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**EXAMINING THE PHYSICAL ACTIVITY EXPERIENCES OF BLIND AND VISUALLY
IMPAIRED WOMEN**

by

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ABSTRACT

EXAMINING THE PHYSICAL ACTIVITY EXPERIENCES OF BLIND AND VISUALLY IMPAIRED WOMEN

Lindsay E. Ball
Old Dominion University, 2024
Director: Dr. Justin A. Haegele

Substantial research has indicated that blind and visually impaired adults often do not meet physical activity guidelines, and therefore, are not experiencing the numerous affordances of physical activity participation. However, those who report meeting physical activity guidelines express higher rates of health-related quality of life. Largely, the research examining the physical activity behaviors and perspectives of blind and visually impaired adults have been survey studies leaving a rich description of their physical activity experiences unexplored. The overall aim of this project was to engage with blind or visually impaired women to understand their experiences accessing and participating in physical activity, exercise, and/or sport. This dissertation was designed using a two-manuscript format. The purpose of the first study was to examine the experiences of blind and visually impaired women when attempting to access and participate in exercise, physical activity, and/or sport through an intersectional lens. An experiential qualitative research approach was utilized, and 10 blind and visually impaired women between the ages of 27-45 years served as participants. Data were collected through one-on-one audio recorded semi-structured interviews with each participant. The reflexive thematic analysis of the interview data yielded the construction of two themes, (1) ‘The female part definitely adds another layer of perceived vulnerability’: Confounding vulnerability, and (2) ‘Men are seen as strong; women are seen as bitches’: Navigating stereotypes. Findings revealed that participants were aware of others perceiving them as vulnerable, and that to avoid gendered

and abled exchanges, they adopted several practices that allowed them to feel safer in physical activity environments. Additionally, the women's physical activity experiences were clearly impacted by gender and disability stereotypes evidenced by the ways in which they navigated the disparities in expectations. The purpose of the second study was to examine the subjective feelings of belonging for blind and visually impaired women when participating in exercise, physical activity, and/or sport. To do this, an experiential qualitative research approach was used. Ten blind or visually impaired women aged 27-45 years served as participants and completed two one-on-one audio recorded semi-structured interviews. A reflexive thematic analysis approach was used to analyze the interview data where three cascading themes were constructed: (1) 'When you get there, and people welcome you': Feeling welcomed to join spaces, (2) 'Feeling like I can contribute and I'm valuable': Feeling accepted within those spaces, and (3) 'Having the opportunity to build positive relationships': Building community that extends beyond spaces. Participants described instances of belonging in physical activity spaces where they were welcomed, felt accepted and valued, and were able to develop long-lasting friendships. Though the women involved in these studies highlighted unique safety and societal stereotyping concerns, it was apparent that feelings of belonging can be fostered in physical activity places and spaces. Further intersectionality research should explore the influence of other identities among this population along with gender and disability.

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Dr. Beverly Wilson-Ball, Grammie, this is because of you. Thank you for inspiring, in the good way, my young mind, and motivating me to be the second Dr. Ball in the family. Your belief in me will never be forgotten.

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TABLE OF CONTENTS

	Page
ABSTRACT.....	ii
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS.....	viii
CHAPTER I: INTRODUCTION.....	1
STATEMENT OF PROBLEM.....	4
PURPOSE OF THE STUDIES.....	5
RESEARCH QUESTIONS	5
SIGNIFICANCE OF STUDIES	5
DELIMITATIONS	6
LIMITATIONS.....	6
DEFINITION OF TERMS	7
CHAPTER II: LITERATURE REVIEW	9
IMPORTANCE OF PHYSICAL ACTIVITY	9
PHYSICAL ACTIVITY AND VISUAL IMPAIRMENT	10
FACTORS ASSOCIATED WITH PHYSICAL ACTIVITY	12
ABLEISM.....	17
INTERSECTIONALITY	22
BELONGING	24
CHAPTER III: RESEARCH METHODS.....	27
PURPOSE AND RESEARCH QUESTION	27
RESEARCH PARADIGM, APPROACH, AND POSITIONALITY	27
CONCEPTUAL FRAMEWORK	28
PARTICIPANTS	30
DATA COLLECTION	34
DATA ANALYSIS.....	36
CHAPTER IV: STUDY MANUSCRIPTS.....	37
MANUSCRIPT I	38
ABSTRACT.....	39
INTRODUCTION	40
METHODS	44
FINDINGS.....	49
DISCUSSION.....	61
CONCLUSION.....	64
REFERENCES	65
MANUSCRIPT II.....	70
ABSTRACT.....	71

INTRODUCTION	72
METHODS	74
FINDINGS.....	80
DISCUSSION.....	91
CONCLUSION.....	94
REFERENCES	95
CHAPTER V: SUMMARY AND CONCLUSIONS	100
REFERENCES	110
APPENDICES	122
APPENDIX A.....	122
APPENDIX B.....	128
APPENDIX C	131
VITA.....	138

CHAPTER I: INTRODUCTION

Physical activity engagement has been credited with numerous mental and physical health benefits. More specifically, adults who are regularly physically active may experience improvements in sleep, bone health, balance, and coordination as well as reduced anxiety, depression, and the risk of several chronic diseases such as heart disease, obesity, and cancer (CDC, 2023). Additionally, physical activity has been found to enhance self-perception and aid in friendship development for disabled people (Martin, 2013; Smith et al., 2019). Despite these numerous benefits, blind and visually impaired individuals tend to be inactive (Holbrook et al., 2009; Marmeleira et al., 2014; Starkoff et al., 2017) and may consequently experience high rates of depression and obesity (Margrain et al., 2012; Ross et al., 2022). To date, a small number of studies have investigated the barriers to physical activity participation for blind and visually impaired persons. Commonly noted environmental barriers across studies have been transportation, lack of opportunities, cost, and inaccessible equipment and facilities (Jaarsma et al., 2014; Kirk & Haegele, 2021; Shaw et al., 2012). Following this, for example, Kirk and colleagues (2021) found a negative correlation between environmental barriers and physical activity engagement among blind and visually impaired adults. Presently, the research examining the physical activity behaviors and perspectives of blind and visually impaired adults have been survey studies, leaving a rich description of their physical activity experiences underexplored.

Ableism is a network of beliefs, processes, and practices that suggest that disability is fundamentally negative and should be improved, cured, or eliminated (Campbell, 2009). Ableism can manifest in several forms, each of which can work to influence physical activity engagement among visually impaired people. For example, indirect ableism, also known as normalized ableism, is characterized by an unconscious behavior that communicates negative assumptions

about disability though the intention behind the behavior was not to cause harm (Wayland et al., 2021). On the other hand, direct or overt ableism is characterized by a conscious and oppressive action directed toward a disabled person or people (Wayland et al., 2021). A third type of ableism, systemic ableism or institutional ableism, is the restriction of access, equity, and freedom of disabled persons through physical barriers, laws, policies, regulations, or practices (Arroyo-Rojas et al., 2023). Lastly, internalized ableism is the process of projecting negative thoughts and feelings onto oneself based on societal stereotypes of disability (Campbell, 2009). Sport and physical activity spaces are privileged places and practices within those spaces reinforce gendered and ableist norms (Pushkarenko et al., 2023; Richard et al., 2023). For example, physical literacy emphasizes physical development, competency, and performance which may serve as a difficult or unrealistic requirement for participation for disabled people (Pushkarenko et al., 2023). Further, disabled women must negotiate a balance between masculine expectations, feminine norms, and the disability hierarchy within these spaces (Richard et al., 2023). Perhaps most problematic, disabled voices, and more specifically, disabled women voices are often absent from research within the adapted physical activity field to guide practices and programming that promote and encourage life-long physical activity engagement (Pushkarenko et al., 2023; Seale, 2012).

Despite this, as well as the knowledge that ableism has become a common topic in disability studies literature in the last decade, just a few studies in adapted physical activity have sought to uncover and name ableism that exists within physical activity spaces to help understand how ableism may influence physical activity engagement, and to help challenge the field to move away from ableist tendencies. One such recent study, which specifically explored the physical activity experiences of blind and visually impaired women in physical activity

spaces found that many of the inaccessibility barriers to physical activity for participants were associated with overt and systemic forms of ableism (Ball & Haegele, 2024). These experiences led participants to feel exhausted, withdraw from activities, and experience internalized ableism. This study has inspired the current work, which aimed to further explore the experiences of blind and visually impaired women in physical activity, through the lenses of ableism, intersectionality, and belonging.

Each of the two studies were guided by different conceptual lenses when attempting to understand participants' experiences. The first study was guided by intersectionality as a conceptual approach. Seale (2012) recommends using a feminist approach, such as intersectionality, when examining the lived physical activity experiences of disabled women. Intersectionality considers that social categories (e.g., race, ethnicity, class, gender, disability) are not independent identities, and instead interact with one another impacting persons who experience multiple overlapping forms of oppression (Crenshaw, 1989; 1991). Both women and disabled people likely experience some sort of marginalization, yet considering the interrelationships between gender and disability is rarely explored, especially in sport and physical activity contexts, therefore, it is important to study the lived experience of individuals who identify as being a woman and having a disability to investigate how their positions may impact their experiences (Seale, 2012). The second study in this dissertation was guided by belonging as a conceptual framework. Belonging has been identified as an essential human need (Baumeister & Leary, 1995) and is characterized by feelings associated with being connected to and cared for by others (Haegele & Maher, 2023). People are more likely to feel as though they belong when they perceive to be accepted by and treated similarly to others (Hall, 2009).

Positive feelings of belonging are likely contrasting with experiences of ableism which may lead to feelings of not belonging, where people may feel left out or ignored (Hall, 2009).

Statement of the Problem

Primarily, current adapted physical activity literature that involves blind or visually impaired individuals typically focuses on understanding their physical activity behavior. More specifically, several studies have indicated that blind and visually impaired adults often do not meet physical activity guidelines outlined by the U.S. Department of Health and Human services (2018) (Holbrook et al., 2009; Ross et al., 2022; Starkoff et al., 2017) and therefore, are not experiencing the numerous positive physiological and psychological outcomes associated with physical activity participation. Blind and visually impaired adults have reported several environmental and interpersonal barriers to physical activity such as transportation, inaccessible facilities, equipment, and activities, feeling burdensome to others, and experiencing lowered expectations (Jaarsma et al., 2014; Kirk & Haegele, 2021; Shaw et al., 2012). Largely, the research examining the physical activity behaviors and perspectives of blind and visually impaired adults have been survey studies leaving a rich description of their physical activity experiences unknown. That is, it is important to study the lived experiences of disabled women to explore how their multiple and multiplicative positions lead to possible oppression and/or opportunity (Seale, 2012) as physical activity spaces are places of privilege and often reinforce ableist and gendered norms (Richard et al., 2023). Interestingly, despite these barriers, blind and visually impaired people who report meeting physical activity guidelines express higher rates of health-related quality of life (Haegele, Famelia et al., 2017; Haegele & Zhu, 2021; 2022). As such, it is crucial to provide clarity in what makes or does not make a physical activity space conducive to blind and visually impaired women's sense of belonging.

Purpose of the Studies

A multiple article format was adopted for this dissertation; therefore, each study has its own purpose. The purpose of the first study was to utilize an intersectional approach to examine the experiences of individuals identifying as blind or visually impaired women when attempting to access or participate in physical activity, exercise, and/or sport. The purpose of the second study was to examine the subjective feelings of belonging for blind or visually impaired women when participating in physical activity, exercise, and/or sport.

Research Questions

Study 1

What do individuals identifying as blind or visually impaired women experience when attempting to access or participate in physical activity, exercise, and/or sport?

Study 2

How do blind or visually impaired women experience a sense of belonging when participating in physical activity, exercise, and/or sport?

Significance of the Studies

Following Seale's (2012) recommendation, the first study in this dissertation examined the experiences of blind and visually impaired women when attempting to access or participate in exercise, physical activity, and/or sport through an intersectional lens. There is limited sport and physical activity literature that explores intersections with disability (Lim et al., 2021). This study added to the limited physical activity knowledge base specific to intersectionality, and disabled women. Additionally, this study extended the work of Blinde and McCallister (1999) who explored the intersection of gender and disability dynamics for physically disabled women in sport and physical activity by extending to women who experience a different disability (e.g.,

blindness or visual impairment). The second study of this dissertation examined blind and visually impaired women's subjective feelings of belonging when participating in exercise, physical activity, and/or sport. This study explicitly utilized a conceptual framework of belonging to provide clarity to what makes or does not make physical activity spaces conducive to blind and visually impaired women's sense of belonging. This is noteworthy as few adapted physical activity studies have specifically been guided by a belonging framework.

Delimitations

The following are delimitations for the studies included in this dissertation:

- Inclusion criteria was purposively limited to only include those who identify as blind or visually impaired women between the ages of 18-45 years old.
- Participants who self-disclosed attempted participation or engagement in exercise, physical activity, or sport as an adult were eligible to participate.
- To recruit participants, a participation email invitation was distributed to existing contacts of the researcher and an email listserv of blind or visually impaired adults interested in research participation; therefore, the sample was limited to only include those with reliable internet access and who were personally motivated to participate.

Limitations

The following are limitations to the studies included in this dissertation:

- These studies specifically sought to examine the experiences of blind or visually impaired women between the ages of 18-45 years old, leaving the experiences of blind or visually impaired men and women 46 years or older unknown as they may have different experiences accessing and/or participating in exercise, physical activity, or sport.

-Though these studies defined exercise, physical activity, and sport, participants were involved in various activities as adults, however, their experiences may not be representative of specific physical activities or sports.

-Participants for these studies are from North America, therefore, results may not easily be globally generalizable.

Definitions of Terms

Ableism: “A network of beliefs, processes, and practices that produces a particular kind of self and body (the corporeal standard) that is projected as the perfect species-typical and therefore essential and fully human” (Campbell, 2001, p. 44).

Belonging: Feelings associated with being connected to and cared for by others (Haegele & Maher, 2023).

Blindness: Having a visual acuity of 20/200 or less or a visual field of 20 degrees or less (CDC, 2022).

B1 Vision: No light perception in either eye up to light perception and an inability to recognize the shape of a hand at any distance or in any direction (USABA, n.d.).

B2 Vision: From the ability to recognize the shape of a hand up to visual acuity of 20/600 and/or the visual field of less than 5 degrees in the best eye with the best practical eye correction (USABA, n.d.).

B3 Vision: From visual acuity above 20/600 and up to visual acuity of 20/200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction (USABA, n.d.).

Direct Ableism: A conscious and oppressive action directed toward a disabled person or people (Wayland et al., 2021).

Exercise: A type of physical activity that involves planned, structured, and repetitive bodily movement done to maintain or improve one or more components of physical fitness (CDC, 2017).

Indirect Ableism: Unconscious behavior that communicates negative assumptions regarding disability, though the intent is not to cause harm (Wayland et al., 2021).

Internalized Ableism: The projection of negative thoughts and feelings onto oneself based on societal stereotypes surrounding disability (Campbell, 2009).

Intersectionality: A theoretical framework that conceptualizes that social categories (e.g., race, ethnicity, class, gender, disability) are not independent identities, but rather interact with one another impacting persons who experience multiple overlapping forms of oppression (Crenshaw, 1989; 1991).

Physical Activity: Any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure (CDC, 2017).

Sport: An athletic activity requiring skill or physical prowess and often of a competitive nature (dictionary.com, n.d.).

Systemic Ableism: Physical barriers, laws, policies, regulations, or practices that restrict the access, equity, and freedom of disabled persons (Arroyo-Rojas et al., 2023).

Visual Impairment: Having a visual acuity of 20/40 or less (CDC, 2022).

CHAPTER II: LITERATURE REVIEW

The purpose of this chapter is to review literature that is pertinent to this dissertation and introduce the conceptual frameworks that guided the inquiries. First, the importance of physical activity is highlighted. Next, research specific to physical activity and visual impairment is summarized. Following this, the conceptual frameworks of ableism, intersectionality and belonging are discussed.

Importance of Physical Activity

Adults who participate in regular physical activity may experience improved sleep, bone health, balance, and coordination (CDC, 2023). Additionally, physical activity may contribute to reduced anxiety, depression, and the risk for chronic diseases such as heart disease, stroke, type 2 diabetes, cancer, dementia, and obesity (CDC, 2023). Physical activity has also been found to have psychological and social benefits such as enhancing self-perception and aiding in the development of friendships for disabled individuals (Martin, 2013; Smith et al., 2019). Thus, for substantial health benefits, the United States (U.S.) Department of Health and Human Services (2018) recommend that adults participate in 150-300 minutes of moderate aerobic physical activity or 75-150 minutes of vigorous aerobic physical activity over the course of a week. In addition to the aerobic physical activity, it is recommended that American adults complete two or more days of moderate muscle strengthening activities (U.S. Department of Health and Human Services, 2018).

Unfortunately, according to the U.S. Department of Health and Human Services (2018), approximately half of adults in the U.S. are meeting the aerobic physical activity guidelines and only about 20% are meeting both aerobic and muscle strengthening physical activity guidelines. Historically, blind and visually impaired individuals tend not to be meeting these explicated

physical activity guidelines (Holbrook et al., 2009; Marmeleira et al., 2014). For example, when analyzing a nationally represented sample from the National Health and Nutrition Examination Survey, Ross and colleagues (2022) found that 59.3% of blind and visually impaired adults are meeting aerobic physical activity guidelines; however, only 22.7% of physical activity minutes are coming from leisure activities. This may indicate that blind and visually impaired adults are not experiencing the benefits of participating in physical activity. For example, approximately 30% of blind and visually impaired American adults experience depression (Margrain et al., 2012). Furthermore, blind and visually impaired adults are less likely to experience depressive symptoms when physical activity, sitting time, and sleep guidelines are met (Haegele et al., 2021). However, only about 30% of blind and visually impaired adults are meeting all three guidelines (Ross et al., 2022). Of further concern, obesity is a serious health risk for blind and visually impaired adults (Ross et al., 2022). That is, approximately 56% of blind and visually impaired adults in Ross and colleagues (2022)' previously mentioned study, which analyzed a representative sample of the US, were identified as either overweight (27.1%) or obese (28.9%).

Physical Activity and Visual Impairment

An emerging body of literature has explored physical activity behaviors and experiences among blind and visually impaired people. Primarily, much of the scholarly work surrounding physical activity for blind and visually impaired people has focused on measuring physical activity levels and determining associations between physical activity and demographic factors. To quantify physical activity levels, device-worn measures (Holbrook et al., 2009; Holbrook et al., 2013; Marmeleira et al., 2014) and self-report measures (Shaw et al., 2012; Starkoff et al., 2017), or both (Sadowska & Krzepota, 2015), have been used. For example, using a step activity monitor, Holbrook and colleagues (2009) measured the daily physical activity levels of 25

visually impaired adults between the ages of 18-60 years, and the average daily step count among the group was 8,028 steps. A similar study utilized a talking pedometer to measure the daily steps of 31 visually impaired adults over the course of seven days (Holbrook et al., 2013), and participants in this study only accumulated an average step count of 5,530 steps (Holbrook et al., 2013). In both of these studies, participants did not meet the recommended 10,000 steps per day and had fewer steps than sighted adults (Holbrook et al., 2009). Marmeleira and colleagues (2014) used accelerometry over the course of 3 days to quantify physical activity levels of 63 visually impaired Portuguese adults between the ages of 18-65 years. In this study, participants took, on average, 5,412 steps per day, and engaged in 168 minutes of physical activity daily. However, only 25 minutes consisted of moderate to vigorous physical activity, and less than 30% of participants met the physical activity guideline of 30 minutes per day of moderate to vigorous physical activity (Marmeleira et al., 2014). According to studies utilizing wearable devices to measure physical activity, blind and visually impaired adults take fewer steps than the daily recommendation and participate in limited moderate to vigorous physical activity.

