to feel as though the depressive symptoms they go through are part of the process and perhaps not actually a clinical issue that requires support or treatment (Howells & Lucassen, 2018). Although most studies on the POB are qualitative, a continued theme amongst the athletes' experiencing POB includes feeling unprepared for celebrity-like attention and lack mental health support after the Olympic Games are over (Bradshaw et al., 2021; Drew et al., 2018; Howells & Lucassen, 2018; Samuel et al., 2016).

Mental Health Concerns

The National Collegiate Athletic Association (NCAA) has identified the number one health related concern to be mental health struggles, specifically depression, suicide, eating disorders, and substance abuse among collegiate athletes (Burnsed & NCAA, 2013). A cross-sectional study conducted with 465 NCAA collegiate athletes identified nearly a quarter (23.7%) of athletes as having clinically significant levels of depressive symptoms (Wolanin et al., 2016). A systematic review of competitive athletes' mental health identified the prevalence of athletes struggling with eating disorders ranged from 10-25% (Reardon et al., 2019), whereas the pooled lifetime prevalence of an eating disorder in the general population is about 1% (Qian et al., 2021). Other studies indicate collegiate athletes are more likely than the general population to engage in risk taking behaviors such as substance abuse, specifically marijuana usage and binge drinking, not wearing seat belts, or engaging in unprotected sexual activity (Brisola-Santos et al., 2016; Buckman et al., 2013; Nattiv et al., 1997; Zhou & Heim, 2014).

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Another alarming more recent statistic is lifetime prevalence rate of 51.7% of mental illness among elite athletes (Åkesdotter et al., 2020), compared with the lifetime mental illness prevalence rate of 20.6% in within the general population in 2019 (Substance Abuse and Mental Health Service Administration [SAMHSA], 2020). While 26% of female elites and 10.2% of male elites met diagnostic criteria for anxiety and/or depression, only 11% of the general population met the same diagnostic criteria (Åkesdotter et al., 2020; Terlizzi & Schiller, 2019). Research suggests the most prevalent mental health diagnoses for both collegiate and elite athletes are depression, anxiety, substance abuse and eating disorders (Dean & Rowan, 2014; Gouttebarge et al., 2013; Ryan et al., 2018).

Depression and Anxiety

Mental illness is not uncommon amongst collegiate athletes. Yang and colleagues (2007) found 21% of 257 collegiate student athletes reported depression, while Weigand and colleagues (2013) noted 16.77% of 117 current student athletes reported depression (Weigand et al., 2013). An associate professor at University of Michigan, Daniel Eisenberg, reported that 33% of students at University of Michigan reported struggling with depression, anxiety, or other mental health symptoms. Of the participants, 30% were seeking help and support. However, only 10% of collegiate athletes struggling with mental health at the university reported help-seeking behaviors (Velasco, 2017). Another study conducted by Gulliver and colleagues (2015) consisting of 224 Australian elite athletes found one out of approximately every two elite athletes (46%) experienced mental health struggles. Additionally, the rate of depression for elite athletes was high at 27.2%, while social anxiety was 14.7%, and generalized anxiety 7.1% (Gulliver, 2015). With an added injury, athletes previously struggling with depression or generalized anxiety had an even greater vulnerability to depressive and anxiety related symptoms (Gulliver et al., 2015).

Eating Disorders

Eating disorders are a prominent concern in sport with nearly a quarter (22.8%) of elite athletes in a recent study reporting endorsing a current or previous eating disorder (Gulliver et al., 2015). Sport subcultures may encourage unhealthy measures to look, weigh, or a belief that weight influences performance that may then lead to onset of food restricting, calorie counting, binging and purging that may ultimately lead to eating disorders (Defaciani, 2016; Thompson & Sherman, 2014). The prevalence of eating disorders has been documented to be higher in elite athletes than that of the general population (Martinsen & Sundgot-Borgen, 2013; Sundgot-Borgen & Torstveit, 2004). An overview of eating disorder prevalence amongst athletes reported female athletes as more likely to struggle with an eating disorder than male athletes, as the prevalence rate of an eating disorder for male athletes ranges from 0-19% whereas female athletes range from 6-45% (Bratland-Sanda & Sundgot-Borgen, 2013).

