


Exploring obstacles experienced by learners with high-functioning autism in pursuing careers in sports

Charles Mushambi*, Boitumelo M Diale , Maximus Monaheng Sefotho , Chiedu Eseadi 

University of Johannesburg, South Africa

 cmushambi@gmail.com*

<p>Submitted: 2024-09-09</p> <p>Revised: 2024-01-25</p> <p>Accepted: 2024-03-10</p> <p>Keywords: autism; careers; special school; sport</p> <p>Copyright holder: © Mushambi, C., Diale, B., Sefotho, M. M., & Eseadi, C. (2024)</p> <p>This article is under:</p> <p></p> <p>How to cite: Mushambi, C., Diale, B., Sefotho, M. M., & Eseadi, C. (2024). Exploring Obstacles Experienced by Learners with High-Functioning Autism in Pursuing Careers in Sports. <i>Bulletin of Counseling and Psychotherapy</i>, 6(1). https://doi.org/10.51214/00202406630000</p> <p>Published by: Kuras Institute</p> <p>E-ISSN: 2656-1050</p>	<p>ABSTRACT: This study investigated the obstacles faced by learners with high-functioning autism (HFA) in pursuing careers in sports, at a special school in Johannesburg, South Africa. It explored strategies that these learners can use to overcome obstacles they may experience in pursuing careers in sports. This research uses a qualitative methodology with an intrinsic case study design. It includes both primary data. It will be easier to understand the narratives if the primary data are included. This research uses purposive sampling to select eighteen participants, namely six teachers, six parents and six learners with HFA. Data were collected through focus group interviews, semi-structured interviews, art-based career collages and document analysis. The data were analyzed through thematic analysis based on Braun and Clarke (2013)'s steps of data analysis. The findings show that these learners face numerous obstacles in pursuing sports careers due to a lack of resources, inadequate facilities, lack of parental involvement, discrimination, inadequate training of teachers, lack of sporting activities, and lack of appropriate school structures. The learners face personal obstacles, including verbal, writing, social, interactional, and behavioral deficiencies. The findings indicate a need to provide these learners with adequate and relevant resources and facilities at home, school, and elsewhere to tackle these obstacles.</p>
---	---

INTRODUCTION

A sport is a physical activity learners with HFA perform for entertainment, to earn an income, to participate more actively in class activities, and develop their problem-solving skills (Ayvazoglu et al., 2015; Ke & Moon, 2018; Potvin et al., 2013). The above views would mean that learners with HFA are likely to generate money as they enjoy participating in a variety of sports like being soccer, netball, cricket, handball or rugby players. Also, learners with HFA's participation in sports activities is also likely to help them to participate well in problem-solving tasks related to sports in the classroom.

Sport in particular, plays a critical role among learners with HFA in terms of promoting the physical and intellectual wellness of these learners (Jamieson, 2010; Potvin et al., 2013). A learner with HFA partaking in sports activities is likely to appear stronger physically as well as having good intellectual capabilities to perform well in academic class tasks. The significance of sport also comes from its ability to foster socialisation, sportsmanship, peace, competition, excitement, and interaction among people of diverse backgrounds, as captured in studies by Cheng et al. (2022), Clark & Parette (2002), Jaarsma et al. (2015), Mhlarhi (2017), Ramirez et al. (2009), Reiman (2008), and J. Vosloo & du Toit (2023). Participating in various sporting activities can benefit learners with

disabilities and other stakeholders in the sporting sector. For instance, sporting activities promote healthy habits and prevent diseases (Jaarsma et al., 2015; Reiman, 2008; Wegner & Struthers, 2011).

As a result of participating in different physical sports, such as running, jogging, jumping, kicking, throwing, catching, or heading a ball, participants might become stronger and fitter. Participating in practical sporting activities could also increase learners' with HFA participation in academic and practical sporting lessons. Despite the above perspectives, learners with HFA face multiple obstacles throughout their lives, including in sports (Ke & Moon, 2018; Potvin et al., 2013). It has been shown that learners with HFA have faced obstacles throughout history, including in sports (Potvin et al., 2013). It has been found that learners with HFA encounter difficulties in sports because of communication, social and interactional deficits, problematic behaviours, and a lack of sporting skills (Potvin et al., 2013). As a result of the above deficits, learners with HFA might have difficulty participating in a wide range of sports activities, both among themselves and with peers without disabilities.

Autism spectrum disorder (ASD) or autism refers to a life-long neurological condition or disability that describes a variety of disorders that prevent learners with such a condition from pursuing careers in sports, according to studies conducted by Ryan & Marshall (2018), Sekererayi (2022), and Silveira-Zaldivar & Curtis (2019). These disorders include communication, social, interactional, behavioral and sensory issues, as captured in studies about autism by Aubineau & Blicharska (2020) and Szidom et al. (2015). It seems that the above group of disorders illustrate the obstacles learners with HFA from a special school setting in South Africa face when pursuing careers in the sporting sector not just a mere hobby, but as an activity they may embark on in order to earn a living out of, starting from the classroom, where they should learn academically about careers in sport.

For example, learners with HFA who lack communication, social, and interactional skills may find it challenging to comprehend information related to sports careers, designed to address obstacles they may encounter while pursuing various sports careers during career lessons with their teachers. In fact, findings from studies by Adamson et al. (1998), Fontana & Siriwichai (2022), McKenzie & Bennett (2022), and Richardson et al. (2021) suggest that a career refers to a lifelong source of livelihood that one aspires to pursue for their entire life with the sole purpose of generating funds.

Thus, a learner with HFA may choose to work as a soccer player, a netball coach, a cricket player, a rugby player, or a sports commentator as a lifelong activity to generate money to buy desired items. Similarly, Fontana & Siriwichai (2022) and McKenzie & Bennett (2022) state that a career is a dynamic lifelong source of generating income over time. These views may present obstacles to career selection among learners with HFA in special schools. For instance, when presented with multiple career options, learners with HFA might find it difficult to choose between being an athlete, a swimmer, cyclist, or a sports administrator. Moreover, careers are selected based on personal, behavioral, societal, or environmental factors (Fontana & Siriwichai., 2022; McKenzie & Bennett, 2022; Richardson et al., 2021).

These perspectives may help learners with HFA select their careers based on specific factors that may suit their sporting needs. Additionally, the views are linked to Bronfenbrenner's bio-ecological systems theory, which illustrates contextual obstacles experienced by learners in their pursuit of sports careers through its stages of learner development namely: micro-system, meso-system, exo-system, macro-system, and the chrono-system (Bronfenbrenner, 1979; Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 2006; Härkönen, 2007; Tudge et al., 2009). The micro-system includes parents, relatives, close friends, mentors, spouses, or other family members who regularly participate in developing a learner's life over extended periods (Bronfenbrenner & Morris, 2006).

Therefore, a learner with HFA's immediate and frequent interactions with family members may influence their socialization and support them in selecting sporting careers. On the other hand, the lack of interaction, career resources, and information about sports careers within families may hinder learners with HFA from selecting and developing careers in sports. The meso-system describes social obstacles experienced at school ([Bronfenbrenner, 1979](#); [Härkönen, 2007](#)). The above views are important in explaining how learners with HFA may encounter challenges in pursuing sports careers as they socialise and interact with various stakeholders within the school context. The lack of career resources, facilities, sports specialists, absence of a sports curriculum, and limited time for sports in special school settings may also describe obstacles faced by learners with HFA in their pursuit of sports careers within the school setting may obstruct learners with HFA's participating in a variety of sports careers.

Furthermore, the exo-system illustrates how learners face obstacles in all aspects of their lives due to external events, such as a parent's workplace ([Härkönen, 2007](#); [Tudge et al., 2009](#)). For example, a parent who does not earn enough money may struggle to provide the necessary resources and equipment for learners with HFA to pursue their sports careers. Additionally, generating money for tuition fees for learners with HFA to attend sports lessons at school may be a challenge if their parents and family members lack other means of income. The macro-system includes the group's culture, sub-culture, and social context, where members share values or belief systems ([Bronfenbrenner, 1979](#); [Härkönen, 2007](#); [Tudge et al., 2009](#)).

Therefore, the macro-system can help explore how local cultural and societal values create obstacles for learners with HFA attempting to pursue sports careers at a special school in Johannesburg. Finally, the chrono-system dimension of time ([Bronfenbrenner & Morris, 2006](#)) involves historical or successive transitional changes. The concept of time can reflect how the developmental trajectories of learners with HFA can create obstacles in their pursuit of sports careers over time. This may be expressed by learners with HFA themselves as they interact with other stakeholders in various societal settings.