While some research has been conducted using devices, such as accelerometers or pedometers, to quantify physical activity, considerably more research has used self-reports. For example, as part of a large survey, Shaw and colleagues (2012) utilized the international physical activity questionnaire (IPAQ) to measure the physical activity level of 204 blind and visually impaired Canadian participants between the ages of 16-30 years. In this study the average physical activity score for participants was 3,657.91 METs, which was lower than the general population average of 4,407.64 METs (Shaw et al., 2012). Similarly, Starkoff and colleagues (2017) also used the IPAQ and found that only 21.7% of the 115 blind and visually impaired American adults in their study met daily physical activity guidelines of 30 minutes of moderate

to vigorous physical activity. Sadowska and Krzepota (2015) examined physical activity levels through both accelerometry and the IPAQ for 25 visually impaired adults and 25 sighted adults from Poland. Their analysis revealed a significant difference between the groups regarding moderate to vigorous physical activity MET minutes as the visually impaired participants engaged in 520 MET minutes of moderate to vigorous activity while sighted participants engaged in 880 MET minutes (Sadowska & Krzepota, 2015). Additionally, there was a significant difference in weekly steps between the two groups with the sighted participants taking more steps (Sadowska & Krzepota, 2015). More specifically, 68% of the sighted participants took 10,000 steps or more while only 12% of visually impaired participants did so (Sadowska & Krzepota, 2015). Like studies using accelerometry, those using self-report instruments also demonstrate that blind and visually impaired adults are not engaging in recommended levels of physical activity.

Factors Associated with Physical Activity

In addition to research exploring physical activity rates and levels, several investigations have examined the relationships between physical activity, demographic, inter-personal, and motivation variables. To date, several studies have explored the relationship between physical activity level of blind and visually impaired adults based on gender, and results appear to be mixed. That is, in their survey study of 176 blind and visually impaired U.S. adults, Haegele and colleagues (2016), as well as the previously discussed survey study by Starkoff and colleagues (2017), found that men were significantly more active than women. On the other hand, Haegele, Brian, and colleagues (2017) found that women were significantly more active than men in their survey study of 92 blind and visually impaired Americans. As such, it is unclear whether there is clear gender-based differences in physical activity engagement among blind and visually

impaired adults in the US. Additionally, in regard to demographics, the level of visual impairment appears to have an impact on physical activity level as visually impaired people have been identified as being significantly more active than completely blind individuals across several studies (Haegele, Brian et al., 2017; Starkoff et al., 2017).

Adding to these studies, a considerable body of knowledge, mostly reliant on self-report survey studies, has explored the influence of constructs from different theories of motivation on physical activity behavior among blind and visually impaired adults such as social cognitive theory (Haegele, Brian et al., 2017), theory of planned behavior (Haegele, Hodge et al., 2017), and self-efficacy theory (Haegele et al., 2018; Haegele & Zhu, 2021). For example, Haegele, Hodge, and colleagues (2017) conducted a survey study and found that intention to engage in physical activity, a theory of planned behavior construct, was a significant predictor of physical activity engagement among the 209 blind and visually impaired participants. Social support, a social cognitive theory construct, has also been found to be a significant predictor of physical activity engagement among blind and visually impaired individuals (Haegele, Brian et al., 2017). Finally, self-efficacy toward physical activity, a construct that is situated within social cognitive theory but also is a standalone theory, was found to be significantly related to actual physical activity engagement by Haegele and colleagues (2018), in their survey study that included 147 blind and visually impaired adults from the U.S. Based on these collective findings, blind and visually impaired persons may be more likely to be physically active if they believe in themselves, the importance of physical activity, and their support system.

In addition to those exploring factors associated with motivational theories, a small number of studies have explored the barriers to and facilitators of physical activity participation for blind and visually impaired persons. The survey study previously mentioned by Shaw and

colleagues (2012) also examined the constraints to physical activity participation, and navigation strategies to overcome constraints to physical activity participation. The most frequently noted constraints to physical activity participation by participants were structural/environmental barriers (i.e., access to transportation, financial means) with interpersonal constraints (i.e., support from family and friends) mentioned least (Shaw et al., 2012). Strategies used by participants to navigate physical activity barriers were improving one's financial circumstances, changing one's interpersonal relationships, and adopting different time management strategies (Shaw et al., 2012). Interestingly, after controlling for constraints and demographic factors, only the navigation strategy of time management was significant in predicting physical activity participation (Shaw et al., 2012).

Following Shaw and colleagues' study, Jaarsma and colleagues (2014) surveyed 648 Dutch blind or visually impaired adults on the barriers and facilitators of physical activity they experience, and grouped participants based on their activity level, where individuals were considered active if they participated in an activity requiring physical exertion for at least 30 minutes twice a week and those who did not were considered inactive (Jaarsma et al., 2014). The most commonly reported personal barrier to physical activity for active participants was dependence on others with both active and inactive participants indicating their visual impairment was a personal barrier (Jaarsma et al., 2014). Transportation was an environmental barrier indicated by both active and inactive participants while active participants noted the lack of opportunities in their neighborhood and inactive participants mentioned lack of exercising with peers and the cost of sports activities as additional environmental barriers (Jaarsma et al., 2014). The most frequently reported personal facilitators of physical activity among both active and inactive participants were health, fun, and social contacts (Jaarsma et al., 2014).

Additionally, participants indicated support from family to be a significant environmental facilitator of physical activity (Jaarsma et al., 2014).

In the most recent work in this area of inquiry, Kirk and Haegele (2021) conducted a qualitative descriptive study and interviewed eight blind or visually impaired adults between the ages of 21-34 years on their expectancy value beliefs, identity beliefs, and physical activity engagement. Through this investigation, Kirk and Haegele identified transportation, inaccessible equipment and facilities and interpersonal interactions such as feeling burdensome, lowered expectations, and unwanted attention as barriers to physical activity for the participants in their study. Additionally, participants acknowledged the importance of physical activity for its health and social benefits, enjoyment, and the opportunity to demonstrate their capabilities as blind people (Kirk & Haegele, 2021). In a follow-up survey study, Kirk and colleagues (2021) utilized a descriptive correlational approach to examine the relationship between barriers to physical activity, expectancy value variables, and physical activity engagement among 214 blind and visually impaired adults. A negative correlation was found between physical activity barriers (i.e., accessibility, personal, transportation) and physical activity engagement (Kirk et al., 2021). Personal barriers were also negatively correlated with attainment value, intrinsic value, utility value, and expectancy beliefs, and accessibility barriers were negatively related to intrinsic value, utility value, and expectancy value (Kirk et al., 2021). Additionally, attainment value, intrinsic value, utility value, and expectancy beliefs were positively correlated with physical activity engagement. However, only expectancy value and intrinsic value were significant predictors of physical activity engagement (Kirk et al., 2021). These studies highlight that environmental barriers are significant inhibitors of physical activity for blind and visually

impaired adults while an intrinsic value of physical activity such as valuing the enjoyment and health associated with physical activity are predictors of physical activity engagement.

In addition to studies exploring factors that might influence physical activity, other studies have examined the relationship between physical activity and outcome variables such as quality of life along with other demographic factors among blind and visually impaired adults. For example, results from two survey studies by Haegele, Famelia, and colleagues (2017) with 80 participants and Haegele and Zhu (2021) with 159 participants found that meeting physical activity guidelines significantly predicted health-related quality of life among their samples. Furthermore, when examining the association between physical activity, sitting time, sleep duration, and health-related quality of life among blind and visually impaired people, Haegele and Zhu (2022) found that meeting all guidelines for physical activity, sitting time, and sleep duration resulted in greater health-related quality of life scores for their 195 participants. Interestingly, though, these findings conflict with prior work from Holbrook and colleagues (2009), who found no association between level of visual impairment or physical activity level and perceived quality of life. A possible explanation for this may be that on average, the physical activity levels of the participants were not sufficient to bring about improvements to health that would enhance their quality of life (Holbrook et al., 2009). Finally, a survey study with 182 blind and visually impaired people, Haegele and colleagues (2021) found that there was no association between depression and physical activity or sitting time, but that sleep was a negative predictor of depression in their sample. These studies emphasize the importance of meeting recommended physical activity guidelines to reap the benefits of physical activity engagement for the enhancement of health-related quality of life.

Primarily, the adapted physical activity literature that involves blind or visually impaired individuals typically focuses on understanding their physical activity behavior. More specifically, several studies have indicated that blind and visually impaired adults often do not meet physical activity guidelines outlined by the U.S. Department of Health and Human services (2018) (Holbrook et al., 2009; Ross et al., 2022; Starkoff et al., 2017) and therefore, are not experiencing the numerous affordances of physical activity participation. Those who report meeting physical activity guidelines express higher rates of health-related quality of life (Haegele, Famelia et al., 2017; Haegele & Zhu, 2021; Haegele & Zhu, 2022). Blind and visually impaired adults have reported several environmental, and interpersonal barriers to physical activity such as transportation, inaccessible facilities, equipment, and activities, feeling burdensome to others, and experiencing lowered expectations (Jaarsma et al., 2014; Kirk & Haegele, 2021; Shaw et al., 2012). Largely, the research examining the physical activity behaviors and perspectives of blind and visually impaired adults have been survey studies leaving a rich description of their physical activity experiences unexplored.

Ableism

As defined by Campbell (2001) ableism can be understood as:

a network of beliefs, processes, and practices that produce a particular kind of self and body (the corporeal standard) that is projected as the perfect species-typical and therefore essential and fully human. Disability then is cast as a diminished state of being human (p. 44).

Campbell (2009) further argues that a core belief of ableism is that disability is fundamentally negative and should be improved, cured, or altogether eliminated. Ableism is especially rooted within the medical model of disability as disabled bodies are compared to standards of what is

considered a normal healthy body, and as such, the goal is to identify, diagnose, and treat if not cure the disability (Leo & Goodwin, 2016; Withers, 2012). Ableism results in the development of a normative body in terms of aesthetic and ability and the concurrent devaluation, oppression, and marginalization of disabled people (Ives et al., 2021). In this respect, ableism is similar to other forms of oppression, such as racism, sexism, and homophobia, in that groups of people experience exclusion based on real or perceived abilities or differences (Campbell, 2009).

According to Peers and colleagues (2023), ableism has three components, (1) it encourages people to evaluate and devalue themselves and others based on a socially constructed hierarchy of human kinds, (2) ableism implements practices, processes, and actions that cater to the value of and assumed normal capacities of people, and (3) ableism emphasizes disabled perfection which leads to under rating those who are unable to meet or maintain expectations. Our societal systems are infused with ableism in that non-normative bodies are simply tolerated while non-disabled bodies are supported (Campbell, 2009). Knowing this, it is likely that ableism is a social regulator that grants non-disabled people with societal power (Brittain et al., 2020).

Ableism manifests in several forms including indirect, direct, systemic, and internalized (Campbell, 2009). Indirect ableism is also known as normalized ableism and is characterized by an unconscious behavior that communicates negative assumptions about disability though the intention behind the behavior was not to cause harm (Wayland et al., 2021). For example, a disabled person being told “you don’t look like you need a service dog” may be a form of normalized ableism (Ball & Haegele, 2024). Direct or overt ableism is characterized by a conscious and oppressive action directed toward a disabled person or people (Wayland et al., 2021). Commonly, for example, blind or visually impaired persons experience direct ableism when they are explicitly denied access to fitness classes based on others’ perceptions of their

ability based on their impairment alone. More specifically, when registering for a fitness class, they are denied access to the class based on a staff member's judgement of their limitations rather than being open to their capabilities (Ball & Haegele, 2024). Systemic ableism, also referred to as institutional ableism, is the restriction of access, equity, and freedom of disabled persons through physical barriers, laws, policies, regulations, or practices (Arroyo-Rojas et al., 2023). An example of systemic ableism experienced by blind or visually impaired individuals may be the inability to independently use fitness equipment with touch screens and no audio output (Ball & Haegele, 2024). This highlights that policies and regulations followed by fitness facilities and manufacturers are not concerned with standardization of equipment that allows all to access (Rimmer et al., 2017). Finally, internalized ableism is the process of projecting negative thoughts and feelings onto oneself based on societal stereotypes of disability (Campbell, 2009). Examples of internalized ableism include feeling burdensome to others, feeling the need to prove one's abilities despite their disability, and pressuring oneself to make no mistakes and work harder than non-disabled peers (Ball & Haegele, 2024; Ives et al., 2021). In these instances, disabled people have internalized society's belief that being disabled is an inferior form of being and as a result are aware of their differences and engage in self-loathing behaviors or attempt to emulate societal norms (Campbell, 2009).

While ableism has become a common topic in disability studies literature in the last decade, just a few studies in adapted physical activity have sought to uncover and name ableism that exists within physical activity spaces and to help challenge the field to move away from ableist tendencies. For example, Richardson and Motl (2020) utilized a dialogical narrative approach to explore the narratives of 35 physically disabled individuals between the ages of 28-79 years who exercised at an adapted community-based rehabilitation center in the U.S.

Participants in this study described how important access to the gym was whether that meant financial access or physical access to equipment. Additionally, participants expressed feelings of acceptance and the freedom to be a work in progress (Richardson & Motl, 2020). This collective narrative of accessibility, acceptance, and well-being contrasts with disabled persons' experiences of discrimination and exclusion when exercising in mainstream fitness facilities (Richardson & Motl, 2020). Following this, Ives and colleagues (2021) explored the experiences of and attitudes toward sport and physical activity of 24 disabled individuals and eight support personnel in the U.K. Participants noted the importance of physical activity for physical and mental health benefits however, physical activity was most valued for its social benefits which is not how physical activity is often promoted and presented to the disabled community (Ives et al., 2021). Additionally, participants described physical and internal barriers linked to systemic and internalized ableism that led to a lack of engagement and perceived enjoyment in sport and physical activity (Ives et al., 2021). Most recently, Ball and Haegele (2024) interviewed 10 North American blind or visually impaired women on their exercise, physical activity, and sport experiences that may be associated with ableism. Participants expressed significant exhaustion with navigating inaccessible physical activity spaces. Frequently having to manage normalized, direct, and systemic ableism when trying to access and participate in physical activity led participants to feel anxious, burdensome, and as though they had to earn the respect of their non-disabled peers through proving their capabilities despite their visual impairment (Ball & Haegele, 2024).

In addition to the aforementioned research, a few inquiries have begun to examine the practices and language used within adapted physical activity and their link to ableism. For example, Leo and Goodwin (2016) utilized an interpretive phenomenological approach to

explore the perspectives of disabled people regarding using disability simulations to enhance post-secondary students' understandings of the disability experience. Participants expressed that disability simulations need to involve a disabled person in the design and/or the implementation process as without the authentic experience of disability, simulations are ableism in action (Leo & Goodwin, 2016). that is, without the lived experience, simulations run the risk of presenting disability as an individual problem due to inability rather than societal restriction reinforcing the perception that impairment is 'less than' (Campbell 2001). Additionally, participants cautioned that disability simulations do not and cannot provide the full picture of what it is like to experience disability and that the novelty of the simulation can detract from the challenges faced by disabled persons as the focus is more on making the task fun (Leo & Goodwin, 2016).

To understand the pedagogical discourses and practices within adapted physical activity, Peers and colleagues (2023) thematically analyzed content in the top seven adapted physical activity textbooks. Overwhelmingly, the texts advocated that disabled individuals be compared to and progress toward normative developmental standards thus pointing out their deficits. Additionally, several texts discussed the importance of strength and ability-based teaching approaches however, disability was still discussed through a categorical and deficit lens (Peers et al., 2023). Furthermore, these findings indicate ableism as the focus is still to strive for non-disabled ideals (Campbell, 2009). Supplementing empirical work by Leo and Goodwin (2016) and Peers and colleagues (2023), other scholars have made calls to understand and deconstruct ableism within adapted physical activity spaces. For example, Pushkarenko and colleagues (2023) outline how ableism is reproduced in physical literacy practices. Notably, they articulate that physical development, competency, and performance are often emphasized and serve as a difficult or unrealistic requirement for participation for disabled people. In addition, they asserted

that the field is lacking authentic experiences of disability to guide programming and practices that promote and encourage optimal and lifelong physical activity engagement (Pushkarenko et al., 2023). As a step to combat ableism within physical activity spaces, Smith and colleagues (2021) proposed a call to action to make sedentary and physical activity behavior messages inclusive rather than perpetuating ableist notions.

Intersectionality

The first study in this dissertation was guided by intersectionality as a conceptual framework. Crenshaw (1989) first introduced the concept of intersectionality to explain the double discrimination faced by Black women in the legal system as well as within the feminist and civil rights movements. Intersectionality considers that social categories (e.g., race, ethnicity, class, gender, disability) are not independent identities, and instead interact with one another impacting persons who experience multiple overlapping forms of oppression (Crenshaw, 1989; 1991). As such, intersectionality is an appropriate theoretical framework to examine the social construction of disability and how it intersects with race, ethnicity, class, and/or gender (Azzarito, 2020). McCall (2005) outlines three methodological approaches to intersectional research (e.g., anticategorical, intracategorical, intercategorical), of which, the current study utilized the intracategorical approach. Within this approach, the focus is on the narratives of dimensions across categories (i.e., disability, gender) and only reflects the perspective of the singular dimension of the social groups (McCall, 2005). In the case of this study, ableism in physical activity contexts was examined for blind and visually impaired women, not for all disabled people. Though traditional categories were named in this study to identify an un- or under-studied group, the researcher was interested in uncovering the diversity and difference within the group (McCall, 2005).

Seale (2012) suggests utilizing a feminist approach when examining the physical activity experiences of disabled women. That is, both women and disabled people likely experience some sort of marginalization, yet considering the interrelationships between gender and disability is rarely explored, especially in sport and physical activity contexts (Seale, 2012). It is important to study the lived experience of individuals who identify as being a woman and having a disability to investigate how their multiple and multiplicative positions lead to possible oppression and opportunity (Seale, 2012). Growth within the field of disability studies indicates that disability is gendered (Seale, 2012). More specifically, disabled women face sexism but also the lack of opportunities to fulfill valued social roles (Richard et al., 2023). Richard and colleagues (2023) further argue that sport and physical activity are places of privilege and reinforce gendered and ableist norms. Like non-disabled women, disabled women negotiate a balance of meeting masculine sport expectations while simultaneously satisfying feminine norms to be seen as a woman (Richard et al., 2023). Additionally, disabled women in sport must navigate the disability hierarchy where disabled bodies that can most emulate able-bodied standards are most accepted (Richard et al., 2023).

