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RESEARCH ARTICLE

Preparation and Attitudes of Sport Psychology Consultants toward Working with Athletes with Hidden Disabilities

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Abstract

Sport psychology consultants (SPCs) can be instrumental in helping athletes with hidden disabilities (HD) by providing psychological skills training. However, SPCs may not have the training to recognize the needs of athletes with HD or be able to change their instruction. This two-part study aimed to identify SPCs preparation and attitudes towards working with athletes with HD, and assess the potential impact of a continuing education workshop. In study one, participants agreed that athletes with HD have the right to be included in sports and do not need to have better athletic skills. Results indicated that SPCs have little specific training to prepare them to consult with athletes with HD. Students disagree that athletes with HD need to be included with non-disabled peers in sports, felt less comfortable and more concerned when consulting with athletes with HD. In study two, all the participants had a positive attitude toward working with athletes with HD. Following the workshop, the majority of participants had increased levels of comfort, confidence, knowledge, and a greater understanding of consulting with athletes with HD. Furthermore, most of the participants felt that students would benefit from increased training in this area. The findings underscore the need for improved education and training for SPCs to meet the needs of all athletes. SPCs may assist in providing a positive experience for all athletes regardless of disability. These findings offer insight into the implications of a continuing education workshop on SPCs' knowledge, attitudes, and self-efficacy toward consulting with athletes with HD.

Keywords: ADHD, ASD, SLD, Sport Psychology.

1. Introduction

The term hidden disability (HD) refers to disabilities, conditions, or disorders that are not obvious to the casual observer, meaning the individual has no obvious physical characteristics of a disability (Bodey, 2010). HD can include either medical conditions (e.g., epilepsy) or high-incidence disabilities (e.g., specific learning disabilities) that might interfere with learning or the ability to perform a major life function (Office of Civil Rights, 2013). Frequently, athletes with HD may be overlooked or may be mistakenly labeled as unmotivated, lazy, oppositional, or defiant (Beyer et al., 2009; Braun & Braun, 2015; Vargas et al., 2012). Athletes with HD, such as specific learning disabilities (SLD), attention deficit hyperactivity disorder (ADHD), and autism spectrum disorders (ASD) often remain discouraged about sport because of their coaches' attitudes, despite having the physical skills and cognitive ability to be full participants in regular sport (Beyer et al., 2009; Lullo & Van Puymbroeck, 2006).

Sport psychology consultants (SPCs) can play a pivotal role in facilitating psychological skills training for athletes with HD (Braun & Braun, 2015), and providing encouragement for athletes with HD to participate in sport. However, SPCs may not have the

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training to recognize the needs of athletes with HD or be able to change instruction for these athletes. SPCs come from a variety of backgrounds and educational training including clinical/counseling psychology, educational psychology, social work, sport science/kinesiology, and other closely related fields. In order to become a Certified Mental Performance Consultant (CMPC®) through the Association for Applied Sport Psychology (AASP), individuals must hold a master's or doctorate degree related to sport science or psychology, complete coursework in eight knowledge areas, complete a mentored experience, and pass a certification exam. The knowledge areas include (1) professional ethics and standards, (2) sport psychology, (3) sport science, (4) psychopathology, (5) helping relationships, (6) research methods and statistics, (7) psychological foundations of behavior, and (8) diversity and culture. Furthermore, according to the AASP ethics code, SPCs should maintain the highest standards of competence in their work including understanding human differences which includes HD.

2. SLD, ADHD and ASD in the Population

The number of individuals diagnosed with HD is increasing. One in five children in the United States (U.S.) has learning and attention issues (Horowitz et al., 2017). General characteristics specific to each disability category manifest in variable ways (see Braun & Braun, 2015 for specific characteristics). Based on data from 2020-21, 15% (7.5 million) of children (ages 3-21) in public schools received special education services in the U.S. Of these students receiving special education services, 33% qualified for services under SLD, 12% under ASD, and 15% under other health impairment (National Center for Education Statistics, 2022), which includes the category of ADHD (Center for Parent Information and Resources, 2017). In general, an estimated 6 million or 9.8% of children between the ages of three to 17 are diagnosed with ADHD (Centers for Disease Control and Prevention [CDC], 2023) while ASD accounts for one in every 36 children (CDC, 2023).