Substance Abuse

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Substance abuse is also a concern in sport (Reardon & Creado, 2014). One study found recreational drug use and other risky behaviors were much higher among collegiate athletes than their non-athletic counterparts (Nattiv et al., 1997). The most recent report from the NCAA (2018) found marijuana usage in Division I athletes was 18%, and 33% among Division III athletes. In the same time period, data from the U.S. Youth Risk Behavior Surveillance data found 20.2% of youth and young adults aged 10-24 had used marijuana (CDC, 2006). While these statistics are not directly comparable given the age range, the high rate of use among collegiate athletes is concerning, as such high rates of substance use may impact athletic and academic functioning, as well as cognitive development (NIDA, 2021).

One systematic review explored the relationship between sports participation and alcohol and drug use to explore whether such participation had a protective effect on substance use. This systematic review of 17 longitudinal studies found a positive relationship between participation in athletics and increased alcohol use in 14 out of 17 studies, although the relationship between illicit drug use and marijuana use was less clear due to methodological issues (Kwan et al., 2014). Overall, the literature did seem to suggest that participation in sport could have the greatest protective effect when it came to illicit substance use first, marijuana use next, followed by alcohol (Kwan et al., 2014).

Treatment Barriers

Mental health stigma is higher among collegiate and elite athletes than that of the general population, which may discourage athletes from seeking mental health care when they may need it (Bauman, 2016; Kaier et al., 2015). Secondary prevention strategies of detecting signs of mental illness are needed to connect athletes to evidence-based mental health care. The paucity of recognition, prevention, and treatment of mental illness in sport may be a contributing factor to mental health vulnerabilities of athletes. According to Reardon and Factor (2010), the cultural dynamic and reputation of competitive athletes is that they are mentally and physically tough. This culture may create an additional challenge in accurately identifying the significance of mental illness within sport due to athlete underreporting due to this stigma (Rao & Hong, 2020). Prior research indicates that athletes and coaches tend to minimize the significance of mental illness due to a belief that athletes must be mentally tough, further implying the negative stereotype that mental illness signifies weakness (Bauman, 2016; Carr & Davidson, 2015).

Collegiate athletes report significantly higher levels of stigma around the perceived view of mental illness than their non-athlete peers (Kaier et al., 2015). There are a variety of factors that contribute to athletes' hesitancy toward seeking mental health services including lack of education on mental illness, fear of consequences if mental illness is found out (e.g., losing spot on a team), and limited time to seek or receive services (Castaldelli-Maia et al., 2019; Gulliver et al., 2012; Reardon & Factor, 2010). Demystifying, destigmatizing, and normalizing mental health concerns, as well as emphasizing the importance of appropriate mental health support for athletes may help to reduce the number of athletes suffering with mental illness in silence.

Cox (2015) evaluated health seeking behaviors of Division I collegiate athletes and found that over a quarter (25.7%) did not know where to seek mental health support and 44.5% of the athletes had not received any mental health education from the school athletic department. Help-seeking behaviors for elite athletes has not been evaluated like that of collegiate athletes. It

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

appears that there are far more studies on mental health for collegiate athletes than that of elite level athletes. However, older studies have indicated that elite athletes are less likely to seek mental health services than that of the general population (Carmen et al., 1968; Pierce, 1969). Athletes that continue to avoid evidence-based care may instead engage in unhealthy coping habits such as utilizing substances or suppressing any uncomfortable thoughts and emotions that can lead to mental health vulnerability.

Prevention, Treatment and Sports Enhancement Using Cognitive Behavioral Therapy

Cognitive-Behavioral Therapy (CBT) is a goal oriented and structured form of therapy that has been tested and proven effective with a range of mental health conditions, including depression, anxiety, eating disorders and obsessive-compulsive disorder (OCD) (Butler et al., 2006; Lewin et al., 2014). CBT is also an effective approach for treating eating disorders and substance abuse (Linardon et al., 2017; McHugh et al., 2010). As previously mentioned, the most prevalent mental health struggles for elite and collegiate athletes are depression, anxiety, substance abuse and eating disorders (Dean & Rowan, 2014; Gouttebarge et al., 2013; Hayes & Levin, 2012; Ryan et al., 2018; Kass et al., 2013). Therefore, CBT may be a particularly valuable treatment modality for the collegiate and elite athlete population.