A recent scoping review of intersectional work within sport and physical activity indicated that there are only a few studies that have examined the intersection of gender and disability (Lim et al., 2021). For example, Blinde and McCallister (1999) examined types of physical activity participation, reasons for participation, outcomes of participation, and gendered aspects of participation for 16 physically disabled women. Primarily, the women in this study engaged in physical activity with the goal to maintain their bodily function and appreciated physical activity for the increased self-esteem and control it gave them. Though their physical activity participation was fairly positive, the women expressed that sport and physical activity

spaces were not places people expected to see disabled women and therefore, they felt their opportunities and support were limited (Blinde & McCallister, 1999). More recently, Sparkes and colleagues (2018) conducted an ethnographic case study of Dan, an elite physically disabled bodybuilder, to explore the binaries of able-bodiedness and disability within the sport of wheelchair bodybuilding. Rejoining the sport of bodybuilding post injury has allowed Dan to challenge ableism but also achieve normative masculinity. More specifically, Dan challenges normative expectations of a disabled body through his muscular appearance and success in bodybuilding while also promoting the sport and encouraging other disabled men to join him and promote the inclusion of a wheelchair division at competitions. However, it is cautioned that his elite status and portrayal of a masculine hero may also reinforce normative gendered bodily perfection (Sparkes et al., 2018). An intersectionality framework within physical activity research surrounding disability has been underutilized and warrants further exploration. Additionally, the few examinations of gender and disability related to sport and physical activity focus on physically disabled people leaving experiences of individuals experiencing other disabilities such as blindness and visual impairment unknown.

Belonging

The concept of belonging acted as the conceptual framework for the second study in this dissertation. One's desire to belong has been identified as a vital and universal human need (Baumeister & Leary, 1995). Baumeister and Leary (1995) define a need to belong as "a need to form and maintain at least a minimum quantity of interpersonal relationships" (p. 499). The need is comprised of two main features, (1) people need frequent, positive, and pleasant interactions with another person, and (2) based on these interactions the person needs to believe that a stable and long-lasting bond with affective concern is forming (Baumeister & Leary, 1995). Since its

conception, belonging has been widely explored in the literature across fields with little agreement; thus, Mahar and colleagues (2013) conducted a literature review to better conceptually understand belonging across disciplines. Mahar and colleagues (2013) found that definitions of belonging commonly included feeling needed, important, integral, valued, respected, and in harmony with a group or system. Experiencing a positive sense of belonging may elicit feelings of or associated with happiness, joy, warmth, closeness, caring, and support (D'Eloia & Price, 2018). In contrast, lacking a sense of belonging can lead to feeling left out or ignored (Hall, 2009). People may feel as though they belong when they perceive that they are accepted by and treated the same as others (Hall, 2009). More specifically, key elements to the development of relationships that foster a sense of belonging are reciprocity and intimate sharing (D'Eloia & Price, 2018). Furthermore, for disabled women, being able to find commonalities to relate to others in the group and having consistent reciprocal support nurtures their sense of belonging (Mejias et al., 2014).

There is limited research within adapted physical activity that explicitly uses belonging as the conceptual framework to guide inquiry. Among these, Maher and colleagues (2023) recently explored the perspective of one disabled person's experiences with exclusion, inclusion, and belonging in both mainstream and segregated sport settings. To do this, Maher and colleagues (2023) adopted a narrative approach to help understand and re-tell Jack's story of participating in both mainstream and cerebral palsy football (soccer) youth leagues. Specific to belonging, Jack ultimately left his mainstream team due to unfulfilling relationships and exclusion, which led him to join a CP football team where he developed meaningful friendships in which he felt important to and accepted by his teammates (Maher, et al., 2023).

More recently, Haegele and colleagues (2024) utilized belonging as a conceptual lens to explore visually impaired secondary students' views on using trained peer tutors in integrated physical education. Some participants in this study indicated that they believed peer tutoring could provide opportunities for blind or visually impaired students to form intimate and reciprocal friendships, which is central to one's sense of belonging, however, other participants cautioned that peer tutoring had the potential to threaten one's sense of belonging due to the inherent unequal distribution of power among classmates. Furthermore, participants did not want to be identified as needing help or being singled out during class and, therefore, thought that peer tutoring would not be beneficial for them and might better serve someone with a more severe visual impairment or someone new to having a visual impairment (Haegele et al., 2024). In addition to these inquiries, there have been some studies that have explored belonging as a sub-concept contributing to intersubjective experiences of inclusion within integrated physical education (Haegele et al., 2022; Haegele et al. 2020), however, it is difficult to gain an understanding of blind and visually impaired individuals' sense of belonging from these findings as they examined experiences through the lens of inclusion where belonging is only a component of the overall experience. As such, this study explicitly used a conceptual framework of belonging to ensure clarity in what makes or does not make a physical activity space conducive to blind and visually impaired women's sense of belonging.

CHAPTER III: RESEARCH METHODS

The purpose of this chapter is to outline the methods that were used for the two studies that make up this dissertation. This dissertation was designed using a manuscript format, which consists of two separate but interrelated studies. The overall aim of this project was to engage with blind or visually impaired women to understand their experiences accessing and participating in physical activity, exercise, and/or sport. First, the purpose and research questions for each study are revisited. Next, the research paradigm, approach, and participants are described followed by data collection and analysis procedures. Several components of the two studies are described together as they are the same for each study.

Purpose and Research Questions

The purpose of the first study was to utilize an intersectional approach to examine the experiences of individuals identifying as blind or visually impaired women when attempting to access or participate in physical activity, exercise, and/or sport. The primary research question that guided this inquiry was *what do individuals identifying as blind or visually impaired women experience when attempting to access or participate in physical activity, exercise, and/or sport?* The purpose of the second study was to examine the subjective feelings of belonging for blind or visually impaired women when participating in physical activity, exercise, and/or sport. The primary research question that guided this inquiry was *how do blind or visually impaired women experience a sense of belonging when participating in physical activity, exercise, and/or sport?*

Research Paradigm, Approach, and Positionality

Each of the two inquiries within this dissertation followed an experiential qualitative approach, as the focus was to center the participants' experiences, thoughts, and interpretations of their time attempting to access and participate in physical activity, exercise, and/or sport

(Braun & Clarke, 2021; Goodwin, 2020). These investigations were situated within an interpretivist framework with an aim to interpret and make meaning of the participants experiences (Maher & Coates, 2020). Additionally, the researcher assumed a relativist ontology and subjective epistemology. Together, relativist ontology and subjective epistemology acknowledge that there are numerous experiences that shape multiple realities and meaning which is influenced by the interactions between researcher and participant (Braun & Clarke, 2021; Goodwin, 2020).

The researcher acknowledges that her own experiences, beliefs, and values influenced the research process, therefore, it is important for her to expose her positionality (Goodwin, 2020). The researcher identifies as a blind White woman who is a doctoral student studying and conducting research specific to adapted physical activity. She disliked physical education throughout her K-12 public schooling however, she was physically active throughout her childhood and adolescent years participating in extracurricular and community sports. As an adult, she has competed as an elite alpine skier and recreational runner. Her experience as a board member and volunteer for organizations hosting sports camps for blind and visually impaired youth ultimately motivated her to pursue a career in adapted physical activity/education. She has a Bachelor's degree in Physical Education Teacher Education as well as a Master's degree in Adapted Physical Education. Though she had positive sport experiences and negative physical education experiences, she recognizes that not all blind or visually impaired persons experience physical activity similarly to her.

Conceptual Framework

An intersectionality framework was adopted to guide the first study of this dissertation. First conceptualized by Crenshaw (1989), intersectionality was first used to help understand the

gender and racial discrimination uniquely experienced by Black women. Intersectionality conceptualizes that social categories (e.g., race, ethnicity, class, gender, disability) are not independent of one another, but rather, are interactive and impact individuals who experience multiple overlapping forms of oppression (Crenshaw, 1989; 1991). Azzarito (2020) articulates that intersectionality provides an effective theoretical lens to examine the social construction of disability and how it intersects with race, ethnicity, social class, and gender. More specifically, this study utilized an intracategorical approach to intersectional research (McCall, 2005). Within this approach, the focus is on the narratives of dimensions across categories (i.e., disability, gender) and only reflects the perspective of the singular dimension of the social groups (McCall, 2005). In the case of this study, ableism in physical activity contexts was examined for blind and visually impaired women, not for all disabled people. Though traditional categories were named in this study to identify an un- or under-studied group, the researcher was interested in uncovering the diversity and difference within the group (McCall, 2005).

The second study of this dissertation was conceptualized through the framework of belonging. A sense of belonging is recognized as an essential and universal human need (Baumeister & Leary, 1995). One's sense of belonging is characterized by subjective feelings associated with being connected to and cared for by others (Haegele & Maher, 2023). Feelings commonly included in definitions of belonging are feeling needed, important, integral, valued, respected, and in harmony with a group or system (Mahar et al., 2013). Qualities of a relationship that are essential to the development of one's sense of belonging are reciprocity and intimate sharing (D'Eloia & Price, 2018). When an individual feels as though they belong, they may experience feelings such as happiness, joy, warmth, closeness, and support (D'Eloia & Price, 2018). Factors that may contribute to a positive sense of belonging include participation,

no fear of judgement, sharing in tradition, and not feeling burdensome (Hall, 2009). Furthermore, disabled people have reported that they feel as though they belong when they perceive that they are accepted by and treated the same as others around them (Hall, 2009).

Participants

Participants for both studies were 10 blind or visually impaired women between the ages of 27-45 years with experience attempting to access and participate in physical activity, exercise, and/or sport. All ten women shared a desire to be physically active, though being physically active looked differently for each woman based on her own interests, circumstances, and experiences. The participants consented to participate in the study where they completed two interviews. See appendix A for the consent form provided to participants. Physical activity comes in a variety of forms such as daily living activities, transportation, occupational demands, leisure and recreation, individual or team sport, and personal or group exercise. For the purposes of the studies, exercise was defined as “a type of physical activity that involves planned, structured, and repetitive bodily movement done to maintain or improve one or more components of physical fitness” (CDC, 2017); physical activity was defined as “any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure” (CDC, 2017); and sport was defined as “an athletic activity requiring skill or physical prowess and often of a competitive nature” (Dictionary.com, n.d.). Participants were recruited through an email invitation distributed to the researcher’s existing contacts and on a listserv of blind and visually impaired adults interested in participating in research. The purpose of the overarching study, time commitment, and data collection procedures were described in the invitation. Individuals interested in participating in the research were asked to email the researcher indicating their interest as well as answers to the demographic questions outlined in the email invitation. See

appendix B for the recruitment information distributed in the email invitation. Institutional review board approval was granted for this research. Each participant's demographic information is described below.

Alicia is a 31-year-old White woman from New York. She has been visually impaired since birth and identified her vision as B2 (i.e., vision ranging from the ability to recognize the shape of a hand up to visual acuity up to 20-600 and/or the visual field of less than 5 degrees in the best eye with the best practical eye correction). Currently, Alicia runs 2-3 times per week with a local running group in addition to practicing yoga and pilates using a fitness app from her home. As an adult, she has completed several triathlons and road races as well as recently trying trail running. Alicia also enjoys hiking and rock climbing. She explained that exercise has been an effective way for her to meet new friends and increase her self-confidence. Alicia has had several disabled role models that have encouraged her to pursue athletic opportunities she may not have considered otherwise such as triathlons.

Diane is a 31-year-old Caucasian woman from Kansas. She is totally blind (B1). While in college, Diane regularly trained at the gym with a personal trainer and frequented a fitness center upon graduating. Now, she has fitness equipment at home that she uses to exercise in addition to taking daily walks with her husband. Additionally, she is currently looking into starting yoga lessons. Diane explained that she was active as a child and that she feels better when she is exercising regularly. She indicated that her most recent motivator to exercise and be physically active was weight loss after a period of being more sedentary and working from home at a desk.

Heidi is a 39-year-old White woman from Ohio. She has been visually impaired since birth and clarified she is totally blind (B1). In her earlier adult years, Heidi regularly exercised at a local gym. More recently, she completes workouts in her home using an accessible fitness

application. Heidi explained that exercise is important to her and she's not as active as she would like to be right now, but has substantial parental responsibilities with young children.

Kimberly is a 39-year-old European Spanish and South American Indian woman from Michigan. She has been visually impaired since birth and totally blind (B1) for thirteen years. Kimberly has been active in martial arts for 25 years. She holds a third-degree black belt in tae kwon do. Additionally, she has engaged in weightlifting throughout adulthood. Kimberly explained that she recently moved and is settling in at her new home and city and is currently working through some lingering injuries and only doing some light weightlifting for exercise but has a goal of feeling better and weight training more at the gym and martial arts dojo in the near future.

Sonia is a 45-year-old Hispanic/Latina woman from Minnesota. She has been totally blind (B1) since childhood. Sonia has competed as an elite athlete in both triathlons and running competitions. Since her retirement from elite sport, she keeps active by working out 4-6 times per week and practicing yoga. She recently got involved with sailing as a new activity. Sonia explained that she grew up being active like her parents and older sisters, riding her bike, taking dance lessons, and alpine skiing. Sonia ran with a friend some in college but got serious about running when she joined a running group to make friends and network after returning home from college. Today, exercising and being active is important for Sonia's physical and mental health.

Jessica is a 33-year-old White woman from Wisconsin. She has been totally blind (B1) since birth. Jessica regularly walks for physical activity and runs on a treadmill at her home for exercise. She has also participated in an adult sports league in her local community. Jessica explained that she enjoys walking and feels as though the movement helps her think and brainstorm. She is excited to have a treadmill at home now and has a goal of running 5Ks again.

Lisa is a 45-year-old White woman from New Jersey. She lost her vision at age 8, has had no useable vision since then, and reported her vision as B1 (i.e., no light perception in either eye up to light perception with the inability to recognize the shape of a hand at any distance or in any direction). Lisa trains at her local gym with a personal trainer twice a week. She also has cardio exercise equipment at home that she uses in addition to taking walks. Lisa has participated in dragon boat racing, rock climbing, horseback riding, and alpine skiing throughout her adulthood. She explained that her primary motivator for exercising is to be physically fit and reduce joint pain in her feet.

Beth is a 27-year-old White woman from California. She became visually impaired while in college due to a degenerative eye condition. She characterized her vision as B3 (i.e., visual acuity above 20-600 and up to visual acuity up to 20-200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction). She has utilized a personal trainer at a local gym but now, she attends fitness classes. Over the past two years, Beth also has begun playing and coaching blind soccer. Beth explained that she has been playing some sort of sport or exercising since she was a young child and when she was losing her vision she was committed to staying active but had to change how she was active. Beth played soccer starting at the age of five years old and played on her high school varsity team as well as intramurals in college. Ultimately, she stopped playing because it was unsafe due to her vision, and she jumped at the opportunity to play blind soccer and return to the sport she loves.

Melissa is a 42-year-old White woman from New Mexico. She has been legally blind since birth, and disclosed her vision as B3 (i.e., visual acuity above 20-600 and up to visual acuity up to 20-200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction). Melissa does a lot of walking and movement in

her free time and as part of her job as a cook in a pizza shop. While raising her children and completing online college courses, Melissa explained that she gained weight and when she returned to work she became aware of how her sedentary behaviors was adversely affecting her health. She took on a second job in the pizza shop because she wanted to be doing more and found that the new job suited her needs and is now her only job. Melissa prefers to have more active jobs as she's uncomfortable doing other forms of exercise and sports on her own and her friends and family are not interested in being active with her.

Shannon is a 40-year-old White woman from Saskatchewan, Canada. She has been visually impaired since birth and specified her vision as B2 (i.e., vision ranging from the ability to recognize the shape of a hand up to visual acuity up to 20-600 and/or the visual field of less than 5 degrees in the best eye with the best practical eye correction). Shannon is an active participant in blind sports organized by an organization in her local community. She participates in sports such as curling, goalball, golf, and bowling though her participation has been more infrequent due to the Covid-19 pandemic because she is immunocompromised. She is currently highly involved in dragon boat racing as a paddler and the president of the local governing organization. Additionally, she has taken fitness classes at a local fitness center over the course of her adulthood and as part of her job and as a local citizen, has advocated for classes to be more accessible and inclusive for disabled people.

Data Collection

The primary source of data for the two studies that make up this dissertation were two audio recorded semi-structured interviews. Participants had the option of completing the interviews over the telephone or zoom. The researcher began each interview by describing the purpose of the research, study procedures, and her background information that was relevant to

the research (Zitomer & Goodwin, 2014). During each interview, participants were asked to reflect on their physical activity, exercise, and sport experiences as well as the meaningfulness of those experiences as an adult. At the start of each interview, physical activity, exercise, and sport was defined for participants to allow them to decide which best aligned with their experiences.

The first interview lasted in duration from 30-76 minutes. Sample questions from the first interview include: “Can you tell me about some good experiences that you’ve had as an adult in exercise, sport, or physical activity,” “Can you tell me about some bad experiences that you’ve had as an adult in exercise, sport, or physical activity,” “What accommodations or modifications helped you experience the most success with physical activity, exercise, or sport,” and “Can you describe any barriers or hindrances that have stopped or restricted you from being physically active?” In addition, participants were asked to describe any experiences of direct, indirect, systemic, or internalized ableism related to physical activity, exercise, or sport as an adult. See appendix C for the full interview guide from the first interview. The second round of interviews ranged in duration from 30-80 minutes. The purpose of the second interview was to explore, more deeply, the participants’ sense of belonging in physical activity, exercise, and/or sport spaces, as well as examine ableism in those spaces through an intersectional lens. Sample interview questions from the second interview include: Can you tell me about what you think is more impactful on your exercise, physical activity, or sport experiences,” “What other identities might influence how you experience exercise, physical activity, or sport,” “Can you tell me about what makes you feel, or not, a sense of belonging when you exercise or participate in physical activity or sport,” and “Can you describe how exercise, physical activity, or sport has, or has not, provided you with opportunities to build positive relationships with others?” See appendix C for the full interview guide from the second interview.

Reflexive interview notes served as a secondary data source for both studies. During and after each interview the researcher documented her thoughts about the interview, meaningful items, and potential emerging themes. Due to the rich description of the reflexive interview notes, the researcher was able to contextually return to the interview during the data analysis process (Phillippi & Lauderdale, 2018).

Data Analysis

Once data collection for the two studies was complete, audio interview recordings were transcribed verbatim. Separately for each of the two manuscripts and research questions, the interview data was analyzed using reflexive thematic analysis outlined by Braun and Clarke (2021). First, the researcher immersed herself in the data by reading and rereading each transcript. Next, labels were assigned to segments of data noting what was said, relationships, and significance (Braun & Clarke, 2021). When coding the data for the first study, the researcher explored the data through the intracategorical approach where specifically she sought to understand how accessing and participating in physical activity was experienced by blind and visually impaired women while also being open to other influential identities (McCall, 2005). The conceptualization of belonging guided the coding process for the second study. That is, the researcher aimed to understand how the participants experience being connected to and cared for by others in exercise, physical activity, and/or sport spaces (Haeghele & Maher, 2023). Codes were shifted to themes that represent patterns of meaning in the data (Braun & Clarke, 2021). Finally, themes were reviewed for clarity, consistency, and the organization of each central concept (Braun & Clarke, 2021).

CHAPTER IV: STUDY MANUSCRIPTS

The purpose of chapter four is to present the manuscripts for each study included in this dissertation. The first manuscript, *An Intersectional Examination of Blind and Visually Impaired Women's Physical Activity Experiences*, begins on page 38 and was composed following the authorship guidelines for *Qualitative Research in Sport, Exercise, and Health*. The second manuscript, *Examining Belonging Experienced by Blind and Visually Impaired Women in Physical Activity Spaces*, follows the first and begins on page 70. This manuscript was structured according to the guidelines of *Adapted Physical Activity Quarterly*. Both manuscripts adhere to the referencing style of the American Psychological Association.