Given the statistics, it is likely that many individuals with HD may participate in sports at some point (Ewing & Seefeldt, 2002; Sherlock-Shangraw, 2013). Inclusion of individuals with disabilities is a worldwide practice (Brownlee & Carrington, 2000; Leyser & Romi, 2008) and is based on the educational practice that advocates access to equal opportunities, regardless of the presence of a disability. The U.S. Department of Education Office for Civil Rights (2013) issued policy guidelines reminding every school that receives federal funding of the requirement to expand opportunities for athletes with disabilities. Specifically, Section 504 of the Rehabilitation Act of 1973 mandates that schools either allow athletes with disabilities to participate on existing sports teams, or provide an equivalent form of adapted sports.

Youth with disabilities are less likely to have the same levels of academic and social success in adulthood as their peers without disabilities (National Center for Education Statistics [NCES], 2023). Limited success is often attributed to their inability to learn and sustain habits and skills that are attributed to personal and professional success in adulthood. Many individuals with HD lack confidence, have difficulty with problem-solving and executive functioning skills, and need explicit instruction and extensive practice to learn and adopt these habits (Morina & Biagiotti, 2021). Participation in sport for these individuals provides opportunities to practice the social/emotional and life skills, such as teamwork, problem-solving, and persistence, that many successful individuals attribute learning through participating in sport in their youth (Carbone et al., 2021).

This two-part study aimed to identify SPCs preparation and attitudes towards working with athletes with HD, and assess the potential impact of continuing education on SPCs. Due to the various training, education experiences, and the statistics of individuals with HD, study one examined SPC's preparation and attitudes toward working with athletes with HD. Moreover, differences in terms of student status (i.e., current student or professional) were examined. Study two examined if a three-hour continuing education workshop would impact participants' perceptions on the following: (a) their knowledge, attitudes, and self-efficacy in working with athletes with HD; (b) the impact of training on SPCs capacity to work with athletes with HD; and (c) the educational material(s) to best train SPCs when working with athletes with HD.

3. Method: Study One

3.1 Participants

Participants included 58 SPCs (male = 14; female = 44) ranging in age from 22 to 59 years old (M = 34, SD = 10.02). Of the participants, 24 identified as being a current student in the sample. The individuals in this study had varying degrees of education including: bachelor's degree (n = 7), master's degree (n = 23), Ph.D. (n = 23), and PsyD (n = 5). In terms of licensure status, 18 of the participants identified as licensed

practitioners. Other certifications included CMPC (n = 17), Certified Athletic Trainers (n = 2), British Association of Sport and Exercise Science (BASES; n = 2), Finnish Psychological Association Certified Sport and Exercise Psychology Professional (UPV sert.; n = 1).

3.2 Procedure

The study was approved by the university's Board (IRB). Emails were sent out to SPCs through the Sportpsy listserv and APA Division 47 listserv to request voluntary participation in an online survey. The email contained a link to the online questionnaires. The questionnaires utilized in this study included a demographic questionnaire and the Sport Psychology Consultants Attitudes toward Athletes with Hidden Disabilities questionnaire. The term HD was defined as "conditions or disorders that are not obvious to the casual observer, meaning the individual has no obvious physical characteristics of a disability, such as SLD, ADHD, and ASD" for the participants. The demographic questionnaire included items on level of education, certifications/licensure, work settings, training in HD and consulting with athletes with HD. The Sport Psychology Consultants Attitudes toward Athletes with Hidden Disabilities questionnaire was adapted from Kozub and Poretta (1998) and developed for this study. Participants were asked to respond to 16 items on a five-point Likert scale (1 = strongly disagree and 5 = strongly agree). Sample items included "athletes with hidden disabilities have a right to sport opportunities that are provided as part of an athletic program" and "I am concerned that I do not have the knowledge and skills required to consult athletes with hidden disabilities."