Generally, sport is very important for learners with HFA since it provides them with a chance to earn sponsorship from companies ([Bricout et al., 2019](#); [Jamieson, 2010](#)). With sponsorship in hand, learners with HFA are likely to be able to enroll at sports institutions for the purpose of furthering their sports aspirations. Participating in sports activities provides significant benefits in terms of reducing problematic behaviours for learners with HFA ([Ayvazoglu et al., 2015](#); [Bricout et al., 2019](#)). Thus, taking part in sporting activities such as swimming may calm a learner with HFA who exhibits problematic behaviours.

In studies about ASD, [Ryan & Marshall \(2018\)](#), [Sekererayi \(2022\)](#), [Silveira-Zaldivar & Curtis \(2019\)](#), and [Szidom et al. \(2015\)](#) argue that ASD substantiates the inappropriate behaviours displayed by learners with such disabilities that hinder them from pursuing sports careers. It might refer to behaviours such as shouting in the classroom, leaving seats and walking all over the classroom, talking constantly, running away and being hyperactive. Nevertheless, this study defines ASD or autism as a special needs condition which prevents learners from participating in academic or practical sporting lessons. This is because they might have failed to meet certain standards intended to discriminate against certain learners from participating in various sports. According to [Aubineau & Blicharska \(2020\)](#), [Hilton et al. \(2008\)](#), and [Ryan & Marshall \(2018\)](#), learners with High-Functioning Autism (HFA) refers to learners with ASD with an average to above-average Intelligence Quotient (IQ). Additionally, these learners with HFA have natural talents or exceptional skills.

A special school is a special teaching and learning place that offers specialised education to a group of exceptional learners using a specialised curriculum, resources and facilities provided by specialist personnel, as cited in a study by [Gibb et al. \(2007\)](#). This might be in an attempt to detect

obstacles experienced by learners with HFA and discovery strategies to overcome these challenges. According to this study, a special school in a location that caters for learners with disabilities, such as those with high-functioning autism, provides them with relevant academic and sporting education using modified resources and equipment aimed at removing barriers faced by learners with HFA in pursuing careers in sports.

Reiman (2008)'s evaluation of careers suitable for learners with physical disabilities in South Africa cited archery, boccia, lawn bowls, athletics, soccer, swimming, wheelchair tennis, wheelchair basketball, fencing, skiing, and ice sledge hockey. The study conducted by Reiman (2008) focused exclusively on the career options available to learners with physical disabilities. Therefore, our study is significant as it explores barriers faced by learners with HFA in pursuing careers in sports, at an urban special school in Johannesburg.

Even though learners with HFA face obstacles in pursuing careers in sports (Potvin et al., 2013), sports also provide many benefits to learners with HFA, including mastering sports skills, participating in sports competitions, forming friendships, and appearing on social media (Ayvazoglu et al., 2015; Bricout et al., 2019; Jamieson, 2010). As a result of participating in sports competitions, learners with HFA are likely to gain information about strategies they might use to overcome obstacles they may face in the sport. For instance, using media platforms to show learners with HFA when they play a variety of sports could help such learners to market their sports skills to prospective sponsors and change negative perceptions members of society may hold about learners with HFA's ability to participate in sports and other sectors of the economy.

Obstacles Faced By Learners With HFA in Their Efforts to Pursue Sporting Careers

Pillay et al. (2024) conclude the absence of adequate and specific education-linked legislation, policies, and Acts that support learners with disabilities like those with ASD. Without these legislations, policies and Acts, it might be difficult for learners with HFA to pursue careers in sports within the school setting and other places in society. Our experience suggests that without these legislations, policies, and Acts, particularly those that require institutions of learning to include learners with HFA in all sporting activities, these learners are likely to continue to be discriminated against in all sporting activities at school, home, and in other sporting venues.

It is also important to note that studies by Aubineau & Blicharska (2020), Hilton et al. (2008), Hou et al. (2023), Miranda et al. (2019), Silveira-Zaldivar & Curtis (2019) and Szidom et al. (2015) found personal deficits such as communication, sensory sensitivity, interpersonal, interactional and behavioural challenges as other obstacles encountered by learners with ASD, probably those with HFA. For example, learners with HFA with behavioural, communication, social, and interactional deficits may have difficulty interacting with peers while discussing how barriers to sporting careers can be eliminated.

Studies by Bolte (2021), Griffiths et al. (2016), Hopp (2022), Pillai et al. (2021), and Tucker & Schwartz (2013) also discussed labelling, negative attitudes and discrimination of learners with disabilities as major obstacles that learners with HFA encounter when trying to pursue careers, probably including careers in sports. Due to poor social, communication, interactional and behavioural deficits, teachers or other learners may have negative attitudes towards such learners, which could lead them to exclude them from other sports activities, thereby impeding their desire to pursue sporting careers. These learners may also be ridiculed, mocked, screamed at, or teased, making them reluctant to participate in sporting career activities.

Moreover, a lack of career resources and facilities at home and school also causes learners with HFA to encounter barriers to their aspiration to pursue careers of their choice, according to findings in a study by Corkum et al. (2014). The non-existence of career-specialised resources such as tablets,

laptops, smartphones and career books and facilities, including swimming pools, soccer, netball and cricket grounds that are autism- user friendly at their disposal, particularly in the area of sport, might make it difficult for learners with HFA to participate in different activities. Consequently, it may be difficult to decide which strategies can be useful for them to address obstacles they might be experiencing in engaging in sporting careers in future.

Studies conducted by [Crippen & Hart Barnett \(2014\)](#) and [Hedges et al. \(2014\)](#) claim that learners with HFA confront multiple obstacles to their attempts to pursue careers, including a lack of transportation, funding, and a lack of specialist teachers. Without government and private funding to purchase specialised resources and facilities that are autism-user-friendly, learners with HFA may continue to face obstacles in pursuing careers, particularly in sports. Without funding, learners with HFA might not get sports bursaries and scholarships to give them a chance to study further at universities and other institutions of higher learning.

Also, findings in studies by [Crippen & Hart Barnett \(2014\)](#), [Corkum et al. \(2014\)](#) and ([Hedges et al. \(2014\)](#)) captured a lack of training on the part of teachers as another major obstacle to learners with ASD's aspiration to pursue careers. Though [Crippen & Hart Barnett \(2014\)](#) and [Hedges et al. \(2014\)](#) did not elaborate on how a lack of specialist teachers can affect learners with HFA in pursuing sporting careers, the absence of these specialist teachers could mean that these learners are left in the hands of untrained teachers who might not have the necessary skills and knowledge on how to cater to these learners with HFA. These untrained teachers might be appointed referees, coaches, umpires or school sports coordinators, yet, they might not have the knowledge and skills to identify ways to overcome challenges faced by learners with HFA in their attempt to pursue careers in sports.

An issue around transportation was cited as another major obstacle to learners with HFA's efforts to pursue careers, in findings of studies by [Crippen & Hart Barnett \(2014\)](#) and [Hedges et al. \(2014\)](#). Findings in studies by [Pan et al. \(2011\)](#), [Sefotho & Onyishi \(2021\)](#) and [Sekererayi \(2022\)](#) reveal that learners with ASD have communication, social, interactional and behavioural deficits and find it difficult to adapt to change. Therefore, it might be difficult for such learners to use public transport when going to and from a school where they are likely to acquire information related to overcoming obstacles to their aspirations to pursue careers in sports. For instance, they might find it difficult to tell drivers where they are going. They might also find it challenging to pay the correct bus fare, calculate change, and find the directions of the location where they are supposed to go. They are also likely to be overwhelmed by the noises of cars and the presence of many people in larger cities who might not be familiar to them. By putting these views into consideration, these learners might end up not attending school unless their parents and guardians and school authorities find alternative transport, particularly for them.