Manuscript I

**An Intersectional Examination of Blind and Visually Impaired Women's Physical Activity
Experiences**

Abstract

The purpose of this study was to examine the experiences of blind and visually impaired women when attempting to access and participate in exercise, physical activity, and/or sport through an intersectional lens. An experiential qualitative research approach was utilized, and 10 blind and visually impaired women between the ages of 27-45 years served as participants. Data were collected through one-on-one audio recorded semi-structured interviews with each participant. The reflexive thematic analysis of the interview data yielded the construction of two themes, (1) ‘The female part definitely adds another layer of perceived vulnerability’: Confounding vulnerability, and (2) ‘Men are seen as strong; women are seen as bitches’: Navigating stereotypes. Findings revealed that participants were aware of others perceiving them as vulnerable, and that to avoid gendered and abled exchanges, they adopted several practices that allowed them to feel safer in physical activity environments. Additionally, the women’s physical activity experiences were clearly impacted by gender and disability stereotypes evidenced by the ways in which they navigated the disparities in expectations.

Keywords

Disability, Exercise, Gender, Intersectionality, Sport, Stereotypes

Introduction

Primarily, physical activity research that involves blind or visually impaired individuals typically focuses on understanding rates of adherence to physical activity guidelines as well as correlates and/or determinants of physical activity (Haegele et al., 2016; Haegele et al., 2017; Haegele & Zhu, 2021; 2022; Starkoff et al., 2017). For example, to date, several studies have explored the physical activity levels of blind and visually impaired adults based on gender, and results appear to be mixed. That is, while several survey studies (Haegele et al., 2016; Starkoff et al., 2017) found that men were significantly more active than women, others have found the opposite to be true (e.g., Haegele et al., 2017). As such, it is unclear whether there is clear gender-based differences in physical activity engagement among blind and visually impaired adults in the US. Additionally, the level of visual impairment appears to have an impact on physical activity level as visually impaired people have been identified as being significantly more active than completely blind individuals across several studies (Haegele et al., 2017; Starkoff et al., 2017). Furthermore, blind and visually impaired adults have reported several environmental and interpersonal barriers to physical activity such as transportation, inaccessible facilities, equipment, and activities, feeling burdensome to others, and experiencing lowered expectations (Jaarsma et al., 2014; Kirk & Haegele, 2021; Shaw et al., 2012).

Largely, existing research examining the physical activity behaviors of blind and visually impaired adults have been survey studies (Haegele et al., 2016; Haegele et al., 2017; Haegele & Zhu, 2021; 2022; Jaarsma et al., 2014; Shaw et al., 2012; Starkoff et al., 2017), leaving a rich description of their physical activity experiences unexplored. To allay this concern, and to understand the influence of ableism on the physical activity experiences of blind and visually impaired women, Ball and Haegele (2024) recently interviewed 10 North American blind or

visually impaired women on their exercise, physical activity, and sport experiences. Participants expressed significant exhaustion with navigating inaccessible physical activity spaces.

Frequently having to manage normalized, direct, and systemic ableism when trying to access and participate in physical activity led participants to feel anxious, burdensome, and as though they had to earn the respect of their non-disabled peers through proving their capabilities despite their visual impairment (Ball & Haegele, 2024).

Despite the findings from Ball and Haegele's recent work, research in this area is still underdeveloped, leaving much unknown about how blind and visually impaired people engage in physical activity. Seale (2012) suggests utilizing a feminist approach when examining the physical activity experiences of disabled women. That is, both women and disabled people likely experience marginalization, yet the interrelationships between gender and disability is rarely explored, especially in sport and physical activity contexts (Seale, 2012). According to Seale (2012), it is important to study the lived experience of individuals who identify as being a woman and having a disability to investigate how their multiple and multiplicative positions lead to possible oppression and opportunity. Disability is gendered, and disabled women face sexism but also the lack of opportunities to fulfill valued social roles (Richard et al., 2023). Richard and colleagues (2023) further argue that sport and physical activity are places of privilege and reinforce gendered and ableist norms, and, like non-disabled women, disabled women negotiate a balance of meeting masculine sport expectations while simultaneously satisfying feminine norms to be seen as a woman. Additionally, disabled women in sport and physical activity spaces must navigate the disability hierarchy where disabled bodies that can most emulate able-bodied standards are most accepted (Richard et al., 2023).

A recent scoping review of intersectionality research within sport and physical activity identified just a few existing studies that have examined the intersection of gender and disability (Lim et al., 2021). For example, Blinde and McCallister (1999) examined types of physical activity participation, reasons for participation, outcomes of participation, and gendered aspects of participation for 16 physically disabled women. Primarily, the women in this study engaged in physical activity with the goal to maintain their bodily function and appreciated physical activity for the increased self-esteem and control it gave them. Though their physical activity participation was fairly positive, the women expressed that sport and physical activity spaces were not places people expected to see disabled women and, therefore, they felt their opportunities and support were limited (Blinde & McCallister, 1999). More recently, Richard and colleagues (2017) examined the construction of gender norms in powerchair football as well as the identity development of women players through interviews with elite powerchair football athletes. The women players adopted masculine attitudes and behaviors on the field to earn respect while simultaneously preserving their femininity through their choice in clothes and accessories. It was noted that the use of electric wheelchairs in the game eliminates the biological differences between men and women, however, this did not eliminate the construction of gendered differences among players. For example, some men players expressed that women may lack discipline, concentration, and/or understanding of the game causing them to skillfully progress more slowly, while the women players believed their presence on the field encourages more teamwork and counterbalances the aggressive tendencies of the men (Richard et al., 2017).

An intersectionality framework within physical activity research focused on disability has been underutilized and warrants further exploration. Additionally, the few examinations of gender and disability related to sport and physical activity focus on physically disabled people,

leaving experiences of individuals experiencing other impairments, such as blindness and visual impairment, unknown. Therefore, the purpose of this study was to utilize an intersectional approach to examine the experiences of blind and visually impaired women when attempting to access and participate in exercise, physical activity, and/or sport.

Intersectionality

This study was guided by intersectionality as a conceptual framework. Crenshaw (1989) first introduced the concept of intersectionality to explain the double discrimination faced by Black women in the legal system as well as within the feminist and civil rights movements. Intersectionality considers that social categories (e.g., race, ethnicity, class, gender, disability) are not independent identities, and instead interact with one another impacting persons who experience multiple overlapping forms of oppression (Crenshaw, 1989; 1991). As such, intersectionality is an appropriate theoretical framework to examine the social construction of disability and how it intersects with race, ethnicity, class, and/or gender (Azzarito, 2020). McCall (2005) outlines three methodological approaches to intersectional research (e.g., anticategorical, intracategorical, intercategorical), of which, the current study utilized the intracategorical approach. Within this approach, the focus is on the narratives of dimensions across categories (i.e., disability, gender) and only reflects the perspective of the singular dimension of the social groups (McCall, 2005). In the case of this study, experiences in physical activity contexts were examined for blind and visually impaired women, not for all disabled people. Though traditional categories were named in this study to identify an un- or under-studied group, the researchers were interested in uncovering the diversity and difference within the group (McCall, 2005). Additionally, it should be acknowledged that this study strays from Crenshaw's (1989; 1991)

conceptualization of intersectionality as race was not a social category under investigation and primarily, the women interviewed for this study identified as white.

Methods

To explore the participants' thoughts, experiences, and interpretations of their time attempting to access and participate in physical activity, exercise, and/or sport, an experiential qualitative research approach was used. This approach aims to find and communicate meaning through the exploration of individuals' feelings, thoughts, and realities based on their lived experiences (Braun & Clarke, 2021). Due to this study's focus of interpreting and constructing meaning specific to blind and visually impaired women's physical activity experiences, it was situated within the interpretivist paradigm (Maher & Coates, 2020). To support philosophical alignment, the researchers ascribed to a relativist ontology and a subjectivist epistemology. A relativist ontology is centered on the belief that the situation or the area of study has multiple realities and the meaning of those realities can be explored, made, or re-constructed through interactions between the researchers and participants (Braun & Clarke, 2021; Goodwin, 2020), whereas a subjectivist epistemology asserts that the meaning made is unique to the thinking and interactions had by the researchers and participants involved in this study (Goodwin, 2020).

[Author 1], as the study's primary data collector, analyst, and interpreter, recognizes that her own experiences, beliefs, and values impacted the research process, therefore, it is important for her to disclose her positionality (Braun & Clarke, 2021; Goodwin, 2020; Smith & McGannon, 2018). She identifies as a blind White woman who is a doctoral candidate studying and conducting research specific to adapted physical activity. Similar to the participants in this study, she has a desire to be physically active and has attempted to access and participate in a variety of sports and activities as an adult. More specifically, [Author 1] has experience as an

elite alpine skier and more recently a recreational long-distance runner. Though, overall, she believes her physical activity experiences to be positive and meaningful, she acknowledges that not all blind or visually impaired women view or experience exercise, physical activity, or sport similarly to her.

Participants

Individuals were eligible to participate in this study if they (a) identified as a blind or visually impaired woman, (b) were between the ages of 18-45 years old, (c) disclosed experience attempting to access or participate in exercise, physical activity, and/or sport as an adult, and (d) were willing to complete a 60-90-minute interview. The age range of participants was specified to focus on the physical activity experiences of young to middle-aged women as their experiences may differ from older adults. Participants were recruited through an email blast that was shared with existing contacts as well as on a listserv of blind and visually impaired adults interested in taking part in research. The invitation consisted of a description of the overall study's purpose, time commitment, and the data collection process. Those interested in participating in the study were instructed to email [Author 1] declaring their interest along with answers to the demographic questions listed on the invitation. An interview was scheduled with each eligible interested individual. Institutional Review Board approval was granted for this study before participant recruitment began. It is important to note that this study was part of a larger project examining the physical activity experiences of blind and visually impaired women. However, the purpose, research question, and data used for this study were unique and separate from others within the overarching project.

Participants for this study were 10 blind or visually impaired women ranging in age from 27-45 years old. Pseudonyms have been assigned to each participant as well as the places and

organizations discussed to protect the participants' identities. The following narrative describes the participants' demographic information. A narrative format was chosen rather than a table because navigating a table with screen reading software frequently used by blind and visually impaired people is ineffective and inefficient (Office of Integrity, Safety and Compliance, 2016; University of Oregon, n.d.).

All participants are from North America with nine being U.S. citizens and one (Shannon) being a Canadian citizen. Alicia, Shannon, Diane, Heidi, Jessica, Beth, Lisa, and Melissa identified their race/ethnicity as White/Caucasian, whereas Kimberley identified as European Spanish and South American Indian, and Sonia identified as Hispanic/Latina. Diane, Heidi, Kimberly, Sonia, Jessica, and Lisa described having B1 vision (i.e., no light perception in either eye up to light perception with the inability to recognize the shape of a hand at any distance or in any direction), Alicia and Shannon having B2 vision (i.e., from the ability to recognize the shape of a hand up to visual acuity of 20/600 and/or the visual field of less than 5 degrees in the best eye with the best practical eye correction), and Beth and Melissa having B3 vision (i.e., from visual acuity above 20/600 and up to visual acuity of 20/200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction) as per the United States Association of Blind Athletes visual classification system. All 10 women shared a desire to be physically active, though being physically active looked differently for each woman based on her own interests, circumstances, and experiences. For example, Diane, Lisa, Melissa, Jessica, and Beth all reported walking as a regular form of physical activity. Alicia, Diane, Heidi, Jessica, and Sonia primarily exercise at home while Beth and Lisa exercise at a local fitness center. Several participants reported sports participation as an adult with Alicia and Sonia completing running road and/or trail races and triathlons, Kimberly competing in martial arts,

and Beth playing blind soccer. Alicia, Shannon, Sonia, Lisa, and Heidi participate in activities through community organizations such as running groups, dragon boat racing teams, and blind sporting events like tandem cycling and sailing.

Data Collection

Data for this study were collected through audio recorded semi-structured interviews conducted by [Author 1] ranging in duration from 30-80 minutes. Participants were provided with the option to complete the interviews over the telephone or zoom, and all but Heidi elected for a zoom interview. [Author 1] started each interview by explaining the study's purpose and procedures as well as her background information that was applicable to the research to reveal her biases to participants (Smith & McGannon, 2018; Zitomer & Goodwin, 2014). Before [Author 1] began asking the interview questions, she defined exercise, physical activity, and sport for participants to allow them to determine which has best aligned with their experiences. For the purposes of this study, exercise was defined as “a type of physical activity that involves planned, structured, and repetitive bodily movement done to maintain or improve one or more components of physical fitness” (CDC, 2017). Physical activity was defined as “any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure” (CDC, 2017). Finally, sport was defined as “an athletic activity requiring skill or physical prowess and often of a competitive nature” (dictionary.com, n.d.). Participants were asked to reflect on their exercise, physical activity, and/or sport experiences in adulthood and the meaningfulness of those experiences. To prompt discussion about their experiences, [Author 1] followed an interview guide that she developed following an intersectional framework. Before the interview guide was considered finalized, [Author 1], [Author X] and [Author Y] discussed, critically reflected on, and revised items to ensure all questions aligned

with McCall's (2005) intracategorical approach to intersectional research. The guide underwent two rounds of revisions prior to being considered final. Sample interview questions included: "How, if at all, does your visual impairment influence how you experience exercise, physical activity, or sport," "How, if at all, does being a woman influence how you experience exercise, physical activity, or sport," "Can you tell me about what you think is more impactful on your exercise, physical activity, or sport experiences," and "What other identities might influence how you experience exercise, physical activity, or sport?"

Reflexive interview notes served as a secondary data source for this study. During and immediately following each interview, [Author 1] documented her thoughts and interpretations of the conversation. More specifically, she highlighted meaningful conversation items and potential emerging themes. Due to the rich description and depth of the interview data provided by the reflexive interview notes, [Author 1] was able to conceptually return to each interview throughout the data analysis process (Phillippi & Lauderdale, 2018).

Data Analysis

After the interviews were completed, they were transcribed verbatim and analyzed using Braun and Clarke's (2021) reflexive thematic analysis. To start the analysis process, [Author 1] immersed herself in the data by reading and rereading each transcript. Next, she labeled segments of data noting meaning related to what was said, implicit ideas and concepts in the data, as well as relationships across the dataset (Braun & Clarke, 2021). During this coding process, she explored the interview data using the intersectional intracategorical approach where she sought to understand how blind and visually impaired women experienced accessing and participating in physical activity while also examining the possible influence of other identities aside from gender and disability (McCall, 2005). At this stage [Author 1] turned to [Author X] who served

as a critical friend to challenge and critique her thinking, interpretations, and reflexivity (Tracy, 2013). Based on meaningful patterns in the data, codes were combined into themes to represent the identified patterns (Braun & Clarke, 2021). As a final step, each theme was reviewed by both [Author 1] and [Author X] for clarity, consistency, and to ensure the theme captured the intended central meaningful idea (Braun & Clarke, 2021). The finalized themes are presented below as findings.

Findings

Based on the data analysis, two themes were developed that represent the participants' experiences and perceptions about accessing and participating in exercise, physical activity, and sport as blind or visually impaired women: (1) 'The female part definitely adds another layer of perceived vulnerability': Confounding vulnerability, and (2) 'Men are seen as strong; women are seen as bitches': Navigating stereotypes. This findings section and the proceeding discussion follow the 'show and tell' style as used by Morley and colleagues (2021), where data is first shown to readers for them to form their own knowledge and understanding, and then an analytical 'tell' is provided in the proceeding discussion section.

'The female part definitely adds another layer of perceived vulnerability': Confounding vulnerability

When reflecting on their physical activity experiences generally, the participants expressed safety concerns related to the vulnerabilities of both having a visual impairment and being a woman. More specifically, the participants expressed that they were cognizant of how others perceived them as vulnerable and how those perceptions impacted their choices of activities, the people they were active with, and how they tend to get to and from activities. For example, Alicia explained:

I am cognizant of how I'm perceived, like my being a straight woman and feminine and like even sometimes commuting to a workout, I might get unsolicited catcalls or just people being disrespectful, and I feel like it's different than when I'm just like in work attire. I feel like when I'm wearing athletic wear, I feel like I tend to attract more unwanted attention than not. And when it comes to like meeting new guides I really would only... I feel safer running with someone that's the same gender if I've never met them before. I feel like Global Heel (running group) is a layer of kind of protection or insurance because they do ask that guides go through like a background check. And there's more of like the safety in numbers kind of thing.

For Melissa, concerns for her safety were especially limiting in terms of her physical activity pursuits. She reflected:

Yeah, there have been a lot of times in my life that I thought, I'm bored, I'll go for a walk. And hey, I'm blind, maybe I'll take my cane. But then all too often, I'll say, well, but I'm a blind woman. I don't really wanna go walk by myself, like hey, I don't have a gun or anything, and so I get really nervous about it. And I kind of would never tell anyone that in the past, like, no, I'm tough, I'm strong, I'll do whatever I want, but the truth is that I didn't do a lot that I wanted to, and I don't think really having a gun is the answer either, but a cane can be a weapon too, but it's the fact that I feel like I could be assaulted and that the cane makes me a target, and that something will happen and I won't realize it until it's too late, and I think that probably is my subconscious telling me things like this have happened in the past, and so I need to be aware of it and not make myself a target just by going out. It's kind of a sad thing, but I don't know how much that is that I'm blind and how much is that I'm a woman, but I'm sure they tie in pretty closely.

Similarly to Alicia and Melissa, Sonia was cognizant of how she is perceived by others and described that the combination of her blindness, gender, and now living in a smaller more inaccessible city with less people around to support her in emergency situations compromised her safety. She noted:

And part of that is just there aren't as many people around either, and so feeling safe is tricky, which is another reason why I decided to apply for a guide dog. So, even in the evening, there's just not many people walking around like you would find in bigger cities, and so asking for help if you need help becomes more challenging. And I do think about like being a woman and because of I'm pretty petite. I'm five feet tall, 91 pounds, like I'm just not a big person. And so, I don't... In the past living in Old Town, I'd be like, oh, no problem, I'll scream, and I've got Mace and I'm fine. But there's so many people around. And so many cars and traffic. And that's just not the case here, really.

When discussing safety concerns and vulnerability, the women specifically referenced unwanted gendered and abled interactions with others, usually men, that made them feel uncomfortable in physical activity spaces. For example, Beth described interactions like this, and stated:

Well, I feel like when I'm at the gym and this is even before I had my vision loss and stuff, I just feel like people at the gym, other men are more likely to come up and strike a conversation than they are with another man in the gym. So, I feel like being a woman, like people just feel more comfortable... Like men feel more comfortable approaching you and talking to you or giving you tips on what you're doing, even when you don't care for them telling you anything. You are like, I'm just gonna do my workout and I don't need... If I wanted a trainer, I would have one. So, I just feel like people give more

unsolicited advice. They're more likely to strike up conversation, offer just help or I don't know, help that you don't always want because... And that's separate from being visually impaired. And then you throw in visually impaired and you get all sorts of weird creeps that wanna help you.

To deter or avoid unsafe situations, participants described a variety of strategies they had developed. For example, Alicia offered up strategies such as running in a group and updating a relative of her plans that make her feel safer when finding a new guide and going out for a run in her community. She detailed:

So, I do like that if I'm gonna run with somebody new I'd rather do it in the context of Global Heel versus just like finding somebody that's like male identifying online, or like... I can't think of another way I might meet someone that I like otherwise. But I do sometimes feel like I'm perceived as... That other people perceive me as being like very vulnerable or an easy target sometimes. But I try to... The safety of numbers thing and keeping people like my husband or a friend, family aware of like where I'm going and when I plan to be home and that kind of thing. But yeah, I do definitely feel like being a woman with a disability is... The female part definitely adds another layer of like perceived vulnerability.