3.3 Data Analysis

SPSS Statistics software was used to analyze the data. Descriptive and frequency statistics were analyzed for the demographic questionnaire. A Multivariate Analysis of Variance (MANOVA) examined the differences in student status on The Sport Psychology Consultants Attitudes toward Athletes with Hidden Disabilities questionnaire.

4. Results: Study One

Participants in the current sample had varying education and training. Table 1 displays differences between the participant's role while working with individuals with HD; course work completed that focused on athletes with disabilities, specifically HD; the number of professional development workshops completed that focused on athletes with HD; and the number of years of experience consulting athletes with HD. The majority of participants disagreed that graduate programs do an adequate job of preparing SPCs to consult with athletes with HD (M = 2.14, SD = 1.19) and agreed that SPCs have little specific training to prepare them to consult with athletes with HD (M = 4.14, SD = 1.03). Therefore, the results suggest that participants support the inclusion of a graduate course designed for consulting athletes with HD and other disabilities (M = 4.47, SD = .98).

Table 1. *Education and Training by Student Status*

Education and Training	Frequency
Student	
Years working with athletes with HD	
No experience	14
0-1 years	2
2-3 years	8
Courses focusing on HD	
No courses	17
1 course	5
2 courses	1
3 courses	1
Workshops focusing on HD	
No workshops	18
1-2 workshops	6
Professional	
Years working with athletes with HD	
No experience	10
0-1 years	8
2-3 years	5
4-5 years	1
6-10 years	7

10+ years	3
Courses focusing on HD	
No courses	14
1 course	7
2 courses	4
3 courses	5
4 courses	1
5+ courses	3
Workshops focusing on HD	
No workshops	20
1-2 workshops	7
3-4 workshops	2
5+ workshops	5

When examining attitudes toward athletes with HD, the majority of respondents agreed that athletes with HD have the right to be included in sports (M = 4.93, SD = .27) and disagreed that athletes with HD need to have better than average physical abilities (M = 1.84, SD = .77). Utilizing a MANOVA to calculate the differences in terms of student status on the questionnaire items, a significant overall effect was reported, Wilk's λ = .56, $F(16, 41) = 2.00$, p = .04, η_p^2 = .44. Significant differences or trending towards significance in student status revealed that students disagreed that athletes with HD need to be included with non-disabled peers in sports ($F(1, 56) = 5.17$, p = .027, η_p^2 = .09), felt less confident ($F(1, 56) = 3.79$, p = .056, η_p^2 = .06), felt less rewarded ($F(1, 56) = 10.80$, p = .002, η_p^2 = .16), felt less comfortable ($F(1, 56)$ = 6.39, p = .014, η_p^2 = .10), do not have the knowledge and skills required ($F(1, 56) = 5.37$, p = .024, η_p^2 = .09), more stressed when working with athletes with HD ($F(1, 56) = 7.33$, p = .009, η_p^2 = .12), and are less able to ask colleagues for assistance when consulting with an athlete with a HD ($F(1, 56) = 7.48$, p = .008, η_p^2 = .12). Table 2 displays significant differences on the questionnaire items.

Table 2. *Significant Differences on The Sport Psychology Consultants' Attitudes Toward Athletes with Hidden Disabilities Items*

	Student		Professional				
Items	**M**	**SD**	**M**	**SD**	**F**	**p**	**η^2**
Athletes with HD need to be included with non-disabled peers in sports programs.	4.21	1.02	4.68	.54	5.17	.027	.09
It is rewarding when I am able to help athletes with HD.	3.92	.93	4.62	.70	10.80	.002	.16
I feel comfortable around athletes with HD.	3.92	1.25	4.53	.56	6.39	.014	.10
I am concerned that I do not have the knowledge and skills required to consult athletes with HD.	3.58	1.18	2.82	1.27	5.37	.024	.09
I am concerned that I will be more stressed if I am consulting a team that has an athlete with a HD.	2.29	1.23	1.59	.74	7.33	.009	.12
I can ask my colleagues for assistance, if needed, when consulting with an athlete with a HD.	3.87	.90	4.50	.83	7.48	.008	.12