CBT can enhance individuals' positive functioning and improve self-confidence (Beck, 2011; Chaves et al., 2017; McKay & Fanning, 2016). Depending on an athlete's ability to cope, a positive performance outcome may improve self-confidence whereas as a negative performance may reinforce or lower negative self-worth. Athletes with low self-confidence are more likely to struggle with anxiety and depression, which negatively impacts performance and overall wellbeing (Samadzadeh & Shahbazzadegan, 2011; Rahimnia et al., 2013). CBT strategies can help athletes develop resilience and the ability to cope with life stressors. If an athlete's mental wellbeing is not a concern, one may argue that learning effective CBT strategies may be utilized as a preventative measure for life stressors that athletes may face in the future, while also building resilience and confidence that may positively impact sport performance (Forsdyke et al., 2016; Joyce et al., 2018; McKay & Fanning, 2016). Low confidence has been shown to be associated with poor performance in sport (Hays et al., 2009).

CBT strategies are also useful for decreasing negative thinking patterns and reframing distorted thoughts, which has also shown to have benefit for elite athletes with perfectionism and burnout as well (Beck, 2011; Gustafsson et al., 2017a; Gustafsson et al., 2017b). Anxious athletes may focus on negative thoughts that lead them to become overwhelmed with high level competition due to perfectionism, or their own or others' (e.g., fans) unrealistic expectations. CBT helps individuals recognize and reframe distorted thinking patterns that may also improve athletic performance (Beck, 2011; Chand et al., 2021). Moreover, the suppression or avoidance of unwanted thoughts and emotions – which may be happening with many high-level athletes – may cause an adverse effect by enhancing negative thoughts, fear, and anxiety (Clark et al., 1991; Purdon, 1999; Wegner, 1994).

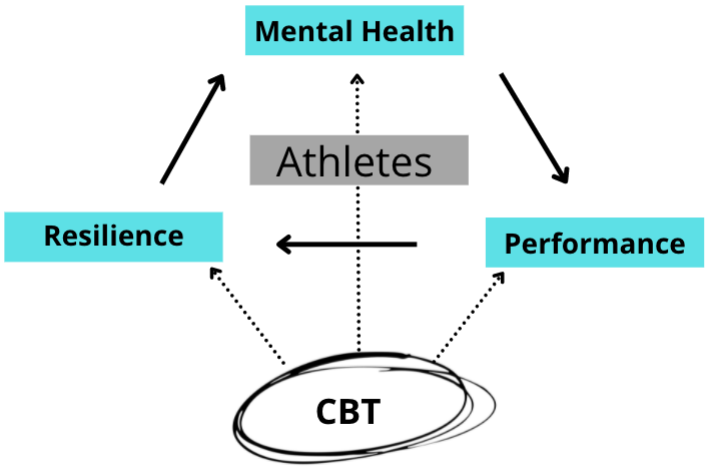
With the existing gap in athletes receiving mental health care, the implementation of CBT strategies may help prevent the onset of a mental illness or be a gateway to more specialized mental health care (Gill, 2008; Gustafsson et al., 2017a; Purcell et al., 2019). In an ideal world, competitive athletes should receive appropriately customized evidence-based care for their

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

specific presenting concerns. However, the mental health barriers athletes face often keep them suffering in silence (Castaldelli-Maia et al., 2019; Gulliver et al., 2012; Reardon & Factor, 2010). While further educating athletes and athlete support staff on mental illness and appropriate resources are important, what if CBT skills were more broadly incorporated into athletics to enhance adaptive thinking and behavior, with the goal of preventing or reducing the severity of mental health problems as a primary prevention strategy among all competitive athletics? An argument in favor of such an approach could speak to the broader benefits that could exist for all athletes given the documented impact of CBT skills on athletic performance (Meyers et al., (1996); Neil et al., 2013) and improved life coping skills (Horwitz et al., 2018; Hutnik et al., 2016). Moreover, if coaches and athlete support staff were aware of the potential for confidence and performance improvements for their athletes, they may buy into CBT preventative strategies as an important component to implement in athlete's training routines.

Resiliency is a characteristic of athletes proven to contribute to lower risks of depression, anxiety and OCD tendencies (Hammond et al., 2013; Proctor & Boan-Lenzo, 2010). A study explaining the impact that resiliency has on aging, discusses the components of resilience as *"the ability to frame difficult life events in positive terms, accept what cannot be changed, manage worry and anxiety effectively, develop psychological flexibility in the face of change and continually seek opportunities for growth and development"* (Hutnik et al., 2016, pp. 110-118). A systematic review of 548 articles reported CBT-based interventions have a positive effect on resilience (Joyce et al., 2018). Figure 1 describes how CBT strategies may positively impact resilience and athletic performance in sport, while also depicting how performance, resilience and mental health play a significant role in the cycle of an athlete's life. With an increase in resilience, athletes may benefit from an overall increase in self-efficacy and confidence (Bandura, 1977; Joyce et al., 2018; Lopez-Garrido, 2023).