Kimberly viewed her options for feeling safe in physical activity spaces as either being 'tough' and fitting in with men or finding an alternative space more designed for women. She commented:

Yeah. It comes back to, what makes me feel comfortable. If I'm in a space that feels safe and approachable to everybody, then that's great. But again, there is the times that the space just does not feel like woman friendly, and you leave them. And that's just kind of, I

think that's anywhere, but especially in like the sports world. There's that gender barrier in a lot of cases. And you just either got to be tough enough to either want to, or to break that barrier. Or if you're more comfortable, then find yourself classes that are more female-centric type classes.

In addition to safety issues described by the participants, they also noted that it was important for them to make transportation-based considerations that were influenced by their impairment and gender. For example, Sonia discussed the limited transportation options in her city and described her hesitation to opt for ride share options due to concerns of harassment or threats to her physical safety. She expressed:

And I know as a woman I could take Uber; I can get Lyft. But, sometimes I do think, I don't wanna get into an Uber today. So, and yeah, some of that is driven by the fact that I am a woman and most of these drivers tend to be men who drive Uber. And at least from my experience, they tend to be men. So, and really these are not things that I would've even considered when I was in my 20s. I guess I thought in Old Town I was pretty invincible, and I didn't really need taxis. I was on the trains and the buses, or I was walking a lot.

In some cases, participants chose their blindness specific mobility aid based on the additional safety it provided them when traveling to and from activities independently. For example, the guide dog users reflected that traveling with their guide dogs was preferable and cut down on the frequency of unwanted attention. Alicia recounted:

I feel a lot more confident and safer traveling with my guide dog. I get a lot more people having the best intentions of grabbing me because they think they're being helpful, or like shouting instructions that they also think are helpful. But generally never asked first. And

that I have a lot more of those experiences when I'm using my cane versus my guide dog. So yeah, and I still think that a lot of people don't... Sometimes I don't... I think a lot of times people don't perceive my guide dog as a... They think I'm training the dog, or they don't realize that she's even any kind of service dog. So yeah, I would, I would say that when possible, I would prefer to be able to get to a workout with my guide dog versus my cane.

Beth echoed Alicia by sharing:

And usually when I'm out on the street, like if I'm walking somewhere, it's almost always men that are trying to help me cross the street and often very pushy, so. Which is why I'm really glad my service dog, my Allie, my guide dog is a Doberman, which has really cut down on the amount of creeps when I'm out with her, so.

Through the participants' narratives, it was evident that as blind women, substantial considerations related to physical activity engagement was their physical and emotional safety, perceived vulnerability around men, and the limited transportation options due to their blindness. More specifically, they were aware of how they were perceived by others, the consequences of those perceptions, and planned their participation and transportation accordingly.

‘Men are seen as strong; women are seen as bitches’: Navigating Stereotypes

Nearly all of the women interviewed for this study mentioned explicit and implicit ways in which societal stereotypes surrounding both disability and gender impacted their access to or participation in physical activities. When asked about expectations set out for them and their feelings surrounding those expectations, several women described instances that perceived lowered expectations had by others related to their disability and/or gender. Specific to disability, Beth said, “they only see me as the athlete of being a blind athlete, but never as a legitimate

athlete”; and Jessica stated that, “I’ve just never been expected to be a very athletic person.”

Similarly, Kimberly expressed frustration and disappointment with having to navigate both abled and gendered expectations upon entering a new physical activity space. She explained:

So, if a sighted person's expectation is we can't even walk downstairs, how am I going to walk into a gym or a martial arts school or whatever, and God forbid, one of these people that have that low of an expectation is working there. Because now not only do I have to prove myself as to be physically capable or able to learn, I have to prove myself as a woman who's capable of doing these things that may be more male centric type of things. And I have to crack the blindness barrier on top of all of that. That's three things I have to crack. And again, cited privilege is most of that stuff they don't have to deal with.,

It appears that these perceived lowered expectations are largely due to stereotypes and the abled masculine environment of physical activity and sport. Shannon emphasized this point by noting:

But typically, in sport, there's a lot more men than women. So that, again, is a little bit intimidating because especially if you're wanting to join a sport that's not designed as a parasport or a blind and partially sighted sport, you feel like you're coming at... Honestly, I think as a woman, you always feel like you're coming in at a deficit because you're seen as weaker, you're seen as not as strong. And maybe that's just masculinity and colonialism and all the things that were taught from a young age. And that's kind of awful. But then I'm also overweight. And then I also have a disability. So, like, there's just so many comorbidities that I have that are intersectionalities that it's just hard to come to that place of like, I think that I'm just as good at the sport as the men on the team.

Shannon continued, and shared on her dragon boating experiences:

So, for example, Dragon Boating, I am really good at, I know I'm really good at it. People have said I'm really good at it. It's not just a personal feeling. People have said that about me, but I don't know if I could go competitive because most of the people in the competitive boat are younger than me, more physically fit than me, male presenting people. And I just don't know if I could feel as much as them in the boat. And that's on me, like that's a me problem, but that's how I feel about it. So, I just don't know if I could ever go competitive because I don't know if I could ever feel like I could keep up with them, whether it's true or not. So, I just don't try. And that's because a lot of the stereotypes that have been put on me as a woman in the past that girls, there're sports for girls, but the ones that are for boys are for boys. It's silly. And I don't believe in gender stereotypes. Like I don't believe in them, but at the same time, I guess I fall into them. So, where does that leave you.

In addition to Shannon, several other women, touched upon the gender disparities they have experienced in male-dominated sports. For example, Kimberly stated:

So especially back in the day when I was doing the martial arts pretty heavily. Some martial arts have a lot of women in them, and others you may not ever run into another female. And sometimes especially those ones that it's not like a woman heavy system, it feels very much like a boys' club. And so, there's a part of, I guess, mental preparedness that I, when I was doing this especially, had to go through, all right, well we're going to go to Jujitsu today and it's gonna be all the guys, and they're gonna be a little weirded out. And I'm just gonna have to deal with that and either get comfortable or if it never gets to a space where I feel comfortable, then I'll bounce. So, usually I'm pretty good with hanging with the guys, so it's not that big a deal, but there is kind of that boys' club that

happens even in the gym. There's like guys that are power lifting, and you can hear it, you can see it if you have vision. It's just a... It is sometimes a very boys club type of situation and that can be uncomfortable for some people.

Following this, some participants reported having to navigate gender and disability stereotypes even in co-ed and disability sport spaces. For example, Alicia communicated her observation of the differing ability expectations among men and women in community running groups:

Yes. I do think that in the... Even in Global Heel or spaces of disabled athletes, I do think that there's some like subconscious bias that just that like men are gonna do better at like longer distances or that they're going to be faster. Just like all the things we associate with being like masculine and competitive. I think that that can be true in all of the running spaces I've been a part of, regardless of disability identity. And yeah, I think it's largely like subconscious I don't always think that people are aware of some of that. And it feels different from somebody who's like naive or ignorant about physical ability and that bias. I think the gender part is just like so baked into a lot of our societal structures that people don't even... It's like a different level of kind of bias, I guess.

Experiences of gender inequality even permeated elite sport, where, for example, Sonia experienced first-hand the discrimination of female track and field athletes and their guides. She reflected:

And being a woman in sport, having been a Paralympian in track and field, I do feel that there was some disparity between getting access to the, what would I say, the benefits that came along from being on the team. There was a lot of support for the male sprinter athletes who were visually impaired, and the male long jump, visually impaired athletes,

that made the team year over year and as a middle distance and long distance runner, I was the only female for TEAM USA in general across the entire country, and I was the only one training out west in middle distance and long distance, there was another visually impaired woman at the time when I was there, who is a sprinter. But I had to fight so hard just to even though I had met my standards and run what I needed to run, just fight and advocate so hard and so long to have the benefits of the guide, to have my guide receive the stipend they're supposed to receive like the male athletes' guides received.

She continued:

And even after all of that, my guide still didn't get access to all of the sports medicine benefits that included massage and chiropractic care, that the male athletes' guides received. And that was just year over year, regardless of my times and meeting the time standards. And it was quite a struggle, and someone could say, well, that's not fair, and that could just be the director at the time of US Paralympics. And of course, sure that could be the case, but that's what we had right at the time, we couldn't change it. It's not like you can say, well, I'm gonna go above you and go beyond you, because well she was it, so she being a woman herself, there was definitely still some, I would say some bias, towards, that gave preferential treatment to them, to male athletes. So yeah, in track and field, that was pretty rough.

Shannon succinctly articulated the consequences of the differential view and treatment of women in sport and physical activity that was commonly expressed by participants. She stated:

Men are seen as strong; women are seen as bitches. And depending how backwoods the place you live is, the more that's facts. And I came from a place that was very much not

backwoods to a place that very much is backwoods. And that's always been very hard for me to reconcile because I was taught to be very strong. But unfortunately, in this place that comes across as very bitchy. So, I have to be very careful how I go about a lot of things, because it's a very fine line. And it's both in reference to how I ask for help, how I come into a space, how I get kicked out of teams. All of those things, because if I was a man, I don't think half of it would've happened. I would've been seen as a really strong team player with great ideas. Not a bitchy woman who wants her way.

Despite the negative feelings had by participants regarding the stereotypes and expectations or lack thereof in physical activity spaces, some described ways in which they used them to their advantage to navigate the space and/or situations they encountered. For example, Shannon described specific scenarios in which she would ask a man versus a woman for help. She detailed:

I think it would depend on what the activity was that I was trying to participate in. And my mood, which sounds awful, but I know people are often more likely to help small women. And that sounds awful, but it's very true. So, like, if I need help with something, and I look around a space and like, let's say I'm at a ball class and I can't put my ball away, like the big yoga ball things. I can't put my exercise ball away myself 'cause I'm too short. I will go ask a big, tall man to do that for me because he's gonna look at small woman and go, 'Oh yes, of course, I protector of small woman, I will help you'. And that sounds really, really bad, and gendered, but I will get the most help from big, tall man. So that's who I will seek out to look for help in that space, because that's traditionally over all my years of experience, what I have found to be true. Whereas like the woman, they'll probably help me, but they might make some snide comment. They might be like, 'Oh

yeah, I guess'. Or 'Can't you reach it yourself'. Before they do it. Whereas the man will just assume, 'No, she can't do it herself, or she wouldn't possibly ask for help'. And that's... So sometimes I will use my gender to my advantage to get help.

She added:

But the other is also true. So, if we're in an exercise class and I don't understand what's going on, I will not ask the man for help because then he will think, 'Woman is ignorant, she doesn't understand'. I will find another woman and say, 'Hey, I don't really get this, can you help explain?' And she'll be like, 'Of course, let me help you'. So, it's kind of like, what do I need help with who I will go to? Because women love explaining things and helping with understanding, whereas men love helping with physical tasks. And those are very gendered statements. And I'm sorry. It's what I found.

Upon reflection, Diane indicated that for the most part she gets along better with men, but when navigating physical activities, she feels more comfortable around women. She noted:

Well, I just told you that I don't feel too much too well around women. But probably if I were to pick which group of people I would rather work with, I would probably pick women still. Because I would feel like we would be more in the same boat. I guess what it boils down to is I'd rather be judged by women for doing something wrong than by men if it makes any sense. I don't know why, let me just say.

Unfortunately, for some of the women, leveraging societal stereotypes did not work to their advantage in physical activity contexts. For example, Jessica reported that despite her developing friendships with athletic people and dressing the part she is still not viewed by others as someone interested in physical activity and sport. She reflected:

People don't really think of me as someone who would do stuff. Like when I tell people, oh yeah, like back when I was running, oh yeah, I run, you know, stuff like that. Like, I don't know, like they would say they run too. And then I would have to be like, oh, would you ever like to run together sometime? And like, they wouldn't initiate it. So, yeah, I don't know. I mean, I dress super sporty. I don't know what more I could do to say to people, hey, I like, you know, I'd be up for sports.

Discussion

This study utilized an intersectional lens to examine the experiences of 10 blind and visually impaired women when attempting to access and participate in exercise, physical activity, and/or sport. By doing so, our findings add to the limited intersectionality research exploring gender and disability within physical activity contexts (Lim et al., 2021) and expand from the experiences of physically disabled women (Blinde & McCallister, 1999; Richard et al., 2017) to attempting to understand the experiences of blind and visually impaired women. Findings revealed that for the women involved in this study, both their gender and disability influenced their choices of activities, the people they were active with, and transportation to and from activities. More specifically, they were aware that others perceived them as vulnerable, and as a result they adopted certain practices that allowed them to feel safer and avoid unwanted gendered and abled interactions. Additionally, it was clear that the abled masculine nature of sport and physical activity impacted the participants' experiences through the ways in which they navigated disparities in expectations based on societal stereotypes surrounding gender and disability. That is, several participants expressed that as women they were viewed and treated differently than men in physical activity spaces, and for some, their visual impairment contributed to further lowering perceived expectations had by others regarding their capabilities.

A substantial consideration surrounding physical activity for the women in this study was being perceived as vulnerable and the safety concerns that accompanied those perceptions. Interestingly, much of the research regarding the safety of blind and visually impaired persons only considers physical safety and overlooks gender and overall social/emotional safety (Deverell, 2019). Similar to prior work, the women in this study reported objectifying interactions like unsolicited catcalls and unwanted exchanges with men in physical activity spaces that left them feeling uncomfortable (Clark, 2015; Wesely & Gaarder, 2004). As a result, and to feel safer, the women adopted several strategies to offset their vulnerability, including planning ahead and telling trusted others of their plans, being intentional with whom they participated in physical activities, and traveling with their guide dog when possible (Wesely & Gaarder, 2004). For some, the concern for their safety was particularly significant and left them hesitant to participate in new activities altogether (Wesely & Gaarder, 2004). It was clear that participants were thinking about and accounting for several layers of gendered and ableist marginalization in order to participate in exercise, physical activity, and/or sport, which highlights the additional cognitive labor women expend when planning for their safety (Wesely & Gaarder, 2004). Complicating matters further, as blind or visually impaired women they may also be experiencing access fatigue where they are expending mental and emotional energy required to navigate power relations and institutional barriers just to acquire access to the space or activity (Konrad, 2021).

Through exploring the participants' narratives, it was clear that societal stereotypes significantly impacted their physical activity experiences. For example, several women indicated that they believe others had lowered expectations of them and their capabilities related to physical activity due to their disability (Hardin, 2007). This finding may not be surprising, as

prior work from Ball and Haegele (2024) has identified that blind and visually impaired women often experience various forms of ableism in physical activity environments. The significant impact of this current study, though, is with our newfound understanding of how gendered expectations may additionally contribute to these lowered expectations, constructing what Blinde and McCallister (1999) refer to as a double disadvantage. Gendered societal stereotypes specific to sport and physical activity frame women as inferior, incompetent, and less capable than men (Clark, 2015; Richard et al., 2017; Voelker & Reel, 2020). These stereotypes were clearly depicted by participants, who reported having lowered expectations and being treated differently than their male peers in co-ed and disability sport spaces. Highlighting this, Sonia spoke at length about the unequal treatment of blind female elite track and field athletes and their guides as compared to the male athletes and their guides. Unfortunately, it appears to be common that disabled women athletes are undervalued and often experience gendered discrimination in sport (Hardin, 2007; Lynch & Hill, 2021; Richard et al., 2017).

To combat these biased values, several participants described ways in which they attempted to leverage societal stereotypes in order to navigate physical activity spaces and express personal traits to others. For example, Jessica explained that she dresses ‘sporty’ in an attempt to communicate to friends and acquaintances that she too likes being physically active and playing sports. This appears similar to prior work where physically disabled women athletes strategically choose clothing, accessories, and hair styles to portray themselves as feminine (Hardin, 2007; Richard et al., 2017). More specifically, disability and sport have been identified as elements that are incompatible with femininity (Richard et al., 2023) and as a result, disabled women in sport attempt to preserve their femininity by conforming to feminine stereotypes such as wearing make-up, jewelry, having long hair, and dressing in clothing that accentuates their

feminine bodies (Hardin, 2007; Richard et al., 2017). Interestingly though, the blind and visually impaired women in this study did not appear to be concerned with portraying themselves as feminine, but rather seemed more cognizant of the impact of stereotypes surrounding blindness and visual impairment. This may be in part to blind women first needing to overcome societal blindness stereotypes before their gender is noticed or considered (Hammer, 2016).

Conclusion

The purpose of this study was to examine the experiences of blind and visually impaired women when attempting to access or participate in exercise, physical activity, and/or sport through an intersectional lens. Feeling as though they were perceived as vulnerable by others in physical activity spaces led the women to seek out strategies and practices that allowed them to feel safer and avoid gendered and abled interactions. Additionally, gender and disability stereotypes clearly impacted the participants' experiences as they noted instances where they were viewed and treated differently than their peers in the physical activity or sport environment. Based on our findings and considering that physical safety has been the primary research concern for blind and visually impaired persons (Deverell, 2019), we encourage stakeholders and scholars to extend their thinking in regard to the safety of blind and visually impaired women and men, to include considerations regarding both gender and social/emotional safety. Though this study provides a contribution to the limited intersectionality scholarship specific to disability and physical activity (Lim et al., 2021), further inquiries are needed to explore the interactions of other identities along with gender and disability such as race, ethnicity, religion, sexual orientation, class, age, marital status, and education, among others, and the impact on exercise, physical activity, and sport experiences.

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Manuscript II

Examining Belonging Experienced by Blind and Visually Impaired Women in Physical Activity Spaces

Abstract

The purpose of this study was to examine the subjective feelings of belonging for blind and visually impaired women when participating in exercise, physical activity, and/or sport. To do this, an experiential qualitative research approach was used. Ten blind or visually impaired women aged 27-45 years served as participants and completed two one-on-one audio recorded semi-structured interviews. A reflexive thematic analysis approach was used to analyze the interview data where three cascading themes were constructed: (1) 'When you get there, and people welcome you': Feeling welcomed to join spaces, (2) 'Feeling like I can contribute and I'm valuable': Feeling accepted within those spaces, and (3) 'Having the opportunity to build positive relationships': Building community that extends beyond spaces. Participants described instances of belonging in physical activity spaces where they were welcomed, felt accepted and valued, and were able to develop long-lasting friendships.

Keywords

Acceptance, Disability, Exercise, Qualitative Research, Sport, Value

Introduction

One's desire to belong has been identified as a vital and universal human need (Baumeister & Leary, 1995). Baumeister and Leary (1995) define a need to belong as “a need to form and maintain at least a minimum quantity of interpersonal relationships” (p. 499). This universal human need is comprised of two main features: (1) people need frequent, positive, and pleasant interactions with other people, and (2) based on these interactions the person needs to believe that a stable and long-lasting bond with affective concern is forming (Baumeister & Leary, 1995). Experiencing a sense of belonging may elicit feelings of or can be associated with happiness, joy, warmth, closeness, caring, and support (D'Eloia & Price, 2018). In contrast, lacking a sense of belonging can lead to feeling left out or ignored (Hall, 2009). People may feel as though they belong when they perceive that they are accepted by and treated the same as others (Hall, 2009). More specifically, key elements to the development of relationships that foster a sense of belonging are reciprocity and intimate sharing (D'Eloia & Price, 2018). Furthermore, for disabled women, being able to find commonalities to relate to others in the group and having consistent reciprocal support nurtures their sense of belonging (Mejias et al., 2014).