Looking at the unavailability of special schools in South Africa, ([Laitila, 2018](#)) found that learners face many obstacles in finding spaces in schools due to the lack of special schools, particularly for learners with ASD. As opposed to [Laitila \(2018\)](#)'s study, which focused on challenges faced by learners with ASD in getting places in special schools as a result of shortages of special schools, this study examined the obstacles encountered by learners with HFA in pursuing sporting careers at an urban special school in Johannesburg. In support of [Laitila \(2018\)](#)'s claims, findings in a study by [Pillay et al. \(2024\)](#) revealed that as a result of insufficient special schools for learners with ASD, they take long periods on the waiting list to get a chance to be enrolled at one of the few available schools. The absence of these special schools and the long periods these learners take to be placed in a particular school might hinder their attempts to pursue careers in sports. This might be so because, without these schools, the implication is that these learners will likely stay at home without interacting with teachers and other stakeholders within a school setting regarding addressing obstacles encountered in pursuing careers in sports.

Furthermore, a pandemic such as Covid-19 is also problematic in matters related to obstacles faced by learners with high-functioning autism in pursuing careers in schools, according to [Kreysa et al. \(2022\)](#), [Fong et al. \(2021\)](#), [Tohidast et al. \(2020\)](#). For instance, due to the lockdown, learners with HFA were prevented from attending physical career classes meant to give them access to identifying obstacles to sporting careers and strategies that eliminate them from pursuing careers in various sporting fields. Likewise, a study by [Pillai et al. \(2021\)](#) cites the absence of parental support as another barrier to learners with HFA pursuing various careers. In the absence of parental career support through career socialisation and interactions with high-functioning autism learners, it may prove difficult for them to access career information that might help them to eradicate barriers to aspirations to pursue careers in sports.

Several socio-economic challenges that might be faced by parents in families in terms of financial difficulties, social exclusion, limited access to basic services and the stress of raising a learner with HFA, might all contribute to the difficulties learners with HFA might face in their attempt to pursue careers in sports. For instance, if family members, including single parents, are unemployed ([Pillai et al., 2021](#)), it may be difficult for them to raise tuition fees and also to purchase other school necessities for learners with HFA to attend school. At school, these learners are likely to share career information with teachers and other learners aimed at enabling them to address barriers to their efforts to pursue careers in sports.

Strategies To Eradicate Obstacles Attempts to Pursue Sporting Careers

This study's rationale is to make stakeholders, especially those from special schools, aware of the obstacles learners with HFA face when pursuing sports careers. In line with the above view, the idea is that if hurdles preventing learners from pursuing sports careers are known, it might be easier to find strategies to overcome them. In order to overcome obstacles faced by learners with HFA in pursuing careers in sports, we propose contextual strategies derived from the bio-ecological theory. According to this theory, stakeholders should work collaboratively to achieve positive outcomes ([Bronfenbrenner, 1979](#); [Bronfenbrenner & Ceci, 1994](#)).

The above views resonate from the fact that teachers, parents, therapists, and nurses alone, may not be able to identify problems encountered by learners with HFA. Nevertheless, if all stakeholders work together, they might be able to develop contextual strategies to overcome obstacles faced by learners with HFA when pursuing careers in sports. In this study, we explored strategies for overcoming obstacles experienced by learners with HFA in pursuing careers in sports at a special school in Johannesburg. In the United States, [Clark & Parette \(2002\)](#) and [Ramirez et al. \(2009\)](#) found that career mentoring may help learners with disabilities overcome obstacles in pursuing careers in various sports. Those who mentor people with specific learning disabilities might often provide information about how to deal with obstacles in their sports careers. According to [Jaarsma et al. \(2015\)](#), adequate career resources play a key role in supporting learners to eradicate barriers to pursuing sporting careers. In pursuing careers in sports, learners with HFA benefit from the presence of tablets, laptops, and books for sports that provide them with the information they need.

Additionally, findings in a study by [Cheong & Yahya \(2013\)](#) indicate that implementing well-trained teachers in sports in schools, is an effective strategy for helping learners with disabilities overcome the challenges they encounter in sports. It is expected that well-trained sports teachers have adequate skills and knowledge to help learners with HFA academically and practically in pursuit of sports careers. In contrast to the studies above, the present one examined obstacles experienced by learners with HFA. A study in the UK by [Ferrara et al. \(2015\)](#) also identified the media as an excellent strategy for supporting learners with disabilities to participate in sports. Considering

the above, the media that reports positively on learners with disabilities' abilities and talents might serve as a good platform to help remove barriers in learners with HFA's attempts to pursue sports careers.

In the context of South Africa, studies by [Pillai et al., \(2021\)](#); [Pillay et al. \(2024\)](#) report parental involvement as a significant strategy that can be used to eradicate obstacles encountered by learners with HFA in sports. This might mean that parents who support learners at home by purchasing career resources such as tablets, computers, smartphones and iPads, would play their roles in supporting learners in dealing with barriers to pursue sporting careers. This might be so because, with these resources at hand, learners with HFA are likely to have access to sporting information aimed at eradicating obstacles they might be facing in their attempt to pursue sporting careers.

Also, a collaborative approach involving several stakeholders in the sporting sector is crucial in helping learners overcome obstacles to achieving the sporting careers they aspire to pursue, as was shown by [Broomfield et al. \(2023\)](#), [Crippen & Hart Barnett \(2014\)](#), [Jennings & O'Halloran \(2021\)](#), [Rofiah et al. \(2021\)](#) and [Houlihan \(2010\)](#). It may be that when many people from various sporting fields meet, they may share important information about how to support learners with HFA best. They must address any barriers to pursuing sports careers across several fields. Many might offer bursaries and scholarships to learners with HFA to help them further their education concerning sports, including how to remove obstacles in various sports fields. Despite the findings above being significant, the present study is unique in that it focuses on obstacles faced by learners with HFA at an urban special school in Johannesburg.

METHODS

Research Design and Participants

This research used a qualitative research methodology informed by a case study design. In this research, eighteen participants were selected using purposive sampling. The participants consisted of six teachers of mixed gender who teach learners with HFA, six parents of learners with HFA, and six learners with HFA at a special school in Johannesburg. We engaged six learners (14- to 19-year-olds) in career collages and facilitated face-to-face focus groups to generate data.

Research Context

The study was conducted at a special school in Braamfontein, Johannesburg, which is close to the Johannesburg Central Business District (CBD), in the Johannesburg East Educational District in the Gauteng Province. It is a public combined day school catering to learners with HFA. The school has a learner population of 350 and a staff complement of 48 class teachers and 48 class assistants. About ten of these learners are girls, while the remainder are boys. The school has 48 classes which are in the Early Childhood Development (ECD) Phase (3-5years), Foundation Phase (6-10 years), Middle Phase (11-15 years), Senior Phase (16-17 years) and the Vocational Phase (17-21years). The ECD Phase learners are a mixed ability class; in the other phases, learners are categorized as either Low- or High support learner classes. Low-support learners are generally steady and calm, while High support learners are unsteady and anxious. The school also has a social worker, a nurse, three occupational therapists and three speech therapists. It is in this context that the study explored obstacles experienced by learners with HFA and strategies that can be used to eradicate obstacles they encounter in attempting to pursue sporting careers.

Research Processes

Before undertaking this study, we obtained ethics clearance from the University's Ethics Committee, the Gauteng Department of Education, the District Director and the principal of the special school where the study was conducted. A selection of participants followed this through an

invitation to voluntarily participate after explaining the purpose of the study. The selection of participants was followed by a meeting with participants, where interview dates and venues were discussed and agreed upon between participants and the researchers. In the next stage, we issued information sheets, consent forms, assent forms and interview schedules to participants for preparation. The next stage was the data collection phase, where we gathered data by interviewing teachers and parents and further engaged learners in career collage activities and focus group discussions. This was followed by analyzing data where we transcribed, coded, categorized, created and named emerging themes. The literature reviewed, and the theoretical tenets presented herein also discussed the themes.

Ethical Considerations

Ethics emphasise the need for participants to be protected from any harm during the study ([Cresswell, 2018](#)). Participants must be protected from harm when they are involved in a study. In this study, we embarked on the ethical principles of informed consent, confidentiality and privacy, protection from harm and voluntary participation. For informed consent, participants were invited to voluntarily participate in the study after being given information about the purposes of the study. In order to ensure privacy and confidentiality, we ensured that participants' identities were not made known to other people in that their real names were not used in the data presentation to protect their identities. The ethical principle of protection from harm entails that participants must not be exposed to any form of harm during the study process ([Galer, 2018](#)). Thus, we avoided asking participants questions that could offend them during fieldwork. For voluntary participation, we allowed participants to choose to take part or withdraw from the study at any point without a penalty. These are the ethical considerations foregrounded in this study.