Figure 1. ***Cognitive Behavioral Therapy for Athletes***



Future work addressing mental health concerns using CBT could focus on translating CBT skills to be efficiently delivered in group settings to all athletes, with focused follow up for

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

individual athletes who may need more individualized treatment support. This "two for one" approach could support athletes in the development of positive, realistic thinking patterns that also help with sport performance, in addition to benefiting athletes that may be secretly or unknowingly struggling with mental illness. For those struggling with mental illness, the incorporation of CBT and perhaps other psychoeducational resources to support referral may be a beneficial gateway approach to point athletes towards more directive evidence-based mental health care. It is well established that CBT helps to promote a positive sense of self, and therefore CBT strategies may benefit athletes' wellbeing in addition to sport performance, and perhaps prevent an onset of future mental illness (Beck, 2011; Horwitz et al., 2018).

Future Directions

Although we may be moving towards a world that is more accepting of mental health concerns, primary and secondary prevention is needed for the athletes now. Prior research suggests collegiate and elite athletes struggle most commonly with disorders that CBT is used to effectively treat. We also know that CBT strategies help to increase sense of confidence and positive reframing that can be helpful for sport (Beck, 2011; Chaves et al., 2017; McKay & Fanning, 2016). Helping athletes learn these strategies and how to incorporate them into their sport may help their overall sport performance in addition to increasing positive wellbeing and preventing mental health risks. It is important to note that when an athlete is struggling with anxiety, depression, substance abuse, or an eating disorder, CBT alone may not be the most efficacious approach to meet the athlete's mental health needs. There are research-supported interventions that could be connected to athletes. For example, an athlete struggling with emotion regulation or anger management may benefit from Dialectical Behavioral Therapy (DBT) (Frazier & Vela, 2014), whereas athletes with eating disorders may need more specialized care that incorporates exposure and family-based therapy techniques (Kosmerly et al., 2015; Reilly et al., 2017). Future research should develop and test the effectiveness of team based mental health primary and secondary prevention models on both mental health and performance outcomes.

Finally, if athlete support staff can recognize mental illness within sport, they can also encourage athletes to seek out specific, tailored evidence-based care. This care may incorporate evidence-based mental health applications or Telehealth resources that are convenient, more private and that reduce the stigma of help seeking on campus or in public. The incorporation of CBT, may however, help to catch negative thinking patterns early, thereby more broadly preventing mental illness, and even potentially boosting performance among athletes. Although CBT is not a "one size fits all" approach, it may be a starting point to helping athletes reduce mental health risks, and if needed, begin the therapeutic process of obtaining specialized care instead of suffering in silence.

References

Åkesdotter, C., Kenttä, G., Eloranta, S., & Franck, J. (2020). The prevalence of mental health problems in elite athletes. *Journal of science and medicine in sport*, *23*(4), 329-335.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Bandura, A. (1977). Self-efficacy theory: Toward a unifying of behavioral change. *Psychological review*, *84*.

Bartko, W. T., & Eccles, J. S. (2003). Adolescent participation in structured and unstructured activities: A person-oriented analysis. *Journal of youth and adolescence*, *32*(4), 233-241.

Beck, J. S. (2011). Cognitive behavioral therapy: Basics and beyond. New York, NY: Guilford Press.

Bradshaw, H., Howells, K., & Lucassen, M. (2021). Abandoned to manage the post-Olympic blues: Olympians reflect on their experiences and the need for a change. *Qualitative Research in Sport, Exercise and Health*, 1-18.

Bratland-Sanda, S., & Sundgot-Borgen, J. (2013). Eating disorders in athletes: overview of prevalence, risk factors and recommendations for prevention and treatment. *European journal of sport science*, *13*(5), 499-508.

Brisola-Santos, M. B., Gallinaro, J. G. D. M. E., Gil, F., Sampaio-Junior, B., Marin, M. C. D., de Andrade, A. G., ... & Castaldelli-Maia, J. M. (2016). Prevalence and correlates of cannabis use among athletes—a systematic review. *The American journal on addictions*, *25*(7), 518-528.

Brown, G. T., Hainline, B., Kroshus, E., & Wilfert, M. (2014). Mind, body and sport: Understanding and supporting student-athlete mental wellness. *Indianapolis, IN: National Collegiate Athletic Association*.