5. Method: Study Two

5.1 Participants

All participants registered for a continuing education course offered at the AASP Conference. Participants for this study were 20 SPCs (male = 8; female = 12) between the ages 26 to 65 (M = 38.05, SD = 10.74). All participants had earned a Bachelor's degree, and more than half (60%) held terminal degrees (Ph.D., Ed.D., or PsyD) in psychology/counseling (n =9) or exercise science (n =3). One participant held a bachelor's degree in health science and the remaining seven participants held a master's degree in psychology/counseling (n = 5), exercise science (n = 1), and sport psychology (n = 1). Participants reported working in a variety of settings, including schools (academic teaching, university coaching, and high school coaching), mental health clinics or counseling centers, and private practice; nine participants reported working in more than one setting. More than two-thirds of the participants (70%) were either a CMPC (n = 6), psychologist, counselor (n = 4), or both (psychologist and CMPC) (n = 4), and specialized in sport psychology and performance enhancement (n = 14), or counseling or clinical psychology (n = 6).

Participants' years of practice ranged from five months to 35 years, with a mean of 9.79 years.

A majority of the participants (n = 13) consulted with athletes weekly. Time spent consulting with athletes ranged between less than one hour to more than 30 hours per week. Of the participants who reported consulting with athletes, most did so for 1-5 hours per week (n = 4), followed by 6-10 hours (n = 3) or 21-30 hours (n =3), and 30 or more hours (n = 2). Two participants reported that the time they spent in consultation varies.

5.2 Procedure

Before the study began, IRB approval was granted and participants signed an informed consent. Prior to the start of the continuing education course, participants completed a demographic questionnaire and answered open-ended questions related to their confidence and comfort, concerns, attitudes, challenges, and knowledge of working with athletes with HD. These question topics were selected to address the aims of study two. Participants also answered a question related to their opinions of how well-prepared SPCs are to work with athletes with HD. This methodology was selected to capture as many participants as possible who attended the workshop within time constraints. Open-ended responses allowed the participants the freedom to express and articulate their feelings, personal experiences, and expand on ideas without a predetermined set of responses (Thomas et al., 2023).

Next, the participants attended a three-hour continuing education workshop on athletes with HD. The purpose of this workshop was: (1) to introduce participants to those disabilities that are not obvious to the observer, specifically, ADHD, SLD, and ASD as well as (2) to offer strategies and techniques that promote inclusive practices and positive sport experiences for individuals with these disabilities. The workshop utilized a variety of learning tools including simulation activities, case study analyses, and group discussions.

Following the workshop, participants completed the same open-ended questions related to their confidence and comfort, concerns, attitudes, and knowledge of working with athletes with HD. Additionally, participants answered how educational materials regarding athletes with HD would be best taught to SPCs including graduate curriculum, field-based practicum, provide resources, clinics/workshops, or others. The final two questions allowed participants to share how they felt about the information presented along with any other thoughts about athletes with HD.

5.3 Data Analysis

Pre- and post-survey questions were developed and qualitatively analyzed to assess for changes in participants' perspectives, after having received professional development training on working with athletes with HD. The aim of our analysis in exploring the data was to reveal any potential patterns and recurrent themes in participants' responses to pre- and post-survey questions through thematic analysis. Thematic analysis is a foundational method to carry out a qualitative analysis and is a flexible method that can be utilized across theoretical perspectives and disciplines to evaluate qualitative data (Braun & Clarke, 2006). Through thematic analysis of the survey questions, patterns were assessed for emergent themes.