Trustworthiness

The study focused on the four trustworthiness components: conformability, credibility, transferability, and dependability. As a trustworthiness principle, credibility describes how researchers interact with participants when gathering data ([Bazeley, 2013](#); [Cresswell, 2018](#)). The study was designed to ensure credibility by using semi-structured interviews, focus groups, art-based career collages and document analysis to gather information about obstacles experienced by learners with HFA in their efforts to pursue careers in sports. Credibility was assured through multiple sources, which is also known as triangulation, according to [Cresswell \(2018\)](#). In contrast, transferability is a process by which results can be applied to new contexts and stakeholder groups, according to [Sefotho & Onyishi \(2021\)](#). In order to facilitate transferability in this study, we chose to publish this study's findings online so that other stakeholders can access them.

The study was posted in the university library repository for other students, staff, and external patrons to access. The results of the study are also available to participants upon request. As the dependability principle requires, we described in detail all the processes undertaken in the current study. Finally, confirmability implies that findings and interpretation of data are not reflective of the researcher's views but rather of the participants ([Cresswell, 2018](#)). Following verbatim transcription, we sent transcripts back to participants to ensure confirmability. As a result, we allowed them to check and confirm that what was captured in the transcripts reflected what they said during the data collection process. As soon as all participants had checked, confirmed, and returned the transcripts, we began thematic analysis.

RESULTS AND DISCUSSION

Results

Data analysed thematically through inductive coding, resulting in two themes: Obstacles experienced by learners with HFA in pursuing careers in sports and strategies to eradicate obstacles experienced by learners with HFA in pursuing sporting careers.

Theme 1: Obstacles Experienced by Learners with High-Functioning Autism in Pursuing Careers in Sports

As a result of an inductive coding process, the major theme that emerged from analyzing the data thematically was, obstacles experienced by learners with HFA in pursuing careers in sports at a South African special school in Johannesburg, cross multiple contexts, as highlighted by six teachers, six parents and six learners with HFA. Several sub-themes were generated from this theme, including home obstacles to sporting careers, school obstacles to sporting careers, Covid-19-related obstacles to efforts to pursue sporting careers and personal obstacles to attempts to pursue sporting careers.

Sub-theme 1: Home Obstacles to Sporting Careers

Participants indicated that learners with HFA experience multiple obstacles within the home setting that impede their ability to pursue careers in sports. Examples include discrimination, a lack of career resources, a lack of parental involvement and socio-economic challenges. The above views are captured in the following verbatim excerpts, presented in italics:

Teacher Participant 3: "...I think starting with the parents, if I am not mistaken, I heard there was a parent who was locking a child in a room. So, if people recognize that we see the person and then the disability later, then schools, even the department, do not recognize autism as much as other disabilities are recognized, let me go to the sports department, and they do not also recognize it as much as they recognize other disabilities. Recently, I have been seeking a donation for our cricket team for our school. Each time I go to the cricket website, I am realizing for other disabilities, they are just doing deaf, visual impairment and intellectual challenges, yet, sports can be a career for learners with autism..."

Teacher Participant 5: "...So, we used to put them aside, we used not to take them to school because we thought this is not a normal child, there is nothing that they can do; we had to dress them up and feed them and only to find out that this child can read. I believe that even now, there are kids who are still at home because people say I do not want people to see my child. They will hate my child, discriminate against my child, hide them in the house, and get helpers to look after them..."

Parent Participant 5: Some of the people, tell their kids do not play with that kid he is crazy or she is crazy, that is what they do. Even older people treat kids with autism as if they are crazy. Teacher Participant 6: "...Socio-economic factors can determine what the child becomes exposed to and can also be respecting what the parents can do for their children. Cultural factors, I think these go together with socio-economic factors..."

Sub-theme 2: School Obstacles to Sporting Careers

According to the findings of this study, South African learners with HFA experience obstacles in their efforts to pursue sporting careers within the school setting. As an example, teachers, learners and parents reported a lack of resources, including tablets, iPads and computers, as well as facilities, such as playgrounds and swimming pools, as well as an insufficient number of sports activities and a lack of training on specific learning disabilities on the teachers' part as major obstacles to career advancement in sport among learners with HFA at an urban special school in Johannesburg. The following excerpts present these views:

Teacher Participant 1: "...Even soccer grounds we do not have. Some learners are just sitting, because we do not have facilities like sports grounds, like swimming pools, we cannot go anywhere for swimming. It is a challenge for the principal. We are not doing sports within the school premises..."

Parent Participant 4: "...I can say no, because here at school, as we speak, we do not have any computers. We do not even have tablets that he uses at home here at school. So, firstly, we do not have computers, we do not have tablets, we do not have even network to connect even for the child to go to internet. So, it is difficult for them because they are doing different things at school from what he likes. We do not have any sports here at school. So, I think we are facing difficulties because we do not have anything to keep our kids busy careers..."

Teacher Participant1: "...Lack of proper training; if educators are not well-trained to help learners, they will never be able to help learners towards their career goals. We know a high need for teachers, as long as teachers are not trained on special needs, we may have the documents, but the actual work must be done..."

Parent Participant 2: "...There are no colleges for autistic kids, so, what they have done here at a special school for learners with autism in Johannesburg, at 21, what do you do, nothing? Parent Participant 4: We do not have any sports here at school. So, I think we are facing difficulties because we do not have anything to keep our kids busy..."

Teacher Participant 2: "...Our parents lack that kind of motivation..."

Learner Participant E: "...They [Parents and Teachers] did not say anything about my future career..."

Our findings show that learners with HFA face multiple obstacles in pursuing sporting careers within the school context.

Sub-theme 3: Covid-19-Related Obstacles to Efforts to Pursue Sporting Careers

The sub-theme highlights obstacles that learners with HFA face in pursuing sporting careers at a special school setting in Johannesburg due to the Covid-19 pandemic. Physical school lessons and career programmes were postponed during the lockdown to curb the spread of the Covid-19 pandemic in schools and society. As a result, some participants felt that such a situation limited the

ability to expose learners with specific learning disabilities to multiple sporting careers that might have interested them. Following are excerpts that confirm the above views:

Teacher Participant 1: "...Since the lockdown, things have been at a standstill and up to now, we are waiting to continue from where we left off before lockdown. For instance, we used to take learners shopping, but we no longer do that for reasons that I cannot expose or say. Children going to Biltong Factory, children going for sports..."

Parent Participant 2: "...I would not say much, because of Corona; a lot of things have been back warded. So even if you want to do something, now it is lacking, if it is not due to the Corona, we were not going to do this. It is not same as before. Learner Participant D: But sometimes when there was no Corona, they played in stadium like fans like to support people, but since Corona came, that is why they would like; they play at home, like not in the stadium but at home..."

Sub-theme 4: Personal Obstacles to Efforts to Pursue Sporting Careers

Parent and teacher participants agreed that ASD prevents learners from reaching their career goals. Participants in this study believe the above deficits make it difficult to interact and socialise with teachers and other stakeholders in sporting career selection and development processes. Following are excerpts that illustrate the above points:

Parent Participant 4: "...It is a developmental disorder that affects the spectrum of the child and the development..."

Teacher Participant 3: "...Problematic behavior or repetitive behaviors, and these autistic learners want to stick to one thing..."

Parent Participant 4: "...Communication, it is very difficult for them, even to make friends, so in the workplace, you need to be friendly. So it takes time to understand them and to get it. It affects them to get more chances of jobs. In some of the jobs, you need to be friendly with people, then they find it difficult..."

Theme 2: Strategies to Eradicate Obstacles Experienced by Learners with HFA in their Efforts to Pursue Careers in Sports

According to this study's findings, barriers to pursuing careers in sports among learners with HFA are eradicated in several ways at an urban special school in Johannesburg. In this study, participants said the partnership among different stakeholders helps to address obstacles experienced by learners with HFA in sports. It was found that stakeholders include company owners, teachers, parents, and therapists. Participants agreed that when various stakeholders meet, this allows them to share information on how each can contribute to eradicating obstacles in sporting careers among learners with HFA. Among the stakeholders involved, the findings of this study indicated that company owners are responsible for offering internships and work experiences to learners with HFA to help them pursue their sporting careers.