In this paper, we focus on experiences of belonging among blind and visually impaired women in physical activity contexts. To date, research focused on blind and visually impaired women's physical activity experiences have centered around the access issues and ableism they experience within physical activity contexts. For example, Ball and Haegele (2024) found that blind and visually impaired women reported exhaustion with having to navigate inaccessible physical activity spaces as well as having to manage indirect, normalized, and systemic ableism while trying to access and participate in physical activity. Here, we pivot from exploring the

ableist barriers that exist to prevent physical activity for blind and visually impaired women to exploring belonging within physical activity spaces and places (Brittain et al., 2020; Martin, 2013; Smith et al., 2019). With that in mind, we hope to uncover characteristics that support feelings of belonging rather than focusing on the negative experiences of blind and visually impaired persons typically associated with physical activity.

Concepts related to belonging have begun to emerge as an important construct to explore among disabled people within physical activity contexts. For example, in their investigation of barriers and facilitators of gym use among physically disabled persons, Richardson and colleagues (2017b) reported that despite the unwelcoming messages participants received at the gym, they were still able to form social connections with others through positive interactions, enhancing their sense of belonging. For some, these social connections were formed by seeing other disabled people in the gym, allowing them to form bonds and friendships with others who have had similar experiences (Richardson et al., 2017b). Following this sentiment, disabled people who exercised in a peer group highlighted the value of being understood, supported, and validated by others in the group (Richardson et al., 2017a). More specifically, the mutual understanding experienced in the group fostered a sense of belonging among group members which resulted in them feeling empowered to resist inherent oppressive practices within gym culture rather than feeling like unwelcomed outsiders (Richardson et al., 2017a).

While concepts related to belonging have begun to emerge in scholarship in this area of inquiry, there is limited research within adapted physical activity that explicitly uses belonging as the conceptual framework to guide inquiry. Among these, Maher and colleagues (2023) recently explored the perspective of one disabled person's experiences with exclusion, inclusion, and belonging in both mainstream and segregated sport settings. To do this, they adopted a narrative

approach to help understand and re-tell Jack's story of participating in both mainstream and cerebral palsy (CP) football (soccer) youth leagues. Specific to belonging, Jack ultimately left his mainstream team due to unfulfilling relationships and exclusion, which led him to join a CP football team where he developed meaningful friendships in which he felt important to and accepted by his teammates (Maher, et al., 2023). To help move research in this area of inquiry forward, this study explicitly used a conceptual framework of belonging to ensure clarity in what makes or does not make a physical activity space conducive to blind or visually impaired women's sense of belonging. By doing so, we extend the prior work of Richardson and colleagues (2017a; 2017b) by specifically exploring the role one's sense of belonging has in a physical activity space. More specifically, the purpose of this study was to examine the subjective feelings of belonging for blind and visually impaired women when participating in physical activity, exercise, and/or sport.

Methods

This study was situated within the interpretivist research paradigm as the goal was to interpret and construct meaning related to the concept of belonging based on the physical activity experiences of blind and visually impaired women (Maher & Coates, 2020). Within this paradigm, an experiential qualitative research approach was used to understand blind and visually impaired women's sense of belonging when participating in exercise, physical activity, and/or sport. When utilizing the experiential qualitative research approach, researchers attempt to find and communicate meaning by exploring the lived experiences of individuals through their feelings, thoughts, and realities (Braun & Clarke, 2021). To support philosophical alignment, this study adopted a relativist ontology and subjectivist epistemology. A relativist ontology asserts that there are multiple realities and the meaning ascribed to those realities can be created,

explored, or re-constructed by researchers and participants through their interactions with one another (Braun & Clarke, 2021; Goodwin, 2020). Furthermore, a subjectivist epistemology posits that the created meaning regarding the situation or area under study is unique to the researchers and participants involved in the study itself (Goodwin, 2020).

As the primary interviewer, analyst, and interpreter, [Author 1] acknowledges that her beliefs, experiences, and values influenced the research process, therefore, it is necessary for her to expose her positionality (Braun & Clarke, 2021; Goodwin, 2020; Smith & McGannon, 2018). She identifies as a blind White woman who is a doctoral candidate studying and conducting research specific to adapted physical activity. Similar to the participants in this study, she has a desire to be physically active and has attempted to access and participate in a variety of sports and activities as an adult. More specifically, [Author 1] has experience as an elite alpine skier and more recently a recreational long-distance runner. Though, overall, she believes her physical activity experiences to be positive and meaningful, she recognizes that not all blind or visually impaired women view or experience exercise, physical activity, or sport similarly to her.

Participants

To be eligible to participate in this study, individuals had to (a) identify as a blind or visually impaired woman, (B) be between the ages of 18-45 years old, (c) have experience attempting to access or participate in exercise, physical activity, and/or sport as an adult, and (d) be willing to complete two 60-90-minute interviews. The purpose of the specified age range of participants was to allow the focus of the research to be on the physical activity experiences of young to middle aged women as their experiences may differ from those of older adults. An email invitation to participate in this research was shared on a listserv of blind and visually impaired adults interested in being involved in research and with existing contacts. The invitation

outlined the study's purpose, time commitment, and data collection procedures. Interested individuals were asked to email [author 1] directly indicating their interest as well as answers to the demographic questions listed on the invitation. [Author 1] then scheduled the first interview with each eligible woman. Before recruitment began, Institutional Review Board approval was granted for this study.

Participants for this study consisted of a purposive sample of 10 blind or visually impaired women aged 27-45 years old. To protect the identities of the women in this study, pseudonyms were assigned to each of them as well as the places, locations, and organizations they discussed. The proceeding narrative describes the participants' demographic information. A narrative format was chosen to display the information rather than a table often found in academic journals because navigating a table with screen reading software regularly used by blind and visually impaired persons is ineffective and inefficient (Office of Integrity, Safety and Compliance, 2016; University of Oregon, n.d.).

All participants are from North America with nine being U.S. citizens with Diane, Heidi, Jessica, Kimberly, and Sonya residing in the Midwest, Alicia and Lisa residing in the northeast, and Beth and Melissa residing in the west. One participant, Shannon, is a Canadian citizen residing in one of the prairie provinces. Alicia, Shannon, Diane, Heidi, Jessica, Beth, Lisa, and Melissa identified their race/ethnicity as White/Caucasian, whereas Kimberley identified as European Spanish and South American Indian, and Sonia identified as Hispanic/Latina. Diane, Heidi, Kimberly, Sonia, Jessica, and Lisa described having B1 vision (i.e., no light perception in either eye up to light perception with the inability to recognize the shape of a hand at any distance or in any direction), Alicia and Shannon having B2 vision (i.e., from the ability to recognize the shape of a hand up to visual acuity of 20/600 and/or the visual field of less than 5

degrees in the best eye with the best practical eye correction), and Beth and Melissa having B3 vision (i.e., from visual acuity above 20/600 and up to visual acuity of 20/200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction) as per the United States Association of Blind Athletes visual classification system. All 10 women shared a desire to be physically active, though being physically active looked differently for each woman based on her own interests, circumstances, and experiences. For example, Diane, Lisa, Melissa, Jessica, and Beth all reported walking as a regular form of physical activity. Alicia, Diane, Heidi, Jessica, and Sonia primarily exercised at home while Beth and Lisa exercised at a local fitness center. Several participants reported sports participation as an adult with Alicia and Sonia completing running road and/or trail races and triathlons, Kimberly competing in martial arts, and Beth playing blind soccer. Alicia, Shannon, Sonia, Lisa, and Heidi participated in activities through community organizations such as running groups, dragon boat racing teams, and blind sporting events like tandem cycling and sailing.

Data Collection

The primary source of data for this study was two audio recorded semi-structured interviews lead by [Author 1]. Participants had the option to complete the interviews over the telephone or zoom. Heidi elected for telephone interviews, Beth chose one phone interview and one zoom interview, and all others completed zoom interviews. Each interview began with [Author 1] describing the purpose and procedures of the study, as well as her professional and personal background that was pertinent to the study (Zitomer & Goodwin, 2014). Additionally, [Author 1] defined exercise, physical activity, and sport for participants to allow them to decide which form of movement best aligned with their experiences. For the purposes of this study, exercise was defined as “a type of physical activity that involves planned, structured, and

repetitive bodily movement done to maintain or improve one or more components of physical fitness” (CDC, 2017). Physical activity was defined as “any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure” (CDC, 2017). Finally, sport was defined as “an athletic activity requiring skill or physical prowess and often of a competitive nature” (dictionary.com, n.d.). In the first interview, which ranged in duration from 30-76 minutes, questions focused more generally on the meaningfulness of the participants’ physical activity experiences. Some example questions from the first interview include: “can you tell me about some good experiences you’ve had as an adult in exercise, sport, or physical activity,” “Can you tell me about some bad experiences you’ve had as an adult in exercise, sport, or physical activity,” “Can you explain your experience with peers, friends, family, or others who you have participated with in sport or physical activities,” and “Can you describe interactions with fellow physical activity participants, guides, and facility or organization personnel within the physical activity space?” The purpose of the second interview, which ranged from 30-80 minutes, was to explore more deeply the participants’ sense of belonging in exercise, physical activity, and/or sport spaces. Sample questions from the second interview include: “Can you tell me about what makes you feel, or not, a sense of belonging when you exercise or participate in physical activity or sport,” “Can you describe how exercise, physical activity, or sport has, or has not, provided you with opportunities to build positive relationships with others,” “Can you describe times when you feel welcomed by others in exercise, physical activity, or sport spaces,” and “Can you describe times when you have felt unwelcome in exercise, physical activity, or sport spaces?”

A secondary data source for this study was reflexive interview notes. [Author 1] documented her thoughts, reactions, and interpretations of each conversation during and

immediately following the interviews. More explicitly, she noted meaningful items that stood out during the conversations individually as well as potential emerging themes across interviews. Throughout the data analysis process [Author 1] was able to contextually return to each interview due to the description and depth provided to the interview data by her reflexive notes (Phillippi & Lauderdale, 2018).

Data Analysis

Upon the completion of each round of data collection, interviews were transcribed verbatim. [Author 1] followed Braun and Clarke's (2021) guidelines for reflexive thematic analysis when analyzing the interview data. To start the analysis, she immersed herself in the data by reading and rereading the transcripts. Next, she coded the data by labeling sections highlighting meaning related to what was explicitly said, implicit ideas or concepts, and relationships across the data (Braun & Clarke, 2021). While engaged in the coding process, [Author 1] examined the data through the lens of belonging. That is, she sought to understand how the participants experience being connected to and cared for by others in exercise, physical activity, and/or sport spaces (Haegele & Maher, 2023). At this point, [Author 1] consulted a critical friend, [Author X], to challenge and critique her thinking, interpretations, and reflexivity (Tracy, 2013). Codes were then consolidated into themes to represent identified meaningful patterns that emerged from the data (Braun & Clarke, 2021). Both [Author 1] and [Author X] reviewed the themes for clarity, consistency, and to verify each theme communicates the intended meaningful concept (Braun & Clarke, 2021). The decided upon themes are presented below as findings.

Research Quality

Several strategies were utilized throughout the research process to ensure the quality of this study. Because [Author 1]'s lived experience impacted methodological and analysis decisions, she disclosed her personal and professional positionality to both participants and readers to expose her biases (Braun & Clarke, 2021; Goodwin, 2020; Smith & McGannon, 2018). Additionally, readers are able to reflect on the researchers' interpretations through their own examination of the data and findings as the themes center the participants' voices through an abundance of rich verbatim interview quotes (Spencer & Molnar, 2022; Yardley, 2000). To support rigor throughout this project, an interview guide was developed and followed based on the conceptual framework of belonging. More specifically, [Author 1] and [Author X] discussed, reflected on, and revised questions to assure that each aligned with feeling connected to or cared for by others in exercise, physical activity, and/or sport spaces (Haegele & Maher, 2023; Yardley, 2000). The interview guide went through two rounds of revisions until being considered final. Additionally, Braun & Clarke's (2021) reflexive thematic analysis guidelines were followed, and the specific data collection and analysis procedures were detailed. Finally, trustworthiness was supported through frequent debriefing sessions between [Author 1] and [Author X] where they collaboratively discussed the research design, data collection, and analysis processes (Shenton, 2004).

Findings

The reflexive thematic analysis resulted in the construction of three cascading themes that represent the participants' experiences with belonging in physical activity contexts (1) 'When you get there, and people welcome you': Feeling welcomed to join spaces, (2) 'Feeling like I can contribute and I'm valuable': Feeling accepted within those spaces, and (3) 'Having the opportunity to build positive relationships': Building community that extends beyond spaces.

Keeping with the intention of centering the participants' voices, the three themes are represented through the presentation of direct quotes from each participant in the following section, and constructed themes are further interpreted in the subsequent discussion section.

‘When you get there, and people welcome you’: Feeling Welcomed to Join Spaces

The women in this study indicated that before they could experience feelings associated with belonging, they first needed to feel that they were welcomed within the material physical activity space itself. This sentiment was highlighted by Alicia, who stated that “The things that make me feel like I am belonging is when the group is friendly and welcoming” and Shannon, who said, “Just having those encouraging words and having people build you up and not drag you down.” Supporting this further, several women reported ways in which they felt more welcomed, or unwelcomed, within material physical activity spaces, and how that helped them feel a greater sense of belonging within those spaces. For example, Alicia noted specific actions performed by fitness center staff that allowed her to exercise in the facility:

They were very generous and very open-minded about my being in the space as somebody who's blind. So, some examples were like, when sometimes I would do a brick workout, which is where you do a swim and a run back-to-back, and so sometimes the gym where the pool was, was really cool with me leaving my guide dog in their office. I think that's something as a service dog handler I approach with each facility. And I don't think it's not an expectation that I would think anyone would be willing to do or open to, but that they were open to like, ‘Oh yeah, she can hang out under this person's desk.’ That meant a lot to me that they had that kind of courtesy. But also, at the same time they were cool about some of the equipment at the gym. Like the treadmills, they would assist me in finding one that was not occupied when I came in and then they would put scotch tape on

the buttons so that I could use it myself. And so just the fact that they were thinking outside of the box and using something really low tech like scotch tape, and that they were okay with that, being on their equipment, just those kinds of kindness or courtesies I think went a long way, and that they would listen to what I needed as the customer, the athlete, whatever you wanna call it.

Likewise, Heidi reflected on two distinct experiences she had with group exercise instructors, one of which was accommodating and welcoming, and the other as unwelcoming. She described the positive experience:

I think that yoga training was pretty positive because I had a good instructor that was good at telling us what to do, but if I wasn't understanding she would be more apt to just come over and, you know, just rotate my arm or put it in a different way or something. Or she was able to say like 'do you want to meet one-on-one one day before class or after class? I can show you the poses we're doing.' So, I think just having that assurance was a benefit and helpful and adaptive, like help with adapting. Sometimes you get to a class like that, and somebody is not very accommodating or doesn't want to be accommodating. It made me feel good and like I was able to participate like everyone else was.

She continued with the second more unfavorable experience:

Unfortunately, the lady that did the handbells class, I stopped doing that particular class because she was a little bit more, she acted like it was like annoying having to, you know what I mean? I don't know, even though she didn't say that, but just her like reactions and stuff, I'm like, okay, clearly you're getting impatient with having to show me how to do things. So, I don't know, it was kind of off-putting, so I didn't keep going back...

Supporting these quotes, other participants noted simple ways others have welcomed or can welcome them into physical activity spaces such as, “when we walk in they have learned our names” (Lisa) and “when somebody says, what do you need? Or do you need an elbow? Asking me directly versus anticipating, guessing, or not even acknowledging it (blindness) at all” (Alicia). Additionally, Shannon added:

I think it's like when you get there and people welcome you in when they're like, ‘Oh, hey, are you here for blank?’ And you can be like, ‘Yeah, I am.’ They're like, ‘Oh, great. Come on in.’ I like that because then you know you're in the right place. You know that someone has seen you. Because for me, I never know if I'm in the right space.

When describing what might help them feel welcomed within physical activity settings, the participants described a number of strategies they have adopted to communicate their needs and determine whether or not they would experience meaningful participation. For example, Heidi, Kimberly, Lisa, and Jessica described the importance of having conversations with individuals running the events prior to committing to participate. Jessica, specifically, stated:

Well, before I joined, I knew the person who would be my team captain and I did have a conversation with him like, ‘hey, I kind of wanna do this.’ And he was like, I think he had made a comment 'cause he had nystagmus... Growing up in gym class was always a really difficult time for him too. And so, he made a point of like telling me like, ‘if you're on my team, like you're gonna be a part of the team’. And he understood where I was coming from too. He understood what it was like for people to assume you couldn't do things just 'cause you can't see, or like maybe to assume that you can do things. Like I had people who were like, you wanna play volleyball? And I'm like, no I really don't. So, it just like, he was

really willing to meet me where I was at and that really made me feel comfortable in playing and contributing to the team.

For Kimberly, introducing herself and disclosing her blindness was a protective approach she used to prevent joining a martial arts school where she was not welcomed. She stated:

Even to this day with all my experience, when I look for a new school, I'll straight up say, 'Look I'm blind, is this gonna be an issue?' Because I don't want... I want the ball in my court. I wanna lay it all on the table and that way I have the cards and if they deny me then at least I know that I was forward with them, and they made that decision. So, it's a little less jarring.

Finally, Sonia described how committing to a workout schedule ensured she encountered the same people each time. She recalled:

I think it's been helpful to, if I go to a new gym, to be on a schedule when I go to the gym so that the people start to become familiar with me, including the people who clean the locker rooms, the people who re-stock towels, those kinds of things. Because then they start to talk to you and say hello. Or they'll say, 'Hey, do you need a towel?' And then they give you a towel a week later, so, then they become more helpful, and they seem less wary or afraid or just they're more sure of how they can interact with you, because now they realize, oh, it's just a person like anyone else. Same thing with the people who check you in at the door. And then any yoga or cycling instructors who teach those cycling classes, same thing. I just show up for class, and then I try to get on a little schedule so they become familiar with me. And I think that helps, because then they realize they can be more descriptive, and that's always a good thing. It helps too, I think, for the people who are attending class with you, because then they start to see you and then they're like,

‘Oh, hey, your same bike is free today,’ or something like that. And I’m like, ‘Hey, that’s helpful.’ Any tidbit you give me, I’ll take it. So, I think that’s probably the biggest thing I’ve learned, is try to get on a schedule, people get familiar with you and then they become more helpful.

Based on the reflections from participants, being accommodated and feeling welcomed into physical activity spaces was the first step in eliciting feelings of belonging and contributed to continued participation.

‘Feeling like I can contribute and I’m valuable’: Feeling Accepted within those Spaces

Once the women felt welcomed within the space or activity, they described instances of acceptance, value, and receiving participation opportunities similarly to others in the space as critical features that supported opportunities for belonging. For example, when asked about factors that contributed to her sense of belonging, Heidi noted, “I think just in general. If people didn’t treat you any differently and stuff just ‘cause of your vision impairment.” For Jessica, feeling valued was of particular importance when participating in activities with others. She stated:

I think like in terms of sports with others, I think the belonging is a big one. Feeling like I can contribute and I’m valuable. Being valued is a very important thing to me. And if that element isn’t there, I’m just not into it, whatever the activities.

Kimberly identified that for her, feelings of belonging stemmed from being accepted by others regardless of any vision related modifications that might need to be made to aid in her participation. She communicated the acceptance and openness she has experienced at martial arts schools throughout her career by saying:

So, through the martial arts, I mean, it's been a really great experience. I think through the years I've met a lot of really cool people that are very accepting and open to any adaptations that might need to be made, which at this point, there's very little I need because of my experience level, but when you first start, there's... You're learning everything. So, there is some changes that might need to happen and things like that. And I've always been pretty lucky that the schools I've attended have been really awesome with that and willing to accept me for me. But also, not put me on this pedestal or this...pedestal is not the word, but like, single me out as we need to do this special for her because of this or whatever.