6. Results: Study Two

Survey questions were developed to investigate how participants perceived working with athletes with HD before and after having attended a professional development training seminar (Table 3). Participants' responses to questions were evaluated to assess the impact of the professional development training seminar on participants' understanding of working with athletes with HD. Themes identified, through analysis included: confidence, knowledge base, concerns, and an increase in practical skills.

6.1 Confidence

Questions one through three were designed to measure the impact of the seminar on SPCs' overall comfort level and attitudes about working with athletes with HD and addressing the coaches' concerns. All the SPCs reported having a positive attitude towards working with athletes with HD before and after the professional development training. However, half of the participants reported an increase in their confidence and comfort levels towards working with athletes with HD after having completed the professional development training. Mixed results were found in evaluating any change in SPCs' concerns in working with athletes with HD.

6.2 Knowledge Base

Question five of the pre-survey asked SPCs to describe their knowledge of working with athletes with HD. Most SPCs reported they had limited or no knowledge of working with athletes with HD. Nine out of 20 participants expressed limitations in knowledge. Four stated they had some knowledge in the field of HD but wished to know more about directly working with HD in sports.

Two SPCs had no knowledge of HD and sports. Two other SPCs provided statements that did not reflect a response to the question, such as "people try to make them visible". Two SPCs reported having knowledge and knowing how to apply it for individuals with HD in sports. Both of these SPCs also mentioned personal experience and/or multiple interactions with individuals with HD. One SPC left the question blank.

Question four of the post-survey asked SPCs to describe their knowledge of working with athletes with HD. Most participants reported their knowledge increased after the workshop. Fourteen SPCs out of 20 described their knowledge had improved in some way and/or felt more confident. Two SPCs stated their knowledge was "good" and two other SPCs described their knowledge as still limited in some way. For example, one of the SPCs was concerned about what an SPC can handle and when athletes should be referred to another provider. One SPC left the question blank and another provided a response that was not consistent with the question.

Table 3. *Pre- and Post-Survey Questions*

	Pre	Post
1*	Please describe your confidence and comfort levels toward working with athletes with hidden disabilities.	Please describe your confidence and comfort levels toward working with athletes with hidden disabilities.
2*	Please describe your concerns toward working with athletes with hidden disabilities	Please describe your concerns toward working with athletes with hidden disabilities
3*	Please describe your attitudes toward working with athletes with hidden disabilities.	Please describe your attitudes toward working with athletes with hidden disabilities.
4	Please describe any challenges you've encountered working with athletes with hidden disabilities.	Please describe your knowledge on working with athletes with hidden disabilities.
5	Please describe your knowledge on working with athletes with hidden disabilities.	In your opinion, how would educational material regarding athletes with HD be best taught to sport psychology consultants? Please check all that you feel is appropriate and explain why you feel this way. (Graduate curriculum, field based practicum, provide them with resources [e.g., books, videos, pamphlets, webpage], clinics/workshops, other?)
6	In your opinion, how prepared are sport psychology consultants to work with athletes with hidden disabilities?	Please let us know how you felt about the information you received today.
7	-	Is there anything else you would like to share with us regarding your thoughts about athletes with HD?

Note: **Questions 1, 2, 3 are identical on the pre- and post-survey*

6.3 Concerns

SPCs discussed their concerns towards working with athletes with HD on question two of the survey. Most SPCs reported concerns about not knowing how to support athletes with HD in the pre-survey. SPCs did not know how to be helpful, had difficulty understanding the degree of the disability, and also discussed concerns about helping athletes with HD if they did not self-report the disability. Responses on the post-survey demonstrated a continued need for supporting athletes with HD. Six SPCs addressed new concerns unrelated to their previous responses. Four SPCs had a greater understanding of how to be helpful based on the workshop. Four SPCs provided responses that addressed similar concerns to the pre-survey, thus there was no difference. Three SPCs stated they had a greater understanding but would still like more training. Three SPCs did not respond to the post-survey question.