Similarly, career mentors of different types share their skills and expertise in various settings with learners with HFA. On the other hand, teachers and parents must work collaboratively with outside stakeholders to find ways to eradicate sporting obstacles for learners with HFA in sports. These views are captured in the following excerpts:

Teacher Participant 1: "...Before, Lockdown, we used to take learners, for instance, to places such as sheltered employment where many disabled people go. It is a center where they do much work like plugs, nuts and bolts; they screw and package. A place like Biltong Factory where they go and package Biltong. Sci-bono. So as a teacher involved with learners with autism, I work with what they already know, what they really show interest in and enhance their skill along their skill along that path..."

"...At the present moment, what I do with the HoD (Head of Department) and the principal we agreed that we will be, will be getting intensive training in different types of skills like pottery, beading, I can't remember the others, but, at the end of the year, we will be getting training so that we can impart the knowledge to the learners in preparation when they leave school, they will be able to make a living for themselves. It was the very first time, and he is the first child. What happened is, together with the Head of the Department, he got an internship in Roodepoort. The parent was surprised how the child was taken to the racing cars, have a feel. The sheltered employment is a center for all disabled people with different disabilities go sometimes, some of them go there daily from morning up to until 2 o'clock and then some of them up until 4 o'clock, and then that is how they earn a living. They do not look them differently, so when we get there with our learners, they sit there and do the task, and they come back to school for the day. The same as Biltong Factory..."

Parent Participant 1: "...They can maybe, they are willing to sponsor our kids or maybe, put them in schools or if they have someone who is willing to work with our kids because our kids are not just kids, they are special. So, it will take time for such companies to work with our kids because they don't understand them. Or they need someone to explain to them this and that..."

Parent Participant 2: "...You know, teacher to be honesty with you, there are many things that can really do that, neh! You still have to tell the kids. Firstly, people need to know about autism. You understand, so that, whatever programme you are taking them to whatever, the theatre, you still have to teach them about autism. That's when they can understand that these kids need to be around us, and they can do this. You understand because it's not useful to take a child to a place. Okay! There are theatres– there are theatres to do such things. But now, when you get there to the theatre, this person you communicate with doesn't know what kind of a person you are. So, first of all, understand what autism is so that when you go to the theatre, they are not here to make funny or whatsoever. I also need to learn and do this. So, that's the main thing so that you can learn..."

Discussion

Obstacles Experienced by Learners with HFA in Pursuing Careers in Sports

According to the study, learners with HFA face many obstacles to pursuing careers in sports because of a lack of career resources, parental involvement, and discrimination in the home setting. As an example, a lack of career resources and facilities within the home setting limits the participation of learners with HFA in a variety of sporting fields. Without career resources and facilities, such as computers, tablets, iPads, toy bicycles, motorcycles, and swimming pools, these learners cannot access information about careers in sporting fields that they might be interested in. Furthermore, learners with HFA may experience obstacles in pursuing sporting careers if they do not have career resources such as bicycles, tricycles, or swimming pools at home. In fact, without utilizing these resources in real-life situations, it may be challenging for these learners to eradicate obstacles encountered in different sporting activities.

In support of the above views, [Corkum et al. \(2014\)](#), [Pillai et al. \(2021\)](#) and [Pillay et al. \(2024\)](#) also discovered that the scarcity of career resources and facilities in the home setting impedes learners with HFA from pursuing sporting careers in different sporting fields. In support of the above views, we also testify from our experience working with learners with HFA at the special school that was utilised as a study location that teachers, parents and learners struggle to eradicate sporting obstacles among learners with HFA due to the limited availability of career resources and facilities. Based on the above findings, we encourage parents and guardians to provide all the necessary resources and facilities in the home setting to assist learners to address obstacles they experience in their efforts to pursue careers in sports.

Furthermore, the negative views by parents and other stakeholders about learners with HFA in pursuing sporting careers make learners with HFA experience obstacles to their sporting careers. Parents of learners with HFA may not view these learners as deserving of the opportunity to pursue careers in various sporting fields as part of the school curriculum or as a life-long career when they graduate from school. As a result of the above perspective, it might not be possible for such parents to sit down with such learners and discuss obstacles they might encounter in pursuing sporting careers and share further important information on how to eradicate such obstacles.

[Pillai et al. \(2021\)](#) and [Pisula & Porebowicz-Dorsmann \(2017\)](#) also share the above perspectives by also noting that negative perspectives concerning learners with HFA by parents and other stakeholders in matters related to their education and career development, and efforts to eradicate sporting career obstacles make it impossible for these learners to make efforts to pursue sporting careers. In support of the above views, as we saw it from our perspectives, the lack of interaction and socialisation between parents and learners with HFA limits these learners' ability to eradicate obstacles faced in pursuing careers in sports within the home setting. Because parents may provide all the information about learners with HFA, their absence from career aspirations could adversely affect these learners' efforts to pursue careers in sports.

The discrimination learners with HFA encounter at home further hinders their ability to pursue careers in different sporting fields. As a result of their disabilities, these learners may be locked in houses when their parents and guardians leave for work or may be kept in their homes on the assumption that they are not worthy of exposure to the public. They may likely experience barriers to their sporting careers when interacting and socializing with other peers and adults concerning eradicating barriers within their immediate environment. Parents may forget that learners with HFA's efforts to pursue careers in sports are hampered by their exclusion from inclusive career networking and socialization activities with their peers in various areas of society. For example, a learner with HFA who is not allowed to go outdoors and play soccer, netball, cricket, or swim with other learners might have difficulty determining his or her future sporting careers and ways to eradicate obstacles

experienced in various sporting fields. The above views are shared by [Bolte \(2021\)](#), [Griffiths et al. \(2016\)](#), [Hopp \(2022\)](#), [Pillai et al. \(2021\)](#), and [Tucker & Schwartz \(2013\)](#), who also discovered that discrimination affects learners in all facets of their lives including in matters related to eradication obstacles to sporting careers. As a result of our personal experience, we also found that discrimination hinders learners with HFA from pursuing careers in sports.

In the school setting, just as at home, learners with HFA also face obstacles that inhibit their efforts to pursue careers in sports. As a result of the scarcity of career resources and facilities in schools, such as computers, tablets, iPads, swimming pools, and other sporting grounds, these learners experience challenges in their attempts to pursue careers in sports. Without these career resources, learners with HFA are denied an opportunity to learn about sporting careers. Due to a lack of career facilities such as swimming pools and other sporting activities within the school setting, learners with HFA might not have an opportunity to partake in various sporting activities designed to help eradicate obstacles experienced in sporting fields. The above perspectives are shared by [Corkum et al. \(2014\)](#) and [Pillay et al. \(2024\)](#), who also note that the absence of career resources and facilities in career settings where learners with HFA are placed for participation in sporting activities results in obstacles faced in different sporting fields. Based on our experience working with learners with HFA at a special school in Johannesburg, we also learned that without career resources and facilities, learners with HFA might have trouble accessing career information aimed to make them address obstacles they might be experiencing in their attempt to pursue careers in the field of sports.

The lack of training on the part of teachers in teaching and training learners with HFA, particularly in finding ways to remove barriers experienced in sporting activities, also hampers such learners' participation in various sporting activities. The absence of this trained personnel in schools would mean that untrained teachers or other staff members might coordinate all the sporting activities without specialised training in various sporting fields. The above finding is also shared in the findings in studies published by [Crippen & Hart Barnett \(2014\)](#), [Corkum et al. \(2014\)](#) and [Hedges et al. \(2014\)](#) that also discovered a lack of specialised teachers in the area of HFA sports training. In our opinion, we also have a strong perspective that teachers who lack specialised knowledge and skills in HFA, in turn, might make it difficult to support learners with HFA with crucial information on how to eradicate obstacles experienced in sporting activities within the school setting.

Furthermore, bad school structures, especially those in a block of flats, have been implicated as causing learners with HFA to encounter obstacles in pursuing sporting careers. Due to the location of such schools, they may be unable to set up specialised career facilities and equipment that may be crucial to making learners with HFA participate in sporting activities aimed at finding ways to remove obstacles experienced in sporting activities. Due to a lack of space, teachers, parents and other stakeholders might be unable to provide relevant sporting facilities and equipment to introduce these learners to diverse sporting careers.

