

FACILITATORS AND BARRIERS TO PHYSICAL ACTIVITY: THE PERSPECTIVE
OF ADULTS WITH DISABILITIES

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ABSTRACT

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Children and adults with disabilities are at greater risk of developing higher levels of obesity, and chronic diseases associated with obesity (Centers for Disease Control and Prevention [CDC], 2014). Physical activity is crucial to maintaining health, mobility, and slowing disease progression for all people, especially those experiencing disability. Despite this fact, physical activity levels in individuals with disabilities are very low (Centers for Disease Control and Prevention [CDC], 2006). Lower physical activity levels in are the result of a complex interactions of personal and environmental factors that unfold across a lifespan. Research on the facilitators and barriers to physical activity among adults with disabilities is limited and tends to focus on the immediate barriers to physical activity such as income and expenditure, availability of facilities, and community access (Messent, Cook, and Long (2009); Buffart, Westendorp, van den Berg-Emons, Henk, Roebroek (2009), neglecting social and emotional barriers and facilitators. To understand the factors that contribute to health participation in health promoting physical activity, this research will focus on the experiences of adults with disabilities in physical activity participation. This is a phenomenological study consisting of semi-structured interviews with 8 adults who attend or have attended an adapted

physical education class. The interviews are recorded, transcribed, and analyzed to identify themes in perceptions of physical activity participation.

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INTRODUCTION

Regular engagement in physical activity can help individuals control their weight while decreasing one's chances of developing chronic diseases (e.g., coronary heart disease, diabetes) throughout the lifespan (Centers for Disease Control and Prevention [CDC], 2014). Yet, physical activity levels of individuals with disabilities are particularly low. It has been reported that up to 50% of adults with disabilities are engaging in no leisure time physical activity (CDC, 2006). Similarly, individuals with disabilities also have less access to recreation and sport activities in their communities, and are less physically fit (Law, King, and King, 2006). This inactivity contributes to higher levels of obesity among children and adults with disabilities: for example, 20% of children from 10 through 17 years of age who have special health care needs are obese compared with 15% of children of the same ages without special health care needs (CDC, 2016). Among adults with disabilities, obesity rates are approximately 57% higher than for adults without disabilities; reported percentages of obesity were 36% among adults with a disability, versus 23% among adults without a disability (CDC Obesity Factsheet, 2010). When comparing health status of adults with disabilities to adults without disabilities, those with disabilities are three times more likely to suffer from diseases such as stroke, heart disease, and some forms of cancer (CDC, 2016). To inform interventions to increase physical activity levels, and ultimately positively impact the health of individuals with disabilities, an understanding of the facilitators and barriers to physical activity for this population is crucial. To achieve this, researchers have examined the

perspective of physical activity for individuals with disabilities among the stakeholders involved, including the perspective of caregivers, and youth and adults with disabilities.

Perspective of Caregivers

Research, although sparse, has examined the perspective of caregivers of people with disabilities, on physical activity participation of their clients. For example, Temple & Walkley (2007) focused on the constraining and enabling factors for health promoting physical activity among adults with intellectual disabilities. Six focus group interviews were conducted: adults with intellectual disabilities (n = 9), direct care workers (n = 5), group home supervisors (n = 15), managers (n = 4), and parents (n = 7). The findings of the interviews reported that motivation for participation, social support, and political and financial support were three factors that influenced how much or how little adults with intellectual disabilities participated in physical activity. Similarly, interviews conducted with caregivers of adolescents with intellectual disabilities in Taiwan, by Jin-Ding and colleagues (2009), sought to understand their perspective of the determinants of physical activity among their clients. It was revealed that the caregivers' educational level, and their preference toward physical activity are variables that significantly influence physical activity participation of individuals with intellectual disability (Jin-Ding, et al., 2009). As the individuals trusted to care for the everyday needs of individuals with disabilities, parents, caregivers, and support staff are a valuable resource for insight into the perspectives of those they care for. Despite this, research that includes input from this group is very limited. Further research that includes input from caregivers could provide

insights valuable to the understanding of the experiences of individuals with disabilities as they relate to physical activity.

Perspective of Youth with Disabilities

To better understand physical activity participation among individuals with disabilities, research extends beyond the stakeholders (e.g. the caregivers), and has revealed the perspective of the participants themselves. A study (Goodwin & Watkinson, 2000) on the perspectives of elementary students with disabilities on inclusion in physical education in England utilized a combination of focus group interviews, field notes, and participant drawings, and concluded that students with disabilities can have a positive experience being included into the physical education class if they feel like they are empowered, fully included in the lesson, can skillfully participate, have a sense of belonging, and when they could share in the benefits of the activity. However, the environment established by the physical education teacher is an important factor contributing to positive experiences of students (Goodwin and Watkinson, 2000). Coates and Vickerman (2008) reviewed qualitative studies centered on consultation with students with disabilities. The outcome of the review was that students with disabilities report feeling discriminated against, and having feelings self-doubt because of being isolated from others (Coates and Vickerman, 2008; Goodwin and Watkinson, 2000). The research indicates the experiences of children with disabilities in physical education are affected by lack of training for PE teachers and support staff.