Buckman, J. F., Farris, S. G., & Yusko, D. A. (2013). A national study of substance use behaviors among NCAA male athletes who use banned performance enhancing substances. *Drug and Alcohol Dependence*, *131*(1-2), 50-55.

Burnsed, B., & National Collegiate Athletic Association. (2013). NCAA mental health task force holds first meeting. *NCAA 2013*.

Butler, A. C., Chapman, J. E., Forman, E. M., & Beck, A. T. (2006). The empirical status of cognitive-behavioral therapy: a review of meta-analyses. *Clinical psychology review*, *26*(1), 17-31.

Carmen, L. R., Zerman, J. L., & Blaine Jr, G. B. (1968). Use of the Harvard Psychiatric Service by athletes and non-athletes. *Mental Hygiene*, *52*(1), 134-137.

Carr, C., & Davidson, J. (2015). *Mind, body, and sport: The psychologist perspective.* Retrieved from http://www.ncaa.org/health-and-safety/sport-science-institute/mind-body-and-sport-psychologist-perspective.

Castaldelli-Maia, J. M., e Gallinaro, J. G. D. M., Falcão, R. S., Gouttebarge, V., Hitchcock, M. E., Hainline, B., Reardon, C. L., & Stull, T. (2019). Mental health symptoms and disorders in elite athletes: a systematic review on cultural influencers and barriers to athletes seeking treatment. *British Journal of Sports Medicine*, *53*(11), 707-721.

Chand, S. P., Kuckel, D. P., & Huecker, M. R. (2021). Cognitive behavior therapy. *StatPearls [Internet]*.

Chung (2013). The Dynamic Advertising Effect of Collegiate Athletics. *Marketing Science (Providence, R.I.)*, *32*(5), 679–698. https://doi.org/10.1287/mksc.2013.0795

Clark, D. M., Ball, S., & Pape, K. (1991). An experimental investigation of thought suppression. *Behaviour Research and Therapy*, 31,207-210.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Cordero, A., Masiá, M. D., & Galve, E. (2014). Physical exercise and health. *Revista Española de Cardiología (English Edition)*, *67*(9), 748-753.

Cox, C. (2015). *Investigating the prevalence and risk-factors of depression symptoms among NCAA Division I collegiate athletes* (Doctoral dissertation, Southern Illinois University at Edwardsville).

Dean, C., & Rowan, D. (2014). The Social Worker's Role in Serving Vulnerable Athletes. *Journal of Social Work Practice*, *28*(2), 219–227.

Drew, M., Vlahovich, N., Hughes, D., Appaneal, R., Burke, L. M., Lundy, B., Rogers, M., Toomey, M., Watts, D., Lovell, G., Praet, S., Halson, S., Colbey, C., Manzanero, S., Welvaert, M., West, N. P., Pyne, D. B., & Waddington, G. (2018). Prevalence of illness, poor mental health and sleep quality and low energy availability prior to the 2016 Summer Olympic Games. *British journal of sports medicine*, *52*(1), 47-53.

Eime, R.M., Young, J.A., Harvey, J.T. *et al.* A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *Int J Behav Nutr Phys Act***10,** 98 (2013). https://doi.org/10.1186/1479-5868-10-98.

Forsdyke, D., Smith, A., Jones, M., & Gledhill, A. (2016). Psychosocial factors associated with outcomes of sports injury rehabilitation in competitive athletes: a mixed studies systematic review. *British journal of sports medicine*, *50*(9), 537-544.

Frazier, S. N., & Vela, J. (2014). Dialectical behavior therapy for the treatment of anger and aggressive behavior: A review. *Aggression and Violent Behavior*, *19*(2), 156-163.

Gerber, M., Best, S., Meerstetter, F., Walter, M., Ludyga, S., Brand, S., ... & Gustafsson, H. (2018). Effects of stress and mental toughness on burnout and depressive symptoms: A prospective study with young elite athletes. *Journal of Science and Medicine in Sport*, *21*(12), 1200-1205.

Gill, E. L. Jr. (2008). Mental health in college athletics: It's time for social work to get in the game. *Social Work*, *53*(1), 85–88.

Gordin, R. D., & Henschen, K. P. (2012). Reflections on the psychological preparation of the USA ski and snowboard team for the Vancouver 2010 Olympic Games. *Journal of Sport Psychology in Action, 3*(2), 88–97. http://dx.doi.org/10.1080/21520704.2012.683091.