Results from question four on the pre-survey that asked participants to describe any challenges in working with athletes with HD revealed variable concerns among coaches. This illustrated a definitive need for professional development among SPCs in understanding how to work with athletes with HD. Participants also described challenges in addressing the needs of athletes with HD who did not disclose their disability.

Question six of the pre-survey asked SPCs their opinions on the preparation of SPCs, in general, to work with individuals with HD. Overall, most participants were divided between not believing SPCs were prepared or simply stating it depended on background knowledge. Seven out of 20 believed

SPCs, in general, were not prepared to work with individuals with HD. Six were unsure and believed it was based on their background. Two SPCs stated not as prepared "as [they] should be." Two left the answer blank and two others provided unclear responses, such as "three or more courses." One SPC believed SPCs, in general, were prepared to work with athletes with HD.

6.4 Increase in Practical Skills

The overall feedback illustrated an increase in skills that had occurred for SPCs in attending the professional development seminar. Question six of the post-survey asked for participants' feedback on the workshop. All participants who responded indicated a positive experience. Many mentioned it was very helpful and provided them with a greater understanding of serving athletes with HD. One participant commented that the workshop provided great information; however, they were unsure of the "application in certain fields."

SPCs were also solicited for feedback in considering future professional development activities that could increase their skills in working with athletes with HD. Question five of the post-survey included a list of educational materials and asked SPCs which would be most beneficial to use when teaching SPCs to work with athletes with HD. Fifteen out of 20 SPCs believed a graduate curriculum and clinics/worships would be the most effective in teaching SPCs to work with athletes with HD. Twelve SPCs also believed field-based practicums would be beneficial and ten SPCs believed resources should be included in teaching SPCs to work with athletes with HD. Three SPCs left this question blank.

The last question on the post-survey gave participants the opportunity to share any thoughts. Most left this question blank, and the few that did respond, praised the effectiveness of the workshop. One commenter stated that the workshop would have benefited from a discussion on the stigma of athletes with HD.

7. Discussion

Sport is an integral part of the composition of society and can have a significant impact on the physical, psychological, and social development of individuals (Côté & Fraser-Thomas, 2011). However, sport can represent a place of exclusion even when it has a focus on inclusion (Fitzgerald, 2009). Sport practitioners, including SPCs, may struggle with creating an inclusive environment yet can play an integral role (Spencer-Cavaliere et al., 2017). Consequently, the sport opportunities for athletes with HD can be overwhelming and frustrating regardless of athletic ability (Sherlock-Shangraw, 2013).

In order to promote a positive experience for athletes with HD, SPCs may consult directly with athletes to develop their own strategies to use during practice and competition as well as assist coaches in successfully working with these athletes (Braun & Braun, 2015). Coaches generally receive little or no training to work with athletes with HD and may use strategies and techniques that are ineffective (Vargas et al., 2012). The learning needs of athletes with HD can be addressed with proactive instruction and easy changes to the practices (Flores et al., 2017). Therefore, SPCs are in an excellent position to enhance the sport experience for the coaches and athletes with HD, if they receive the proper training. The results of the current study, however, indicate that graduate programs do not adequately prepare SPCs to consult with athletes with HD and receive little specific training to consult with athletes with HD. Attending a three-hour continuing education course increased SPCs' knowledge, confidence, and skills to consult with athletes with HD.

Sport psychology students and those with limited prior experience have similar concerns as pre-service teachers with little experience or training on inclusion of individuals with disabilities (Forlin et al., 2009; Taylor & Ringlaben, 2012). Sport psychology students in study one felt less confident, less comfortable, more stressed, and did not have the knowledge or skills to work with athletes with HD. Furthermore, students reported that athletes with HD should not be included with non-disabled peers. Previous research has demonstrated that in order for pre-service teachers to feel comfortable using inclusive practices, they need to have a positive attitude, a high level of efficacy, and a low level of concern towards inclusion (Forlin et al., 2009; Sharma et al., 2012). Courses specifically designed for inclusive education significantly increases pre-service teachers' attitudes and efficacy and decreases their concerns (Forlin et al., 2009; Sharma & Nuttal, 2016). Related to this, teachers who had taken three or more courses on specially designed instruction were reported to favor inclusion and teaching students with disabilities (Hodge et al., 2009). Therefore, graduate programs should consider the addition of a course on athletes with disabilities, specifically HD and inclusive practices, which was supported by the participants in the current study.