Connors and Stalker (2007) suggested that discrimination felt by students with disabilities is the result of these students being labeled by teachers and peers. These results further highlight the need for comprehensive teacher training on including students with disabilities into the physical education classroom. Haegele and Sutherland (2015), conducted a qualitative inquiry review on the perspectives of students with disabilities toward physical education and concluded that individuals with disabilities experience isolation and discrimination by teachers and peers. Moreover, the insight gained from research involving students with disabilities reinforces the importance of seeking their perspective, and valuing them as the expert on their own lives.

Perspective of Adults with Disabilities

After an individual with a disability leaves the k-12 school system they are more likely to be inactive, and therefore at an increased risk of being obese, and suffering from heart disease, stroke, and certain cancers (CDC, 2006). Researchers must therefore also seek to reveal the perspective of adults with disabilities, to inform intervention and policy for increasing physical activity among this population. The perspective of the adult with a disability may help reveal the factors inhibiting and facilitating successful physical activity participation from youth to adulthood. Currently, limited research exists on this topic.

In an effort to identify barriers and facilitators to physical activity among individuals with childhood-onset disability, Buffart, Westendorp, van den Berg-Emons, Henk, and Roebroek (2009) conducted 3 focus group sessions with sixteen people with

childhood-onset disability. Of the sixteen participants, eight used wheelchairs for mobility; eight were diagnosed with myelomeningocele; four with cerebral palsy; two with acquired brain injury; and two with rheumatoid arthritis. The subjects participated in three hour and half sessions, during which researchers conducted semi-structured interviews designed to identify perceived barriers and facilitators of physical activity. Several themes emerged during the interviews and were subdivided into personal and environmental factors. The results found that the participants reported lack of energy, existing injury or fear of developing injuries or complications, limited physical activity facilities, and lack of information and knowledge as barriers to physical activity. Factors that facilitate physical activity mentioned by the participants were fun and social contacts as well as improved physical fitness (Buffart, et. al., 2009).

Adults living with disability experience barriers beyond physical and cognitive impairment. Many adults living with disabilities rely on family, caregivers, day centers, and support staff to tend to their daily needs. Messent, Cook, and Long (1999) conducted a descriptive study based on interviews with 24 adults with learning disabilities (mean age of 34 years). Participants volunteered from two residential homes and one social education center (SEC) in a city in the North of England. The results point to unclear guidelines and limited resources in the residential homes and SEC, transportation and staffing constraints, participant income, and limited community options for leisure physical activity as major barriers to physical activity (Messent et.al; 1999). The importance of system support was also demonstrated in research by Frey, Buchanen,

Rosser and Sandt (2005) examining the physical activity habits of adults with intellectual disability, that included both the individuals with disabilities and their caregivers', it was revealed that adults with intellectual disabilities need specially designed physical activity programs, and that support system providers (e.g. group home staff and supervisors, aides, and community helpers) need to be educated regarding the importance of physical activity and how to positively promote physical activity among individuals with intellectual disabilities. This study highlights caregivers' education and preference for physical activity as an indicator of physical activity levels in individuals with disabilities.

The literature currently available on the experiences of adults with disabilities in physical activity is sparse, and centers on immediate barriers to physical activity participation, and not on previous and ongoing experiences with being physically active and how those experiences contribute to the development of physical activity habits across a lifespan. Therefore, the purpose of this research is to examine barriers and facilitators of physical activity experienced by adults with disabilities, and their perspective of transition from school physical activity to lifetime physical activity.

METHODS

Recruitment of Participants

A purposive sampling strategy was used to recruit adult participants into the study. The participants were recruited through their participation in an adapted physical education (APE) class at a community college in which the principal investigator was involved. The principle investigator identified 8 individuals who were above the age of 18 and who had indicated, upon enrollment for the APE program, as having an intellectual, physical, or sensory disability. All 8 individuals were provided with information on the study and invited to participate. Information about the study was provided by text written at a grade 2 reading level (using an information sheet) and verbally discussed with the participants. Potential participants were questioned regarding their understanding of what was involved in participating in the study. All individuals invited to participate accepted the request. The disabilities experienced by the participants included Cerebral Palsy (n=3), Chronic Lyme Disease (n=1), Autism Spectrum Disorder (n=3), and Traumatic Brain Injury (n=1). The participants were aged 20 to 73.