Gouttebarge, V., Castaldelli-Maia, J. M., Gorczynski, P., Hainline, B., Hitchcock, M. E., Kerkhoffs, G. M., Rice, S., & Reardon, C. L. (2019). Occurrence of mental health symptoms and disorders in current and former elite athletes: a systematic review and meta-analysis. *British Journal of Sports Medicine*, *53*(11), 700-706.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2012). Barriers and facilitators to mental health help-seeking for young elite athletes: a qualitative study. *BMC psychiatry*, *12*(1), 1-14.

Gulliver, A., Griffiths, K. M., Mackinnon, A., Batterham, P. J., & Stanimirovic, R. (2015). The mental health of Australian elite athletes. *J. Sci. Med. Sport* 18, 255–261. doi: 10.1016/j.jsams.2014.04.006

Gústafsdóttir, E. (2021) *Prevalence of Post-Olympic blues, in relation to satisfaction of performance, retirement, psychological support, and coping strategies among Icelandic Olympians: a population-based study* (Doctoral dissertation).

Gustafsson, H., DeFreese, J. D., & Madigan, D. J. (2017a). Athlete burnout: Review and recommendations. *Current opinion in psychology*, *16*, 109-113.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Gustafsson, H., Lundqvist, C., & Tod, D. (2017b). Cognitive behavioral intervention in sport psychology: A case illustration of the exposure method with an elite athlete. *Journal of Sport Psychology in Action*, *8*(3), 152-162.

Hammond, T., Gialloreto, C., Kubas, H., Davis, H. & (2013). The Prevalence of Failure-Based Depression Among Elite Athletes. *Clinical Journal of Sport Medicine, 23* (4), 273-277. doi: 10.1097/JSM.0b013e318287b870.

Hayes, S. C., & Levin, M. E. (Eds.). (2012). *Mindfulness and acceptance for addictive behaviors: Applying contextual CBT to substance abuse and behavioral addictions*. New Harbinger Publications.

Hays, K., Thomas, O., Maynard, I., & Bawden, M. (2009). The role of confidence in world-class sport performance. *Journal of sports sciences*, *27*(11), 1185-1199.

Horwitz, A. G., Czyz, E. K., Berona, J., & King, C. A. (2018). Prospective associations of coping styles with depression and suicide risk among psychiatric emergency patients. *Behavior therapy*, *49*(2), 225-236.

Hutnik, N., Smith, P., & Koch, T. (2016). Using cognitive behaviour therapy to explore resilience in the life-stories of 16 UK centenarians. *Nursing open*, *3*(2), 110–118. https://doi.org/10.1002/nop2.44

James, K. A. (2010). Collegiate student-athletes' academic success: academic communication apprehension's impact on prediction models.

Joyce, S., Shand, F., Tighe, J., Laurent, S. J., Bryant, R. A., & Harvey, S. B. (2018). Road to resilience: a systematic review and meta-analysis of resilience training programs and interventions. *BMJ open*, *8*(6), e017858.

Kaier, E., Cromer, L. D., Johnson, M. D., Strunk, K., & Davis, J. L. (2015). Perceptions of mental illness stigma: Comparisons of athletes to nonathlete peers. *Journal of College Student Development*, *56*(7), 735-739.

Kass, A. E., Kolko, R. P., & Wilfley, D. E. (2013). Psychological treatments for eating disorders. *Current opinion in psychiatry, 26*(6), 549.

Kisling, L. A., & Das, J. M. (2021). Prevention strategies. In *StatPearls [Internet]*. StatPearls Publishing.

Kosmerly, S., Waller, G., & Robinson, A. L. (2015). Clinician adherence to guidelines in the delivery of family-based therapy for eating disorders. *International Journal of Eating Disorders*, *48*(2), 223-229.

Küttel, A., & Larsen, C. H. (2020). Risk and protective factors for mental health in elite athletes: a scoping review. *International Review of Sport and Exercise Psychology*, *13*(1), 231-265.

Kwan, M., Bobko, S., Faulkner, G., Donnelly, P., & Cairney, J. (2014). Sport participation and alcohol and illicit drug use in adolescents and young adults: A systematic review of longitudinal studies. *Addictive behaviors*, *39*(3), 497-506.

Lewin, A. B., Wu, M. S., McGuire, J. F., & Storch, E. A. (2014). Cognitive behavior therapy for obsessive-compulsive and related disorders. *Psychiatric Clinics*, *37*(3), 415-445.