The results of the current studies and research from the field of physical education studies suggest that the

three-hour workshop on working with athletes with HD was a good starting place, but more training is needed to deepen SPCs' understanding of HD, their characteristics, and their impact on how athletes learn new skills (Akuffo & Hodge, 2008; Hodge et al., 2009). The diversity of athletes with HD, along with their ever-changing learning needs and varied rates of skill progression necessitates that continuing education workshops explicitly teach a variety of skills and best practices, including differentiation. Differentiation for athletes with HD requires SPCs to be knowledgeable about the specific challenges that result from HD and how to modify the assistance they provide to coaches. SPCs who are knowledgeable about inclusive strategies and their uses, accommodations, and adaptive coaching techniques will provide relevant and meaningful support to coaches and athletes with HD (Flores et al., 2017; Penney et al., 2017).

7.1 Implications for Practice

Differentiation practices help to create an inclusive and supportive environment where the potential of athletes with HD is maximized (Flores et al., 2017). In addition to flexibility, patience, and remaining responsive to an athlete's needs (Akuffo & Hodge, 2008), there are eight strategies that SPCs can use to differentiate their coaching strategies: individualization (Hodge et al., 2004; Webster, 1993), clear communication (Webster, 1993), visual and multimodal instruction (Vargas et al., 2018), chunking and repetition (Vargas et al., 2018), positive reinforcement and motivation (Akuffo & Hodge, 2008), goal setting (Vargas et al., 2018), adaptive instructional techniques (Akuffo & Hodge, 2008; Vargas et al., 2018; Webster, 1993), and social and emotional support (Akuffo & Hodge, 2008; Webster, 1993). Individualizing coaching strategies is based on understanding each athlete with HD's unique strengths and challenges and then customizing the coaching approach to the individual.

7.2 Limitations and Future Research

There are several limitations to these studies. First, the studies had a small sample size and unequal distribution groups (e.g., gender, student status, etc.). Future research would benefit from including participants with various backgrounds in sport psychology, a larger sample size and equal representation of males and females. Previous research has indicated that females tend to express more positive attitudes toward inclusion than males (Hutzler, 2003). Limitations to generalizing results from surveying participants include disengagement of respondents to being surveyed, contextual factors, and self-report bias (Anderson, Their, & Pitts, 2017; Duckworth & Yeager, 2015; Piedmont, McCrae, Riemann, & Angleitner, 2000). Although the continuing education workshop demonstrated a positive impact, numerous factors may influence outcomes in professional development seminars for SPCs. Therefore, these findings should be interpreted with caution when considering their generalizability to the broader SPC population. More specifically, participants paid to take the continuing education course.

Even though participants from study two reported they gained knowledge from the workshop, future research should include additional workshops that focus on the introduction of HD, benefits of inclusive practices, and techniques to support athletes with HD. In addition to the workshops, researchers should follow-up with participants after workshops have been completed to examine if participants were able to implement knowledge they gained from these workshops. Future research should also examine if the training will decrease the participants' concern and increase their attitudes and efficacy.

8. Conclusion

In conclusion, the findings underscore the need for improved education and training for SPCs to meet the needs of all athletes. Based on the number of participants who reported not having any experience working with athletes with HD and not receiving training highlights this need for improved training. Given the statistics of individuals with HD, it is probable that these participants have consulted with athletes with HD, however, they were unaware. Therefore, graduate programs should incorporate content on HD into their curriculum. More extensive continuing education courses should be provided for established practitioners.

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