As a result of a lack of career facilities and equipment within schools, learners with HFA might not be exposed to various sporting activities such as soccer, netball, cricket, or rugby as their future careers. [Laitila \(2018\)](#) also shares the above views in claiming that special schools are scarce in the South African special education context, particularly for learners with HFA. As we have experienced, the lack of space in schools with poorly planned structures due to the lack of proper special schools for learners with ASD in South Africa, adversely impacts efforts to pursue sporting careers among learners with HFA. Our perspectives are based on the belief that without space, teachers might encounter challenges encouraging learners to engage in various sporting activities that they can develop into their future careers. In our opinion, it is the responsibility of parents through the Department of Education to build schools with the appropriate facilities and equipment for learners

with specific learning disabilities. These kinds of schools might introduce learners with HFA to various sporting careers they might choose as their future careers.

In addition, the lack of parental involvement in matters about learners with HFA's sporting careers is detrimental to these learners' sporting careers. Parents who do not visit their children with HFA's schools and do not have time to sit with the children's teachers concerning ways to eradicate barriers to sporting activities, are also sources of obstacles experienced by these learners in pursuing sporting activities. Without consultation with teachers and parents, it might be difficult for teachers and parents to share information regarding how parents can support learners at home or how teachers can assist learners with HFA at school. The above perspectives are also shared by [Pillai et al. \(2021\)](#). Additionally, [Pillay et al. \(2024\)](#) also note that parental inaction to finding ways to eradicate obstacles in sporting activities impedes such learners' efforts to pursue careers in sports. In our perspective, we support the above view because our experience working with learners with HFA at a special school in Johannesburg has demonstrated to us that parents do not participate as much as they should in matters related to learners with HFA's sporting matters, thereby making it difficult for learners with HFA to participate in a variety of sporting activities.

Our findings indicated that the Covid-19 pandemic also hindered learners with HFA's efforts to pursue careers in sports, particularly the lockdown imposed by governments to curb the spread of the Covid-19 virus. As a result of this lockdown, learners with HFA could not attend physical sporting lessons in class with their teachers, and yet it was only through face-to-face encounters with their teachers that they could be exposed to multiple sporting careers that they might have selected for their future careers. The findings above are also supported by [Fong et al. \(2021\)](#), [Kreysa et al. \(2022\)](#) and [Tohidast et al. \(2020\)](#), who also captured that the lockdown that was necessitated by the Covid-19 pandemic, affected how educational programmes were conducted in schools. This includes how learners with HFA could not attend face-to-face sporting career lessons with their teachers and other peers. Using our experience, we discovered that a school setting without face-to-face career interaction makes it difficult to support learners with HFA in finding obstacles they might be experiencing in their attempt to pursue sporting careers. As their parents might also not have had specialised career resources at home, it could have been challenging for them to support such learners at home in finding ways to eradicate obstacles experienced in sporting careers.

Among learners with HFA, personal obstacles such as communication deficits, social deficits, interactional deficits, behavioural deficits and sensory issues can trigger obstacles to their efforts to pursue careers in sports. In our experience working with learners with HFA at a special school in Johannesburg that was used as this study's site, we learned that learners with HFA who lack communication, social and interaction skills find it difficult to participate in inclusive sporting careers. Our experience working with learners with HFA has also taught us that deficits in communication, interaction, social behaviour all make learners with HFA experience obstacles in their efforts to pursue careers in sports.

The absence of communication, social and interactional skills might mean that such learners are likely to miss a lot of important information aimed at making them eradicate obstacles experienced in sporting careers. Likewise, behavioural deficits are likely to make it impossible for these learners with HFA to sit with others and find ways to eradicate obstacles encountered in sporting activities. The above views are shared in studies by [Aubineau & Blicharska \(2020\)](#), [Hilton et al. \(2008\)](#), [Hou et al. \(2023\)](#), [Miranda et al. \(2019\)](#), [Silveira-Zaldivar & Curtis \(2019\)](#) and [Szidom et al., \(2015\)](#) that also debunk that lack of skills affects learners with HFA in all schooling activities including in sports. Additionally, based on our experience working with learners with HFA, we noted that the behavioural deficits experienced by learners with HFA also contribute to obstacles they experience with HFA in sports. For instance, learners who are hyperactive or bullies might not be able to

participate in sporting activities aimed at eradicating obstacles that they might experience in their attempt to pursue sporting activities.

Strategies to Eradicate Obstacles Experienced by Learners with HFA in their Efforts to Pursue Careers in Sports

According to this study, a collaborative approach of many stakeholders is crucial to eliminating obstacles faced by learners with HFA in their attempt to pursue careers in sports. A teamwork approach entails engaging various stakeholders in matters related to eradicating obstacles experienced by learners with HFA. This approach might also help all stakeholders sit together and share information about strategies to eradicate obstacles among learners with HFA in their aim to pursue careers in sports. In particular, each member of the team approach plays an important role in removing barriers experienced by learners with HFA. The above views also link to findings in studies by [Broomfield et al. \(2023\)](#), [Crippen & Hart Barnett, \(2014\)](#), [Jennings & O'Halloran \(2021\)](#), [Rofiah et al. \(2021\)](#) and [Houlihan \(2010\)](#), who also captured that a partnership among different stakeholders helps address obstacles encountered by learners with HFA in pursuing careers in sports.

Also, the internship or work experience provided by company owners is a good career strategy to eradicating obstacles learners face in pursuing sporting careers. There is a connection between these findings and findings from studies by [Lee & Carter \(2012\)](#) that also captured that learners acquire career skills when engaged in various on-the-job activities under the supervision of career mentors. Though the above authors did not elaborate on how these deficits might eradicate obstacles experienced by learners with HFA in sporting activities, our observations suggest that work experience allows learners with HFA to eradicate challenges encountered in sporting activities by making them engage in real-life sporting work at natural workplaces.

Parental support is one of the major strategies that can be used to make learners with HFA eradicate challenges they might experience in sports in the home context. For example, parents who have time to sit with learners with HFA and share crucial information about removing barriers encountered in sporting activities are seen as caring parents. These parents can also buy career resources related to sports at home that learners with HFA can use. These parents can also liaise with sporting experts and send learners with specific learning disabilities to tap for additional information on addressing obstacles faced by learners with HFA in various sporting fields. The above also links to findings in studies by [Pillai et al. \(2021\)](#) that also captured that parents play a significant role in supporting learners in their schooling. This might include supporting them with information on eradicating barriers to sporting activities. Our experience working with learners with HFA has revealed that parental support plays a major role in eradicating obstacles to sporting careers, particularly when parents pay tuition fees for learners with HFA to attend sporting lessons at school daily.

Furthermore, providing career resources and facilities significantly removes barriers to experienced learners with HFA at a special school in Johannesburg. On the one hand, sporting resources such as tablets, computers, smartphones, career books and iPads help learners with HFA access information about how to eradicate obstacles to their attempts to pursue careers in various sporting fields. On the other hand, providing facilities such as swimming pools, soccer, netball, cricket, rugby and basketball grounds and equipment such as balls, nets, and whistles helps learners with HFA participate in different sporting activities aimed at removing barriers experienced by these learners. The above can be made possible by engaging learners with HFA in various sporting activities. The above is supported by [Corkum et al. \(2014\)](#), who also found that the availability of career resources supports learners in eradicating obstacles they might face in their attempt to pursue sporting careers.

Our experience working with HFA also shows that the availability of facilities and equipment also plays a major role in facilitating ways to eradicate barriers experienced by learners with HFA.

Providing sporting activities in schools also significantly addresses barriers experienced by learners with HFA. As an example, the presence of a variety of sporting activities in schools presents learners with HFA with a chance to select which sporting activities to participate in, as a means of attempting to eradicate obstacles they might experience in a variety of careers in the sporting sector. The above views are similar to findings in a study by [J. Vosloo & du Toit \(2023\)](#)), which also discovered that various sporting activities in schools allow learners to participate in different sporting activities. Based on our experience working with HFA, we noted that when multiple sports are provided in schools, learners with HFA can participate in different sports aimed at eradicating barriers experienced in sports through their participation.

Implications

In light of the findings of this study, policymakers, researchers, and other stakeholders can develop a comprehensive understanding of effective strategies to overcome obstacles faced by learners with HFA in South Africa. Based on the findings of this study, it is suggested that schools adapt sporting curriculums to meet the sporting needs of learners with HFA to determine how to overcome barriers that learners with HFA may encounter when pursuing sporting careers in special schools.