Lopez-Garrido, G. (2023). Self-efficacy theory in psychology: Definitions & Examples.

Lumpkin, A., & Favor, J. (2013). Comparing the academic performance of high school athletes and non-athletes in Kansas 2008-2009. *Journal of Applied Sport Management*, *4*(1), 31.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Malm, C., Jakobsson, J., & Isaksson, A. (2019). Physical Activity and Sports-Real Health Benefits: A Review with Insight into the Public Health of Sweden. *Sports (Basel, Switzerland)*, *7*(5), 127. https://doi.org/10.3390/sports7050127

Martinsen, M., & Sundgot-Borgen, J. (2013). Higher prevalence of eating disorders among adolescent elite athletes than controls. *Med Sci Sports Exerc*, *45*(6), 1188-1197.

McKay, M., & Fanning, P. (2016). *Self-esteem: A proven program of cognitive techniques for assessing, improving, and maintaining your self-esteem*. New Harbinger Publications.

McLoughlin, E., Fletcher, D., Slavich, G. M., Arnold, R., & Moore, L. J. (2021). Cumulative lifetime stress exposure, depression, anxiety, and well-being in elite athletes: A mixed-method study. *Psychology of sport and exercise*, *52*, 101823.

McNeal Jr, R. B. (1995). Extracurricular activities and high school dropouts. *Sociology of education*, 62-80.

Moore, M. A. (2016). Do psychosocial services make the starting lineup? Providing services to student-athletes. *Journal of Amateur Sport*, *2*(2), 50-74.

Meyers, A. W., Whelan, J. P., & Murphy, S. M. (1996). Cognitive behavioral strategies in athletic performance enhancement. *Progress in behavior modification*, *30*, 137–164.

Nattiv, A., Puffer, J. C., & Green, G. A. (1997). Lifestyles and health risks of collegiate athletes: a multi-center study. *Clinical journal of sport medicine: official journal of the Canadian Academy of Sport Medicine*, *7*(4), 262-272.

NCAA (2018) NCAA National study on substance use habits of college student-athletes: executive summary. Retrieved from https://ncaaorg.s3.amazonaws.com/research/substance/2017RES_SubstanceUseExecutiveSummary.pdf

NIDA (2021). How does marijuana use affect school, work, and social life? Retrieved from https://nida.nih.gov/publications/research-reports/marijuana/how-does-marijuana-use-affect-school-work-social-life on 2022, September 19

Paskus, T. S. (2012). A summary and commentary on the quantitative results of current NCAA academic reforms. *Journal of Intercollegiate Sport*, *5*(1), 41-53.

Pierce, R. A. (1969). Athletes in psychotherapy: how many, how come?. *Journal of the American College Health Association*, *17*(3), 244-249.

Purdon, C. (1999). Thought suppression and psychopathology. *Behaviour Research and Therapy,* 37, 1029-1054.

Proctor, S. L., & Boan-Lenzo, C. (2010). Prevalence of depressive symptoms in male intercollegiate student-athletes and nonathletes. *Journal of Clinical Sport Psychology*, *4*(3), 204-220.

Purcell, R., Gwyther, K., & Rice, S. M. (2019). Mental health in elite athletes: increased awareness requires an early intervention framework to respond to athlete needs. *Sports medicine-open*, *5*(1), 1-8.

Qian, J., Wu, Y., Liu, F., Zhu, Y., Jin, H., Zhang, H., ... & Yu, D. (2021). An update on the prevalence of eating disorders in the general population: a systematic review and meta-analysis. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 1-14.

Rahimnia, F., Mazidi, A., & Mohammadzadeh, Z. (2013). Emotional mediators of psychological capital on well-being: The role of stress, anxiety, and depression. *Management Science Letters*, *3*(3), 913-926.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Rao, A. L., & Hong, E. (2020). Overcoming the Stigma of Mental Health in Sport. In *Mental Health in the Athlete* (pp. 1-10). Springer, Cham.

Reardon, C. L., & Creado, S. (2014). Drug abuse in athletes. *Substance abuse and rehabilitation*, *5*, 95.