The women mentioned a number of ways in which acceptance and value were fostered for them within physical activity spaces. Most notably was not feeling singled out for their blindness. Shannon highlighted this when describing how a fitness class instructor made her feel during class:

But she was so nice and she's like, 'Oh, you can come, you can be at the front with me if you want.' And she'd always be like okay everyone now we're gonna do this. And she'd like explain it to the whole class. Like she didn't single me out even though it was a class for sighted people. And after class she'd come over and she'd be like was that enough description? Like, do you need more? Like she didn't target me during the class. She always asked after and she'd adapt if I said, oh well there was this one thing I didn't really understand. She's like, okay, well we'll do better next time. And like she'd say we like, it wasn't like, you know, she was always so positive about it. Like everyone was gonna do better not just like

me and her and like it was just the language that she used was really positive and she never made it seem like a burden to make it adapted and that was nice.

Similar to Shannon, Beth referenced a positive relationship she formed with a group exercise instructor at the fitness center she attends. She shared:

I think I feel better. I feel like I belong more when people assume that I can do something rather than assuming that I can't do it. Like when I go to a workout class, I feel like... There's like one trainer and I love taking her classes, and I know her really well now. She is always of the assumption that unless I say otherwise, I'm always gonna do what the rest of the class is doing. And like that makes me feel good. Like instead of her being like, oh, well, okay, so here's an activity for everybody else and here's an activity for Beth. It's like always, she always just assumes and she's like, she doesn't modify unless I ask her to. But I feel like when I've had other people, they've always been like, 'oh, are you able to do this? Oh, I didn't know you could do that.' Like, other trainers at the gym and that's like, and it's like, no, unless I say so, it's like I can do it. So, I think just assuming I can rather than I can't makes me feel more, and I'd rather try.

Melissa articulated a subtle point that in many cases, especially for many of these women, a connection with just one person in the space can enhance feelings of belonging. She expressed:

Just having even one person that says, you should be here, I want you here, or let's do this together, helps bring me a sense of belonging, it only takes that one person and then I don't care about everyone else.

Through the women's narratives, it was clear that in order to experience a sense of belonging, they first needed to feel accepted and valued by others they encountered during the activity or within the physical activity space.

‘Having the opportunity to build positive relationships’: Building Community that Extends Beyond Spaces

In the prior theme, several women experienced opportunities for acceptance and value through developing connections with others which allowed them to feel a sense of belonging within the physical activity space. Here, however, feelings of belonging were most available during instances where participants were able to develop relationships with others that extended beyond the physical space and allowed them to feel as though they were part of a community. Highlighting this, Kimberly indicated that social connection is a key element of belonging and may not always be inherently and immediately available. She explained:

So, belonging, to me, is earned, if that makes sense. I can walk into a space, and it be completely perfect from the second I walk into it. So, like, let's just say for example, a gym was set up and this is the ultimate perfect circumstance. Machine directions are in braille, there's like ways to navigate through the rows of machine set up that kind of keep you in a safe environment. Everything's perfect. But I could go to that gym, be able to do everything, but the space, the people in it hasn't opened up yet meaning people are there, everybody's doing their thing. It's great. I'm able to do my thing independently, but there's no sense of feeling like you're a part of a community where you've made a friendship. Even just walking in the door, and you know the person at the counter, and they say, ‘hey’, and you say, ‘hey’, and you strike up a conversation for a couple minutes before you start your day. So, I think that's where belonging comes. And it can be as simple as the person at the counter when you walk in reaching out and being super welcoming and more so than just the average, ‘hi’. And then people are willing to speak to you sighted or otherwise. And you start to make these bonds in this community within the space, that's

belonging. Even though the gym's perfect, belonging did not happen immediately. And I think that's why it's earned.

Nearly all of the women spoke fondly of relationships they were able to make with others in physical activity spaces. Particularly, Alicia, Kimberly, Sonia, and Shannon expressed that participating in certain sports and activities where common interests were shared among the group aided in the formation of the connections made. For example, Sonia shared:

I think that's pretty much, I think that's why I really have gravitated to the running community because everyone's running in one way or another. And I feel like that everybody shares that in common that love of running. And that's why we're all there. And I think that's what draws us together.

Like Sonia, Alicia is an active member of her local running community and shared on her experience:

I feel like it's definitely been more having the opportunity to build positive relationships with others. I think my experience has just been... It's doing things with other people, like shared interests are like default. You already have something in common. And especially when you're training for like anything past a 10K, like you're gonna be running with someone for several hours. So, just the things that you talk about and the physical, like fatigue of like oh, we've been doing this for two hours now, and like we have... Just like that shared struggle. I think physical struggle is like a really effective way of building bonds and the friendships I've made from running with other people with disabilities and the guides that support me and have become like great friends, they're really quite invaluable.

For many of the women, and perhaps essential for belonging, the connections made during these activities stretched beyond just the physical activity space. For example, Alicia credited her involvement with her local running group with supporting her through job searching when she moved to a new city. She recalled:

And I think too with running, when I moved to Old Town permanently in 2014, the folks that I met through running, that was the main way I started to build friendships and a community in a new city, and that obviously is very invaluable. And it was also helpful when I was going through finding a job and networking, and finding a job as a woman with a disability is really tough. And having that social support and even social networking, being able to network with people.

Similarly, while in college and regularly going to the gym, Diane often made friends with her personal trainers and would do activities with them outside of the gym. She noted:

Yeah. And then some of them, we were still good friends. And then sometimes when we couldn't go to the gym for whatever reason, she couldn't or whatever, she's like, 'Okay, I cannot go to the gym with you, but I can take a walk with you if you'd like on the weekend'.

As someone who lost her vision as an adult, Beth expressed gratitude for finding blind soccer, not only as a way to continue playing her favorite sport, but also for finding a community of people she could relate to. She reflected:

Well, I think blind soccer has given me a new community of people. I mean, I have great friendships that I formed through blind soccer, and like my husband, he's involved with it too. So, I think for both of us, it's been really good. There's another couple that we're friends with where the husband is visually impaired, and the wife is totally sighted. And

so then going out with them to lunch and it's like, we've got the blind people and the sighted people and it kind of like, we've formed relationships where it's also given my husband somebody that he can identify with we're like, what do you call like an inner abled couple, you know? So, I think we've formed, and me like we formed really good friendships and relationships with all the people in the blind soccer community. Just getting to know more people. And I think if I didn't have blind soccer, I wouldn't have this whole community of... I don't know that like, I don't even know other visually impaired people outside of blind soccer. I don't have other people in my life that are visually impaired besides my blind soccer people. So, it's like, yes, we're all visually impaired, but we also have this other hobby that's outside of just being blind, you know?

Discussion

This study examined blind and visually impaired women's subjective feelings of belonging when participating in exercise, physical activity, and/or sport. While prior research has documented the significance of belonging for disabled persons in physical activity environments (Richardson et al., 2017a; 2017b), this is the first inquiry, to the researchers' knowledge, that has attempted to understand what does or does not make a physical activity space conducive to blind and visually impaired women's sense of belonging. The participants provided accounts of feelings of belonging within these spaces, but they were not inherently or immediately available to them upon entering a physical activity space. Rather, the themes depicted three cascading levels of experiences that influenced feelings of belonging within exercise, physical activity, and/or sport spaces, where they first needed to feel welcomed to join the material space in which the activities occurred, then accepted and valued within that space, and finally, enjoyed

relationships with others from the physical activity environment that extended beyond the space itself.

The first theme in this study described the importance for participants to feel welcomed upon entering the physical activity space. Unfortunately, substantial research has documented that physical activity spaces are often not accessible and/or useable for disabled individuals (Johnson et al., 2012; Rimmer et al., 2017; Rimmer et al., 2005; Stoelzle & Sames, 2014) despite calls to make physical activity environments accessible for blind and visually impaired persons (Jones et al., 2022). While physical accessibility may be a pre-requisite to participation, it appears that for participants, feelings of belonging required more than just access to the activity or facility. Rather, the women explicitly described the need not only to have access but feel welcomed within the physical or material space. This may not be surprising, as prior work has demonstrated that welcoming greetings and encouraging messages from others can elicit feelings of belonging for disabled people in fitness facilities (Nikolajsen et al., 2021; Richardson & Motl, 2020). Moreover, as being welcomed into a physical activity space contributes to belonging, experiencing welcoming interactions is critical for prolonged physical activity participation (Brittain et al., 2020; Nikolajsen et al., 2021) which appeared to be true for the women involved in this study as they did not persist in activities or spaces where they felt unwelcomed. The positive welcoming interactions upon entering the space contributed to participants feeling accepted and valued by others (Haegele & Maher, 2023) which then increased the availability of their sense of belonging.

At times when participants described feeling welcomed within physical activity spaces, they then described feeling accepted and valued as critical precursors to feelings of belonging in those spaces. That is, when describing instances of belonging, the women highlighted first

needing to feel accepted and valued by others in the space. This finding appears logical, given that definitions of belonging across a variety of disciplines generally include feelings of being needed, important, integral, valued, respected, and in harmony with a group or system (Mahar et al., 2013). Additionally, several explorations of belonging among disabled individuals have highlighted acceptance by others as a critical component of belonging (D'Eloia & Price, 2018; Hall, 2009; Milton & Sims, 2016; Richardson & Motl, 2020). A primary way in which the women in this study felt accepted within physical activity spaces was when they were not singled out for their disability and believed they were receiving participation opportunities similarly to fellow participants in the activity or space (Hall, 2009). Based on this finding, in order to facilitate belonging in physical activity spaces, feelings of acceptance and value must first be developed within the space.

It was clear, through the participants' narratives, that they had experienced belonging in the form of positive and pleasant interactions that led to the formation of reciprocal friendships (Baumeister & Leary, 1995). Importantly, feelings of belonging appear to be most meaningful for disabled persons, including the women in this study, when the friendships formed extended beyond the material physical activity space (Richardson et al., 2017b). Many of the women credited the shared common interest of the sport or activity with the development of meaningful relationships which enhanced their sense of belonging (Milton & Sims, 2016; Richardson et al., 2017a). For example, Both Alicia and Sonia referenced the shared interest of running when speaking highly of the long-lasting friendships they have formed with guides and other runners throughout their adulthood. Importantly, one's sense of belonging is dynamic and never permanent based on internal and external environmental factors (Mahar et al., 2013). That is, feelings of belonging can change in response to what an individual is experiencing based on the

space, relations with others, and time within the environment (Haegele & Maher, 2023). With this in mind, we know that oftentimes disabled people feel as though they do not belong within various places and spaces (D'Eloia & Price, 2018; Morrison et al., 2020). But, based on our findings, physical activity spaces may be a place for blind or visually impaired and other disabled individuals to experience belonging and form long-lasting friendships. That is, physical activity and sport settings can be used to elicit feelings of belonging for blind and visually impaired individuals through being welcoming and fostering feelings of acceptance and value. Here, though, it should be cautioned that our findings may not be transferable to all blind and visually impaired or disabled people, as we spoke with women who had a desire to be physically active, and further work would be necessary to explore the same phenomenon among those within the general population. However, these findings may be relevant to help support a sense of belonging for blind and visually impaired women in other spaces and places, where characteristics understood through this study could be applied to other contexts or spaces.

Conclusion

The purpose of this study was to examine blind and visually impaired women's subjective feelings of belonging when participating in physical activity, exercise, and/or sport. Participants clearly described instances of belonging in physical activity spaces when they felt welcomed, accepted and valued by others within the material space, and were able to develop long-lasting friendships that originated within the activity or space. Similarly to prior work, the blind and visually impaired women involved in this study highlighted the importance of feeling a sense of belonging for prolonged physical activity engagement (Brittain et al., 2020; Nikolajsen et al, 2021). As such, we encourage physical activity stakeholders to create environments that foster welcoming messages and feelings of acceptance and value.

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CHAPTER V: SUMMARY AND CONCLUSIONS

Primarily, adapted physical activity literature that involves blind or visually impaired individuals tends to focus on understanding their physical activity behavior. More specifically, several studies have indicated that blind and visually impaired adults often do not meet physical activity guidelines outlined by the U.S. Department of Health and Human services (2018) (Holbrook et al., 2009; Ross et al., 2022; Starkoff et al., 2017) and therefore, are not experiencing the numerous positive physiological and psychological outcomes associated with physical activity participation. Blind and visually impaired adults have reported several environmental and interpersonal barriers to physical activity such as transportation, inaccessible facilities, equipment, and activities, feeling burdensome to others, and experiencing lowered expectations (Jaarsma et al., 2014; Kirk & Haegele, 2021; Shaw et al., 2012). Largely, the research examining the physical activity behaviors and perspectives of blind and visually impaired adults have been survey studies leaving a rich description of their physical activity experiences unknown. That is, it is important to study the lived experiences of disabled women to explore how their multiple and multiplicative positions lead to possible oppression and/or opportunity (Seale, 2012) as physical activity spaces are places of privilege and often reinforce ableist and gendered norms (Richard et al., 2023). Interestingly, despite these barriers, blind and visually impaired people who report meeting physical activity guidelines express higher rates of health-related quality of life (Haegele, Famelia et al., 2017; Haegele & Zhu, 2021; 2022). As such, it is crucial to provide clarity in what makes or does not make a physical activity space conducive to blind and visually impaired women's sense of belonging.

The purpose of the first study in this dissertation was to examine the experiences of blind and visually impaired women when attempting to access and participate in exercise, physical

activity, and/or sport through an intersectional lens. An experiential qualitative research approached was utilized, and 10 blind and visually impaired women between the ages of 27-45 years served as participants. Data were collected through one-on-one audio recorded semi-structured interviews with each participant. The reflexive thematic analysis of the interview data yielded the construction of two themes, (1) ‘The female part definitely adds another layer of perceived vulnerability’: Confounding vulnerability, and (2) ‘Men are seen as strong; women are seen as bitches’: Navigating stereotypes. Findings revealed that participants were aware of others perceiving them as vulnerable, and to avoid gendered and abled exchanges, they adopted several practices that allowed them to feel safer in physical activity environments. Additionally, the women’s physical activity experiences were clearly impacted by gender and disability stereotypes evidenced by the ways in which they navigated the disparities in expectations.

The findings of this study add to the limited intersectionality research exploring gender and disability within physical activity contexts (Lim et al., 2021) and expand from the experiences of physically disabled women (Blinde & McCallister, 1999; Richard et al., 2017) to attempting to understand the experiences of blind and visually impaired women. Findings revealed that for the women involved in this study, both their gender and disability influenced their choices of activities, the people they were active with, and transportation to and from activities. More specifically, they were aware that others perceived them as vulnerable, and as a result they adopted certain practices that allowed them to feel safer and avoid unwanted gendered and abled interactions. Additionally, it was clear that the abled masculine nature of sport and physical activity impacted the participants’ experiences through the ways in which they navigated disparities in expectations based on societal stereotypes surrounding gender and disability. That is, several participants expressed that as women they were viewed and treated

differently than men in physical activity spaces, and for some, their visual impairment contributed to further lowering perceived expectations had by others regarding their capabilities.

A substantial consideration surrounding physical activity for the women in this study was being perceived as vulnerable and the safety concerns that accompanied those perceptions. Interestingly, much of the research regarding the safety of blind and visually impaired persons only considers physical safety and overlooks gender and overall social/emotional safety (Deverell, 2019). Similar to prior work, the women in this study reported objectifying interactions like unsolicited catcalls and unwanted exchanges with men in physical activity spaces that left them feeling uncomfortable (Clark, 2015; Wesely & Gaarder, 2004). As a result, and to feel safer, the women adopted several strategies to offset their vulnerability, including planning ahead and telling trusted others of their plans, being intentional with whom they participated in physical activities, and traveling with their guide dog when possible (Wesely & Gaarder, 2004). For some, the concern for their safety was particularly significant and left them hesitant to participate in new activities altogether (Wesely & Gaarder, 2004). It was clear that participants were thinking about and accounting for several layers of gendered and ableist marginalization in order to participate in exercise, physical activity, and/or sport, which highlights the additional cognitive labor women expend when planning for their safety (Wesely & Gaarder, 2004). Complicating matters further, as blind or visually impaired women they may also be experiencing access fatigue where they are expending mental and emotional energy required to navigate power relations and institutional barriers just to acquire access to the space or activity (Konrad, 2021).

Through exploring the participants' narratives, it was clear that societal stereotypes significantly impacted their physical activity experiences. For example, several women indicated

that they believe others had lowered expectations of them and their capabilities related to physical activity due to their disability (Hardin, 2007). This finding may not be surprising, as prior work from Ball and Haegele (2024) has identified that blind and visually impaired women often experience various forms of ableism in physical activity environments. The significant impact of this current study, though, is with the newfound understanding of how gendered expectations may additionally contribute to these lowered expectations, constructing what Blinde and McCallister (1999) refer to as a double disadvantage. Gendered societal stereotypes specific to sport and physical activity frame women as inferior, incompetent, and less capable than men (Clark, 2015; Richard et al., 2017; Voelker & Reel, 2020). These stereotypes were clearly depicted by participants, who reported having lowered expectations and being treated differently than their male peers in co-ed and disability sport spaces. Highlighting this, Sonia spoke at length about the unequal treatment of blind female elite track and field athletes and their guides as compared to the male athletes and their guides. Unfortunately, it appears to be common that disabled women athletes are undervalued and often experience gendered discrimination in sport (Hardin, 2007; Lynch & Hill, 2021; Richard et al., 2017).

To combat these biased values, several participants described ways in which they attempted to leverage societal stereotypes in order to navigate physical activity spaces and express personal traits to others. For example, Jessica explained that she dresses ‘sporty’ in an attempt to communicate to friends and acquaintances that she too likes being physically active and playing sports. This appears similar to prior work where physically disabled women athletes strategically choose clothing, accessories, and hair styles to portray themselves as feminine (Hardin, 2007; Richard et al., 2017). More specifically, disability and sport have been identified as elements that are incompatible with femininity (Richard et al., 2023) and as a result, disabled

women in sport attempt to preserve their femininity by conforming to feminine stereotypes such as wearing make-up, jewelry, having long hair, and dressing in clothing that accentuates their feminine bodies (Hardin, 2007; Richard et al., 2017). Interestingly though, the blind and visually impaired women in this study did not appear to be concerned with portraying themselves as feminine, but rather seemed more cognizant of the impact of stereotypes surrounding blindness and visual impairment. This may be in part to blind women first needing to overcome societal blindness stereotypes before their gender is noticed or considered (Hammer, 2016).

This first study examined blind and visually impaired women's physical activity experiences through an intersectional lens. Feeling as though they were perceived as vulnerable by others in physical activity spaces led the women to seek out strategies and practices that allowed them to feel safer and avoid gendered and abled interactions. Additionally, gender and disability stereotypes clearly impacted the participants' experiences as they noted instances where they were viewed and treated differently than their peers in the physical activity or sport environment. Based on the findings and considering that physical safety has been the primary research concern for blind and visually impaired persons (Deverell, 2019), the researcher encourages stakeholders and scholars to extend their thinking in regard to the safety of blind and visually impaired women and men, to include considerations regarding both gender and social/emotional safety. Though this study provides a contribution to the limited intersectionality scholarship specific to disability and physical activity (Lim et al., 2021), further inquiries are needed to explore the interactions of other identities along with gender and disability such as race, ethnicity, religion, sexual orientation, class, age, marital status, and education, among others, and the impact on exercise, physical activity, and sport experiences.