Limitations and Suggestions for Future Research

While conducting this study at a special school in Johannesburg for learners with autism, some limitations were noticed. We discovered that the Covid-19 limitations made it difficult for learners to pursue sports careers, especially since face-to-face academic and practical instruction was suspended. During semi-structured interviews with six teachers, our recording machine broke down and became completely unusable. This resulted in the loss of recorded data with four other purposely sampled teachers. The outcome was that the data collection sessions had to be postponed since we had to purchase another recording device. In light of the limitations of this study, future researchers may cover a wider range of schools and include more learners with HFA. In this way, we can better understand the barriers learners with HFA encounter when pursuing sports careers. Fieldwork should always be conducted using multiple devices to ensure the recorded data are available in case one device malfunctions.

Recommendations

The study makes recommendations for further research. Based on the findings of this study, further research is needed to determine what obstacles learners with HFA may face in South African special schools and the strategies that can be used to address them. Using the findings of this study, the Department of Basic Education ought to ensure that teachers have adequate training on identifying and addressing barriers faced by learners with HFA. This study recommends implementing an inclusion policy that will make it mandatory for learners with HFA, in special schools, to participate in all-inclusive sporting activities without being discriminated against.

CONCLUSION

The study found that learners with HFA encounter multiple obstacles in the South African special school perspective, including home, school, Covid-19 and personal-related obstacles.

However, in order to overcome these obstacles, the study concludes that there is need to put in place numerous strategies which are inclusive of the participation of parents, teachers, provision of career resources and facilities, provision of sports in schools, construction of proper school infrastructure and partnerships between schools and other internal and external stakeholders.

AKNOWLEDGMENT

The author would like to express gratitude to all those who have supported and contributed to the creation of this article.

REFERENCES

- Adamson, S., Doherty, N., & Viney, C. (1998). The Meanings of Career Revisited: Implications for Theory and Practice. *British Journal of Management*, 9, 251–259. <https://doi.org/10.1111/1467-8551.00096>
- Aubineau, M., & Blicharska, T. (2020). High-Functioning Autistic Students Speak About Their Experience of Inclusion in Mainstream Secondary Schools. *School Mental Health*, 12(3), 537–555. <https://doi.org/10.1007/s12310-020-09364-z>
- Ayvazoglu, N. R., Kozub, F. M., Butera, G., & Murray, M. J. (2015). Determinants and challenges in physical activity participation in families with children with high functioning autism spectrum disorders from a family systems perspective. *Res Dev Disabil*, 47, 93–105. <https://doi.org/10.1016/j.ridd.2015.08.015>
- Bazeley, P. (2013). *Qualitative Data Analysis: Practical Strategies*. Sage Publications. [Google Scholar](#)
- Bolte, S. (2021). "We believe in good jobs, fair jobs, dignifying jobs that give you a good sense of identity": Career and job guidance counseling in autism. *Autism*, 25(4), 857–861. <https://doi.org/10.1177/1362361321990325>
- Bricout, V. A., Pace, M., Dumortier, L., Miganeh, S., Mahistre, Y., & Guinot, M. (2019). Motor Capacities in Boys with High Functioning Autism: Which Evaluations to Choose? *J Clin Med*, 8(10), 1521. <https://doi.org/10.3390/jcm8101521>
- Bronfenbrenner, U. (1979). *The Ecological Human Development: Experiments in nature and design*. Harvard University Press. [Google Scholar](#)
- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualised in developmental perspective: A bioecological model. *Psychological Review*, 101(4), 568–586. <https://doi.org/10.1037/0033-295X.101.4.56>
- Bronfenbrenner, U., & Morris, P. A. (2006). The Bioecological Model of Human Development. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793–828). Wiley. [Google Scholar](#)
- Broomfield, K., Sage, K., Jones, G. L., Judge, S., & James, D. (2023). The Unspoken Voice: Applying John Shotter's Dialogic Lens to Qualitative Data from People Who have Communication Difficulties. *Qual Health Res*, 33(1-2), 3–12. <https://doi.org/10.1177/10497323221139803>
- Cheng, M., Chen, L., & Yuen, A. H. (2022). Exploring the use of technology among newly arrived children in Hong Kong: from an e-sports and cultural capital perspective. *Educational Technology Research and*, 19. <https://doi.org/10.1007/s11423-022-10130-y>
- Cheong, L. S., & Yahya, S. Z. S. (2013). Effective Transitional Plan from Secondary Education to Employment for Individuals with Learning Disabilities, A Case Study. *Journal of Education and Learning*, 2(1), 104–117. <https://doi.org/10.5539/jel.v2ip104>
- Clark, M. D., & Parette, P. (2002). Student Athletes with Learning Disabilities: A Model for Effective Supports. *College Student Journal*, 36(1), 47. [Google Scholar](#)

- Corkum, P., Bryson, S. E., Smith, I. M., Giffin, C., Hume, K., & Power, A. (2014). Professional Development Needs for Educators Working with Children with Autism Spectrum Disorders in Inclusive School Environments. *Exceptionality Education International*, 24(1), 33–47. <https://doi.org/10.5206/eei.v24i1.7709>
- Cresswell, J. W. (2018). *Qualitative Inquiry and Research Design: Choosing among Five Approaches* (4th ed.). Sage Publications Inc. [Google Scholar](#)
- Crippen, R., & Hart Barnett, J. E. (2014). Eight Steps to School-Based Employment Training for Adolescents with Autism Spectrum Disorder and Intellectual Disability. *Physical Disabilities: Education and Related Services*, 33(2), 1-15. <https://doi.org/10.14434/pders.v33i2.5186>
- Ferrara, K., Burns, J., & Mills, H. (2015). Public attitudes toward people with intellectual disabilities after viewing Olympic or Paralympic performance. *Adapt Phys Activ Q*, 32(1), 19-33. <https://doi.org/10.1123/apaq.2014-0136>
- Fong, M. W., Leung, N. H. L., Cowling, B. J., & Wu, P. (2021). Upper Respiratory Infections in Schools and Childcare Centers Reopening after COVID-19 Dismissals, Hong Kong. *Emerg Infect Dis*, 27(5), 1525-1527. <https://doi.org/10.3201/eid2705.210277>
- Fontana, & Siriwichai, E., Prapassorn. (2022). Understanding transgender persons' careers to advance sustainable development: The case of Trans for Career Thailand. *Sustainable Development*, 30(6), 1573-1590. <https://doi.org/10.1002/sd.2329>
- Fontana, E., & Siriwichai, P. (2022). *Understanding transgender persons' careers to advance sustainable development: The case of Trans for Carer Thailand*, *Sustainable Development* (Vol. 30(6),December). John Wiley & Sons, Ltd. <https://doi.org/10.1002/sd.2329>
- Galer, D. (2018). *Working towards Equity Disability Rights Activism and employment in late twentieth-century*. University of Toronto Press. [Google Scholar](#)
- Gibb, K., Tunbridge, D., Chua, A., & Frederickson, N. (2007). Pathways to Inclusion: Moving from special school to mainstream. *Educational Psychology in Practice*, 23(2), 109-127. <https://doi.org/10.1080/02667360701320770>
- Griffiths, A. J., Giannantonio, C. M., Hurley-Hanson, A. E., & Cardinal, D. (2016). Autism in the Workplace: Assessing the transition needs of young adults with Autism Spectrum Disorder. *Journal of Business and Management*, 22(1), 5–22. [Google Scholar](#)
- Härkönen, U. (2007, 2007). *The Bronfenbrenner ecological systems theory of human development* Scientific Articles of V International Conference, <http://inaclass.co.za/wp->
- Hedges, S. H., Kirby, A. V., Sreckovic, M. A., Kucharczyk, S., Hume, K., & Pace, S. (2014). “Falling through the Cracks”: Challenges for High School Students with Autism Spectrum Disorder. *The High School Journal*, 98(1), 64-82. <https://doi.org/10.1353/hsj.2014.0014>
- Hilton, C. L., Crouch, M. C., & Israel, H. (2008). Out-of-school participation patterns in children with high-functioning autism spectrum disorders. *Am J Occup Ther*, 62(5), 554-563. <https://doi.org/10.5014/ajot.62.5.554>
- Hopp, S. A. (2022). *Towards better support for high-functioning autistic learners in a mainstream sixth form classroom* [Ph.D. Thesis, University of Glasgow]. <https://theses.gla.ac.uk/82873/>
- Hou, Y., Yan, T., & Zhang, J. (2023). The relationship between parental involvement and psychological adjustment among Chinese children with autism spectrum disorder in the transition from kindergarten to primary school: A chain-mediating model. *Front Psychol*, 14(ology,20 (14)), 1087729. <https://doi.org/10.3389/fpsyg.2023.1087729>
- Houlihan, B. (2010). *Sport and Society: A Student Introduction* (N. Thomas, Ed.). SAGE Publications. <https://doi.org/10.4135/9781446278833>