Reardon, C. L., and Factor, R. M. (2010). Sport psychiatry a systematic review of diagnosis and medical treatment of mental illness in athletes. *Sports Med.* 40, 961–980. doi: 10.2165/11536580-000000000-00000

Reardon, C. L., Hainline, B., Aron, C. M., Baron, D., Baum, A. L., Bindra, A., Budgett, R., Campriani, N., Castaldelli-Maia, J. M., Currie, A., Derevensky, J. L., Glick, I. D., Gorczynski, P., Gouttebarge, V., Grandner, M. A., Han, D. H., McDuff, D., Mountjoy, M., Polat, A., Purcell, R., Putukian, M., Rice, S., Sills, A., Stull, T., Swartz, L., Zhu, L. J., & Engebretsen, L. (2019). Mental health in elite athletes: International Olympic Committee consensus statement (2019). *British journal of sports medicine*, *53*(11), 667-699.

Reilly, E. E., Anderson, L. M., Gorrell, S., Schaumberg, K., & Anderson, D. A. (2017). Expanding exposure-based interventions for eating disorders. *International Journal of Eating Disorders*, *50*(10), 1137-1141.

Ryan, H., Gayles, J. G., & Bell, L. (2018). Student-Athletes and Mental Health Experiences. *New Directions for Student Services*, *2018*(163), 67–79.

Samuel, R. D., Tenenbaum, G., & Bar-Mecher, H. G. (2016). The Olympic Games as a career change-event: Israeli athletes' and coaches' perceptions of London 2012. *Psychology of sport and exercise*, *24*, 38-47.

Samadzadeh, M., Abbasi, M., & Shahbazzadegan, B. (2011). Comparison of sensation seeking and self-esteem with mental health in professional and amateur athletes, and non-athletes. *Procedia-Social and Behavioral Sciences*, *15*, 1942-1950.

Sitkowski, L. S. (2008). *The effects of participation in athletics on academic performance among high school sophomores and juniors* (Order No. 3311365). Available from ProQuest Dissertations & Theses Global. (194069583). http://ezproxy.rice.edu/login?url=https://www.proquest.com/dissertations-theses/effects-participation-athletics-on-academic/docview/194069583/se-2?accountid=7064

Substance Abuse and Mental Health Services Administration. (2020). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2019 National Survey on Drug Use and Health*. 114.

Sundgot-Borgen, J., & Torstveit, M. K. (2004). Prevalence of eating disorders in elite athletes is higher than in the general population. *Clinical journal of sport medicine*, *14*(1), 25-32.

Terlizzi, E., & Schiller, J. (2019). *Estimates of Mental Health Symptomatology, by Month of Interview: United States, 2019*. 1.

Thompson, R. A., & Sherman, R. (2014). Reflections on athletes and eating disorders. *Psychology of Sport and Exercise*, *15*(6), 729-734.

Velasco, H. (2017). *Few student-athletes with mental illness seek help*. USA TODAY. https://www.usatoday.com/story/college/2017/07/21/few-student-athletes-with-mental-illness-seek-help/37433787/

Wegner, D. M. (1994). Ironic processes of mental control. *Psychological Review,* 101,34-52.

Weigand, Cohen, J., & Merenstein, D. (2013). Susceptibility for Depression in Current and Retired Student Athletes. *Sports Health*, *5*(3), 263–266.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.

Williams, A., Day, S., Stebbings, G., & Erskine, R. (2017). What does ‘elite’mean in sport and why does it matter. *The Sport and Exercise Scientist*, *51*(6).

Wretman, C.J. (2017). School sports participation and academic achievement and middle and high school. *Journal of the Society for Social Work and Research, 8(3),* 399-420.

Wolanin, A., Hong, E., Marks, D., Panchoo, K., & Gross, M. (2016). Prevalence of clinically elevated depressive symptoms in college athletes and differences by gender and sport. *British journal of sports medicine*, *50*(3), 167-17.

Wolverton, B. (2008). Athletes' Hours Renew Debate over College Sports. *Chronicle of Higher Education*, *54*(20).

Yang, J., Peek-Asa, C., Corlette, J. D., Cheng, G., Foster, D. T., & Albright, J. (2007). Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes. *Clinical Journal of Sport Medicine*, *17*(6), 481-487.

Zhou, J., & Heim, D. (2014). Sports and spirits: A systematic qualitative review of emergent theories for student-athlete drinking. *Alcohol and Alcoholism*, *49*(6), 604-617.

© 2023 Werner, Parrish, McIngvale. Distributed under CC-BY-NC-ND 4.0 license.
SSWJ 1(1). Find Issues at OpenJournals.bsu.edu/SportSocialWorkJournal and SSWJ.org.
https://doi.org/10.33043/SSWJ.4.1.81-94.