The purpose of the second study in this dissertation was to examine the subjective feelings of belonging for blind and visually impaired women when participating in exercise, physical activity, and/or sport. To do this, an experiential qualitative research approach was used. Ten blind or visually impaired women aged 27-45 years served as participants and completed two one-on-one audio recorded semi-structured interviews. A reflexive thematic analysis approach was used to analyze the interview data where three cascading themes were constructed: (1) ‘When you get there, and people welcome you’: Feeling welcomed to join spaces, (2) ‘Feeling like I can contribute and I’m valuable’: Feeling accepted within those spaces, and (3) ‘Having the opportunity to build positive relationships’: Building community that extends beyond spaces. Participants described instances of belonging in physical activity spaces where they were welcomed, felt accepted and valued, and were able to develop long-lasting friendships.

While prior research has documented the significance of belonging for disabled persons in physical activity environments (Richardson et al., 2017a; 2017b), this is the first inquiry, to the researcher’s knowledge, that has attempted to understand what does or does not make a physical activity space conducive to blind and visually impaired women’s sense of belonging. The participants provided accounts of feelings of belonging within these spaces, but they were not inherently or immediately available to them upon entering a physical activity space. Rather, the themes depicted three cascading levels of experiences that influenced feelings of belonging within exercise, physical activity, and/or sport spaces, where they first needed to feel welcomed to join the material space in which the activities occurred, then accepted and valued within that space, and finally, enjoyed relationships with others from the physical activity environment that extended beyond the space itself.

The first theme in this study described the importance for participants to feel welcomed upon entering the physical activity space. Unfortunately, substantial research has documented that physical activity spaces are often not accessible and/or useable for disabled individuals (Johnson et al., 2012; Rimmer et al., 2017; Rimmer et al., 2005; Stoelzle & Sames, 2014) despite calls to make physical activity environments accessible for blind and visually impaired persons (Jones et al., 2022). While physical accessibility may be a pre-requisite to participation, it appears that for participants, feelings of belonging required more than just access to the activity or facility. Rather, the women explicitly described the need not only to have access but feel welcomed within the physical or material space. This may not be surprising, as prior work has demonstrated that welcoming greetings and encouraging messages from others can elicit feelings of belonging for disabled people in fitness facilities (Nikolajsen et al., 2021; Richardson & Motl, 2020). Moreover, as being welcomed into a physical activity space contributes to belonging, experiencing welcoming interactions is critical for prolonged physical activity participation (Brittain et al., 2020; Nikolajsen et al., 2021) which appeared to be true for the women involved in this study as they did not persist in activities or spaces where they felt unwelcomed. The positive welcoming interactions upon entering the space contributed to participants feeling accepted and valued by others (Haegele & Maher, 2023) which then increased the availability of their sense of belonging.

At times when participants described feeling welcomed within physical activity spaces, they then described feeling accepted and valued as critical precursors to feelings of belonging in those spaces. That is, when describing instances of belonging, the women highlighted first needing to feel accepted and valued by others in the space. This finding appears logical, given that definitions of belonging across a variety of disciplines generally include feelings of being

needed, important, integral, valued, respected, and in harmony with a group or system (Mahar et al., 2013). Additionally, several explorations of belonging among disabled individuals have highlighted acceptance by others as a critical component of belonging (D'Eloia & Price, 2018; Hall, 2009; Milton & Sims, 2016; Richardson & Motl, 2020). A primary way in which the women in this study felt accepted within physical activity spaces was when they were not singled out for their disability and believed they were receiving participation opportunities similarly to fellow participants in the activity or space (Hall, 2009). Based on this finding, in order to facilitate belonging in physical activity spaces, feelings of acceptance and value must first be developed within the space.

It was clear, through the participants' narratives, that they had experienced belonging in the form of positive and pleasant interactions that led to the formation of reciprocal friendships (Baumeister & Leary, 1995). Importantly, feelings of belonging appear to be most meaningful for disabled persons, including the women in this study, when the friendships formed extended beyond the material physical activity space (Richardson et al., 2017b). Many of the women credited the shared common interest of the sport or activity with the development of meaningful relationships which enhanced their sense of belonging (Milton & Sims, 2016; Richardson et al., 2017a). For example, Both Alicia and Sonia referenced the shared interest of running when speaking highly of the long-lasting friendships they have formed with guides and other runners throughout their adulthood. Importantly, one's sense of belonging is dynamic and never permanent based on internal and external environmental factors (Mahar et al., 2013). That is, feelings of belonging can change in response to what an individual is experiencing based on the space, relations with others, and time within the environment (Haegele & Maher, 2023). With this in mind, it is known that oftentimes disabled people feel as though they do not belong within

various places and spaces (D'Eloia & Price, 2018; Morrison et al., 2020). But, based on these findings, physical activity spaces may be a place for blind or visually impaired and other disabled individuals to experience belonging and form long-lasting friendships. That is, physical activity and sport settings can be used to elicit feelings of belonging for blind and visually impaired individuals through being welcoming and fostering feelings of acceptance and value. Here, though, it should be cautioned that these findings may not be transferable to all blind and visually impaired or disabled people, as the researcher spoke with women who had a desire to be physically active, and further work would be necessary to explore the same phenomenon among those within the general population. However, these findings may be relevant to help support a sense of belonging for blind and visually impaired women in other spaces and places, where characteristics understood through this study could be applied to other contexts or spaces.

As an attempt to provide clarity in what makes or does not make a physical activity space conducive to blind and visually impaired women's sense of belonging, this second study specifically utilized a conceptual framework of belonging to examine the physical activity experiences of ten blind and visually impaired women. Participants clearly described instances of belonging in physical activity spaces when they felt welcomed, accepted and valued by others within the material space, and were able to develop long-lasting friendships that originated within the activity or space. Similarly to prior work, the blind and visually impaired women involved in this study highlighted the importance of feeling a sense of belonging for prolonged physical activity engagement (Brittain et al., 2020; Nikolajsen et al., 2021). As such, the researcher encourages physical activity stakeholders to create environments that foster welcoming messages and feelings of acceptance and value.

Following Seale's (2012) recommendation, the first study in this dissertation examined the experiences of blind and visually impaired women when attempting to access or participate in exercise, physical activity, and/or sport through an intersectional lens. There is limited sport and physical activity literature that explores intersections with disability (Lim et al., 2021). This study added to the limited physical activity knowledge base specific to intersectionality, and disabled women. Additionally, this study extended the work of Blinde and McCallister (1999) who explored the intersection of gender and disability dynamics for physically disabled women in sport and physical activity by extending to women who experience a different disability (e.g., blindness or visual impairment). The second study of this dissertation examined blind and visually impaired women's subjective feelings of belonging when participating in exercise, physical activity, and/or sport. This study explicitly utilized a conceptual framework of belonging to provide clarity to what makes or does not make physical activity spaces conducive to blind and visually impaired women's sense of belonging. This is noteworthy as few adapted physical activity studies have specifically been guided by a belonging framework.

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APPENDIX A: CONSENT FORM

INFORMED CONSENT
OLD DOMINION UNIVERSITY

PROJECT TITLE: **Examining the Physical Activity Experiences of Blind and Visually Impaired Women**

INTRODUCTION

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. This project, **Examining Ableism Experienced by Blind and Visually Impaired Adults in Exercise and Sport**, will ask you to complete a short demographic questionnaire, and complete a 60–90-minute interview where we ask for you to reflect about your experiences related to exercise, physical activity, and sport.

RESEARCHERS

Justin A. Haegele, PhD, Associate Professor, Old Dominion University (PI)

Lindsay Ball, Doctoral Scholar, Old Dominion University

DESCRIPTION OF RESEARCH STUDY

This study will examine the experiences of blind and visually impaired adults related to ableism in exercise, physical activity, and sport contexts.

If you decide to participate, you'll be asked to respond to a brief questionnaire, as well as to complete a one-to-one individual interview via telephone or zoom with a research team member. Only the audio recording and transcript will be recorded if you elect to participate in the video call. The researcher may contact you for a follow-up interview or to get clarification on the transcript of your responses. The total time of participation will be between 60-90 minutes and will be scheduled around your availability.

INCLUSION CRITERIA

Participants will be purposively sampled to include those who (a) are between 18-45 years of age, (b) self-identify as having a visual impairment, (c) have experience with exercise, physical activity, or sport, and (d) are willing to complete an interview for 60-90 minutes.

RISKS AND BENEFITS

RISKS: There are no expected or predicted potential risks associated with participation in this study. And, as with any research, there is some possibility that you may be subject to risks that have not yet been identified. However, it is important to note that while participants have the option to skip or not answer questions.

BENEFITS: There are no direct benefits to participants as a result of participation in this study.

COSTS AND PAYMENTS

Participation in this research is completely voluntary. However, in an effort to increase participation and thank participants for their time, a gift card of \$20 will be electronically delivered to all participants who are chosen to participate following the completion of data collection. Additionally, there are no costs associated with participation in this research.

NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY

The researchers will take reasonable steps to keep information private. First, participants have the option to provide only a pseudonym if they prefer to further ensure confidentiality. However, all participants' information will be kept on a password-protected external hard drive that is only accessible by the research team. The results of this study may be used in reports, presentations, and publications; but the researcher will not identify you and only use the selected pseudonym to report findings. Of course, your records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE

It is OK for you to say NO. Even if you say YES now, you are free to say NO later by opting out of data collection or deciding not to answer specific questions. Your decision

will not affect your relationship with Old Dominion University, or otherwise cause a loss of benefits to which you might otherwise be entitled.

COMPENSATION FOR ILLNESS AND INJURY

If you say YES, then your consent in this document does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation for such injury. In the event that you suffer injury as a result of participation in any research project, you may contact Dr. Justin A. Haegele, at jhaegele@odu.edu or 757 683 5338, Dr. John Baaki, the current chair for the DCOE Human Subjects Committee, at jbaaki@odu.edu or 757-683-5493.

VOLUNTARY CONSENT

The purpose of this form is to inform you about the study prior to participation. By agreeing to complete and submit this screening survey, you are consenting to participate in this study. This means, you are saying that you have read this form or have had it read to you, that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about the research, however if you have additional questions prior to completing this study, please reach out to Justin Haegele at jhaegele@odu.edu. If you have any questions later on, then the researchers should be able to answer them:

Justin A. Haegele: 757-683-5338

If at any time you feel pressured to participate, or if you have any questions about your rights or this form, then you should call Dr. John Baaki, the current chair for the DCOE Human Subjects Committee, at jbaaki@odu.edu or 757 683 5491.

APPENDIX B: RECRUITMENT MATERIALS

Good morning [afternoon]:

My name is Lindsay Ball, I am a doctoral student at Old Dominion University.

I am emailing to see if you might be interested in participating in an interview study with our research team at ODU. This study focuses on understanding the experiences of blind or visually impaired adults related to ableism in exercise, physical activity, and/or sport contexts. The study includes two components. First, we would ask that you complete a brief demographic survey (see below). Once that is complete, and you fit the inclusion criteria for this study (between 18-45 years old, visually impaired, with exercise, physical activity, or sport experience, we would, finally, ask to schedule an interview with you about your experiences.

To conduct this study, we need the participation of visually impaired adults. We expect the interviews to range from about 60 to 90 minutes, and they will be done via zoom or telephone. All responses will be anonymous and confidential. Those who complete the interviews will be thanked with a \$20.00 amazon gift card.

Thank you for considering participating in our research, and if you are interested in this study, please respond to this email with answers to the following questions:

- How old are you today?
- What is your gender?
- What is your race/ethnicity?
- What state are you from?

- Please describe your visual impairment.
- . Would you classify your vision as B1, B2, or B3?

B1 vision is no light perception in either eye up to light perception with the inability to recognize the shape of a hand at any distance or in any direction.

B2 vision is from the ability to recognize the shape of a hand up to visual acuity of 20/600 and/or the visual field of less than 5 degrees in the best eye with the best practical eye correction.

B3 vision is from visual acuity above 20/600 and up to visual acuity of 20/200 and/or a visual field of less than 20 degrees and more than 5 degrees in the best eye with the best practical eye correction.

- . Please describe your relationship with exercise, physical activity, and/or sport as an adult.

Lindsay Ball

Lball006@odu.edu

Old Dominion University

APPENDIX C: INTERVIEW GUIDES

Interview 1:

Today is [insert day and date], the time is [insert time]. Thank you for agreeing to take part in this research. I would like to remind you that our discussions will be kept confidential, and you will remain anonymous throughout this research. If there are any questions you do not want to answer, then that is perfectly fine. You also have the right to pause or discontinue the interview, or redact any comments, for any or no reason. If this happens, all data gathered from you will be destroyed. Before we start the interview, I would like to remind you that the purpose of this study is to discuss your experiences in exercise and sport settings. Do you have any questions you would like to ask me? Are you happy to begin the interview? Thank you.

Notes: Where appropriate, the following clarification, expansion, probe, and supplementary questions could be asked:

What do you mean by that?

Can you tell me a little more about that?

Can you give me some examples?

Why do you say that?

What has influenced that perception?

For the purposes of this study, we have defined exercise, physical activity, and sport. Please feel free to answer each question with experiences related to both exercise/physical activity and sport separately or whichever best fits your experience.

Exercise

A type of physical activity that involves planned, structured, and repetitive bodily movement done to maintain or improve one or more components of physical fitness.

Physical Activity

Any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure.

Sport

An athletic activity requiring skill or physical prowess and often of a competitive nature.

Interview Questions:

What types of exercise, sport, or physical activity do you currently participate in?

What other types of exercise, sport, or physical activity have you engaged in as an adult?

What experiences or factors led you to pursue these types of exercise/physical activity?

Can you tell me about some good experiences that you've had as an adult in exercise, sport, or physical activity? How did these experiences make you feel?

Can you tell me about some bad experiences that you've had as an adult in exercise, sport, or physical activity? How do you feel about these experiences?

Can you explain your experience with peers, friends, family, or others who you have participated with in sport or physical activities? How do these experiences make you feel?

Can you describe interactions with fellow physical activity participants, guides, and facility or organization personnel within the physical activity space? How do you feel about these interactions?

What accommodations or modifications have helped you experience the most success with physical activity?

Based on your experiences, how do you feel your accommodation/modification needs are met?

How do you feel your accommodation/modification needs are not met? How do you feel about your accommodation/modification needs being met, or not being met?

Can you tell me about what makes you feel, or not, a sense of belonging when you exercise or participate in physical activity or sport?

Can you describe any barriers or hindrances that have stopped or restricted you from being physically active? How do these barriers make you feel?

Can you describe a time you had your physical activity participation explicitly restricted or denied? How do you feel about this restriction/denial?

Are you familiar with indirect or normalized ableism?

Indirect or normalized ableism is unconscious behavior not intended to cause harm. These behaviors communicate that disability is negative, and in need of being fixed. Examples include unwanted praise or pity, expressions like “you’re acting bipolar” and “sit less, stand more”, or comments like “you are lucky you get to bring your dog with you all the time” in reference to a guide dog.

Can you describe any instances of indirect ableism that you have experienced in exercise, physical activity, or sport settings? How do you feel about these experiences?

Are you familiar with direct ableism?

Direct or overt ableism is a conscious and oppressive action toward a disabled person. Examples include asking someone invasive questions about their disability, or restricting access or participation solely based on a disability diagnosis.

Can you tell me about any instances of direct ableism you may have experienced in exercise, sport, or physical activity settings? How do you feel about these experiences?

Are you familiar with systemic ableism?

Systemic or institutional ableism are physical barriers, laws, policies, regulations, and practices that restrict access, equity, and freedom for disabled individuals. Examples include inaccessible exercise equipment, or lack of audio description, large print, or braille materials.

Can you describe any experiences with systemic ableism you have experienced related to exercise, physical activity, or sport? How do you feel about these experiences?

Are you familiar with internalized ableism?

Internalized ableism is the projection of negative feelings onto oneself based on the societal stereotypes and belief surrounding disability. Examples may include, feeling like a burden, feeling one has to prove their visual impairment, or feeling one has to prove that disabled people are exceptional and worthy through pressuring oneself to work harder than non-disabled peers.

Can you describe any instances where you may have experienced internalized ableism?

Have any of these happened within exercise, physical activity, or sport settings? How do you feel about these instances?

Interview guide 2:

Today is [insert day and date], the time is [insert time]. Thank you for agreeing to take part in this research and completing a second interview. I would like to remind you that our discussions will be kept confidential, and you will remain anonymous throughout this research. If there are any questions you do not want to answer, then that is perfectly fine. You also have the right to pause or discontinue the interview, or redact any comments, for any or no reason. If this happens, all data gathered from you will be destroyed. Before we start the interview, I would like to remind you that the purpose of this study is to discuss your experiences in exercise and sport settings. Do you have any questions you would like to ask me? Are you happy to begin the interview? Thank you.

Notes: Where appropriate, the following clarification, expansion, probe, and supplementary questions could be asked:

What do you mean by that?

Can you tell me a little more about that?

Can you give me some examples?

Why do you say that?

What has influenced that perception?

For the purposes of this study, we have defined exercise, physical activity, and sport. Please feel free to answer each question with experiences related to both exercise/physical activity and sport separately or whichever best fits your experience.

Exercise

A type of physical activity that involves planned, structured, and repetitive bodily movement done to maintain or improve one or more components of physical fitness.

Physical Activity

Any bodily movement that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure.

Sport

An athletic activity requiring skill or physical prowess and often of a competitive nature.

Interview Questions:

What types of exercise, sport, or physical activity have you tried to access or participate in during the past year?

How, if at all, does your visual impairment influence how you experience exercise, physical activity, or sport? How does this make you feel?

How, if at all, does being a woman influence how you experience exercise, physical activity, or sport? How does this make you feel?

What expectations do you feel are set out for you in exercise, physical activity, or sport spaces? Do you feel those expectations are the same or different for non-disabled people, other women, or men?

Can you tell me about what you think is more impactful on your exercise, physical activity, or sport experiences?

How, if at all, does having a visual impairment influence your interactions and relationships with others during exercise, physical activity, or sport?

How, if at all, does your being a woman influence your interactions and relationships with others during exercise, physical activity, or sport?

What other identities might influence how you experience exercise, physical activity, or sport?

Can you tell me about what makes you feel, or not, a sense of belonging when you exercise or participate in physical activity or sport?

Can you describe how exercise, physical activity, or sport has, or has not, provided you with opportunities to build positive relationships with others?

Can you describe times when you feel welcomed by others in exercise, physical activity, or sport spaces? What makes you feel welcomed?

Can you describe times when you have felt unwelcome in exercise, physical activity, or sport spaces? What made you feel unwelcome?

Overall, do you feel you have meaningful relationships with others in exercise, physical activity, or sport spaces? Why or why not?

VITA

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Human Movement Sciences
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EDUCATION

- In progress PhD, Old Dominion University
Health & Sport Pedagogy
Dissertation topic: Examining the physical activity experiences of blind and visually impaired women
- 2021 MSED, The State University of New York at Brockport
Adapted Physical Education
Thesis Topic: The basic psychological needs in physical education scale for use with students with visual impairments: A Delphi study.
- 2019 BS, The State University of New York at Brockport
Physical Education Teacher Education
- 2013 BA, The University of Maine at Farmington
Psychology
Minor in Rehabilitation Services

SELECTED PUBLICATIONS

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