- J. Vosloo, J., & du Toit, D. (2023). Sports Participation in South African Schools. Have We Lost the Plot? In L. Wachira (Ed.), *Sport and Fitness in Children and Adolescents - A Multidimensional View*. <https://doi.org/10.5772/intechopen.106812>
- Jaarsma, E. A., Dijkstra, P. U., de Blecourt, A. C., Geertzen, J. H., & Dekker, R. (2015). Barriers and facilitators of sports in children with physical disabilities: a mixed-method study. *Disabil Rehabil*, 37(18), 1617-1623; quiz 1624-1615. <https://doi.org/10.3109/09638288.2014.972587>
- Jamieson, J. P. (2010). The Home Field Advantage in Athletics: A Meta-Analysis. *Journal of Applied Social Psychology*, 40(7), 1819-1848. <https://doi.org/10.1111/j.1559-1816.2010.00641.x>
- Jennings, F., & O'Halloran, A. (2021). A Whole School Approach to Supporting Students with Autistic Spectrum Disorders Presenting with Challenging Behavior in the Post- Primary School. *REACH: Journal of Inclusive Education in Ireland*, 28, 61–71.
- Ke, F., & Moon, J. (2018). Virtual collaborative gaming as social skills training for high-functioning autistic children. *British Journal of Educational Technology*, 49(4), 728-741. <https://doi.org/10.1111/bjet.12626>
- Kreysa, H., Schneider, D., Kowallik, A. E., Dastgheib, S. S., Dogdu, C., Kuhn, G., Ruttloff, J. M., & Schweinberger, S. R. (2022). Psychosocial and Behavioral Effects of the COVID-19 Pandemic on Children and Adolescents with Autism and Their Families: Overview of the Literature and Initial Data from a Multinational Online Survey. *Healthcare (Basel)*, 10(4), 714. <https://doi.org/10.3390/healthcare10040714>
- Laitila, N. (2018). Awareness, Acceptance & Appreciation: A Road to Changing Views on Autism in South Africa. <https://doi.org/https://urn.fi/URN:NBN:fi:amk-2018120319582>
- Lee, G. K., & Carter, E. W. (2012). Preparing Transition-Age Students with High-Functioning Autism Spectrum Disorders for Meaningful Work. *Psychology in the Schools*, 49(10), 988-1000. <https://doi.org/10.1002/pits.21651>
- McKenzie, S., & Bennett, D. (2022). Understanding the career interests of Information Technology (IT) students: a focus on choice of major and career aspirations. *Education and Information Technologies*, 27(9), 12839-12853. <https://doi.org/10.1007/s10639-022-11141-1>
- Mhlarhi, O. (2017). *Sports as an intervention in a special school when aiming to modify challenging behavior* [Masters Thesis, University of Johannesburg, South Africa]. [Google Scholar](#)
- Miranda, A., Mira, A., Berenguer, C., Rosello, B., & Baixauli, I. (2019). Parenting Stress in Mothers of Children With Autism Without Intellectual Disability. Mediation of Behavioral Problems and Coping Strategies. *Front Psychol*, 10, 464. <https://doi.org/10.3389/fpsyg.2019.00464>
- Pan, C. Y., Tsai, C. L., & Hsieh, K. W. (2011). Physical activity correlates for children with autism spectrum disorders in middle school physical education. *Res Q Exerc Sport*, 82(3), 491-498. <https://doi.org/10.1080/02701367.2011.10599782>
- Pillai, S., Makhetha, M., & Aldous, C. (2021). study reflecting the demographics and comorbidities of children diagnosed with autism spectrum disorder at initial presentation to the KwaZulu-Natal Children's Hospital. *South African Journal of Child Health*, 15(3), 125–129. <https://doi.org/10.7196/SAJCH.2021.v15.i3.1752>.
- Pillay, S., Duncan, M., & de Vries, P. J. (2024). 'We are doing damage control': Government stakeholder perspectives of educational and other services for children with autism spectrum disorder in South Africa. *Autism*, 28(1), 73-83. <https://doi.org/10.1177/13623613221142111>
- Pisula, E., & Porebowicz-Dorsmann, A. (2017). Family functioning, parenting stress and quality of life in mothers and fathers of Polish children with high functioning autism or Asperger syndrome. *PloS one*, 12(10), e0186536. <https://doi.org/10.1371/journal.pone.0186536>

- Potvin, M. C., Snider, L., Prelock, P., Kehayia, E., & Wood-Dauphinee, S. (2013). Recreational participation of children with High Functioning Autism. *J Autism Dev Disord*, 43(2), 445-457. <https://doi.org/10.1007/s10803-012-1589-6>
- Ramirez, M., Yang, J., Bourque, L., Javien, J., Kashani, S., Limbos, M. A., & Peek-Asa, C. (2009). Sports injuries to high school athletes with disabilities. *Pediatrics*, 123(2), 690-696. <https://doi.org/10.1542/peds.2008-0603>
- Reiman, L. (2008). *Sports for learners with physical disabilities in ordinary schools in the Western Cape* [Masters Thesis, University of the Western Cape]. <http://hdl.handle.net/11394/2752>
- Richardson, J., O'Neil, D. A., & Thorn, K. (2021). Exploring careers through a qualitative lens: an investigation and invitation. *Career Development International*, 27(1), 99-112. <https://doi.org/10.1108/cdi-08-2021-0197>
- Rofiah, K., Sheehy, K., Widayati, S., & Budiyo. (2021). Fun and the benefits of Sign Supported Big Books in mainstream Indonesian kindergartens. *International Journal of Early Years Education*, 31(2), 467-481. <https://doi.org/10.1080/09669760.2021.1956440>
- Ryan, T. G., & Marshall, J. (2018). Pedagogical preparedness: Understanding executive functioning and high functioning autism. *Journal of Pedagogical Research*, 2(2), 91–101. [Google Scholar](#)
- Sefotho, M. M., & Onyishi, C. N. (2021). In-school transition challenges among primary school learners with autism spectrum disorders in South Africa: Parents and teachers' perspectives. *Perspectives in Education*, 39(2), 283-302. <https://doi.org/10.18820/2519593X/pie.v39.i2.20>
- Sekererayi, C. G. (2022). Communication support for learners with autism: a case of special schools in Umlazi district, Kwazulu-Natal province. <https://hdl.handle.net/10500/29700>
- Silveira-Zaldivar, T., & Curtis, H. (2019). "I'm not trained for this!" Barriers to evidence-based social skills interventions for elementary students with high functioning autism in inclusion: social skills interventions for elementary students. *International Electronic Journal of Elementary Education*, 12(1), 53–66. <https://doi.org/https://www.iejee.com/index.php/IEJEE/article/view/964>
- Szidom, K., Ruppar, A., & Smith, L. (2015). Five Steps for developing effective transition plans for high school learners with autism spectrum disorders. *Teaching exceptional children*, 47(3), 147–152. <https://doi.org/10.1177/0040059914559780>
- Tohidast, S. A., Mansuri, B., Bagheri, R., & Azimi, H. (2020). Provision of speech-language pathology services for the treatment of speech and language disorders in children during the COVID-19 pandemic: Problems, concerns, and solutions. *Int J Pediatr Otorhinolaryngol*, 138, 110262. <https://doi.org/10.1016/j.ijporl.2020.110262>
- Tucker, V., & Schwartz, I. (2013). Parents' perspectives of collaboration with school professionals: Barriers and facilitators to successful partnerships in planning for students with ASD. *School Mental Health*, 5, 3–14. <https://doi.org/10.1007/s12310-012->
- Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and Misuses of Bronfenbrenner's Bioecological Theory of Human Development. *Journal of Family Theory & Review*, 1(4), 198-210. <https://doi.org/10.1111/j.1756-2589.2009.00026.x>
- Wegner, L., & Struthers, P. (2011). Sports for learners with physical disabilities in ordinary public primary schools in the Western Cape, South Africa. *African Journal for Physical, Health Education, Recreation and Dance*, June (Supplement), 103-112. [Google Scholar](#)