Interview Procedure

All participants were interviewed by the primary researcher (PI). The PI is an Adapted Physical Education instructor with background experience in special education. To create the semi-structured interview, protocol the primary and secondary researchers drew upon professional experience in working with children and adults with disabilities in physical

activity settings. After initial creation of the interview protocol by the researchers, it was sent to three experts (professors) of adapted physical education/activity for feedback. The experts were asked to provide feedback on each questions' appropriateness, to elicit the individual's perspective of physical activity. The experts were also requested to provide suggestions for further questions. When the interview protocol was finalized, the primary researcher conducted the semi- structured interviews with each participant in an informal setting, either in the APE office on the college campus, or at a location of the participant's choice (Beteta & Education, 2009). Prior to the interview, participants were given a personal copy of the interview protocol. During the interview, the primary researcher used the semi-structured interview protocol to guide questioning. The interview protocol was flexible and responsive to participant preferences to promote comfort (King, 2009). A recording device was used to ensure accurate reporting of participant responses. The author's background and experience could create a bias that would affect data collection and interpretation (Stewart & Mickunas 1974). To address this issue, the author consulted with co-authors when creating the interview questionnaire, and interpreting the data results. The primary researcher also went through a process of bracketing, identifying preconceptions so as to be aware of their potential for biasing data collection and analysis

Transcription and Data Analysis

The interviews were transcribed verbatim by the primary researcher, and an inductive thematic analysis was performed by the primary and secondary researcher

(Braun & Clarke 2006). The transcripts were read, and re-read a number of times to gain comprehensive knowledge of the data (Braun & Clarke 2006). The transcripts were then reviewed by both researchers individually for themes that point to the facilitators and barriers to physical activity participation. Primary and secondary researchers then collaborated and initially decided on four overarching themes, and additional subthemes that describe the phenomenon indicated by the research question (Braun & Clarke 2006). In addition, quotes were highlighted in the transcripts that provided interesting insight into the subject matter, or highlighted the identified themes. Researchers then returned to the data sets and compared them to the initial themes. Upon further evaluation of the data, it was found that the four themes could be collapsed into three overarching themes with underlying sub-themes. This procedure yielded a more accurate representation of the data that better describes the phenomenon (Braun & Clarke 2006).

RESULTS

Participants discussed their physical education and physical activity experiences with the primary researcher. The interview – guided by the semi-structured interview schedule – served to examine barriers and facilitators of physical activity experienced by the participants, and their perspective of transition from school physical activity to lifetime physical activity. Three overarching themes emerged: (1) Sources of motivation, (2) Struggling with Barriers, and (3) The influence of peers and teachers.

Sources of Motivation

This theme involves both the intrinsic and extrinsic factors that participants spoke of that contribute to their motivation for participation in physical activity. Subthemes for this main theme include embracing challenges, achieving health benefits, a sense of autonomy, discovering interests, and feelings of success.

Embracing the challenge of completing activities alongside peers was a common issue raised by the individuals interviewed (n=4). The belief that the individual could achieve success to the same degree as peers was voiced by half of the respondents. This is reflected in the opinion of Barb, who, when asked about what helps her be active, responded that her determination to be active is due to her mother, who always told her *“Do what you can to the best of your ability and don’t let anybody pull you down or talk you down... You are as good as they are in a different way.”* which closely echoes Sally’s comment on how she *“wanted to do what they do [in physical education], and that still*

motivates me today” Participants often spoke of this inclination to perform at a level commensurate with peers as being fostered in physical education. For example, Sarah spoke of how she, *“could have taken modified P.E., but I chose to take regular P.E. to push myself.”* Interestingly, all participants who indicated ‘embracing challenges’ as a motivator for participation made mention of a parent or parents who were actively involved in their development and/or encouraged participation in physical activities.

All eight participants in the study pointed to maintaining and improving health as a motivator for physical activity participation. Each participant relayed their story of how they sought out physical activity to improve or maintain their health. For example, Sally spoke of the challenge of maintaining a healthy weight. She relayed how, in recent years, she has noticed how her limited mobility – due to her cerebral palsy – made it difficult for her to maintain a healthy exercise routine. Regarding her motivation to be active, Sally noted *“To not be overweight is what motivates me most, I don’t want to be obese because if I were ever obese I would probably be in a wheelchair”*. Sarah’s interview made it clear that this realization of the health benefits of physical activity began at an early age; *“That’s the reason I didn’t do modified P.E. too, I wanted to keep my body healthy.”* A fear of declining health was a common topic that emerged, capsulated by the theme of motivation. For example Mitchell stated *“my body, the way it is, I have to do certain things to keep it longer.”* Bing’s tale of lifestyle change reflected health as a motivating factor, as he spoke about how he had always struggled with his weight. His parents brought him to consult with a nutritionist and doctor who told him and his parents of the dangers of being sedentary. This experience was a pivotal moment for Bing, who

launched an intense campaign to improve his health. *"It was like, wow, I don't want to die younger...I decided I better get on doing healthier stuff and so that's where I am right now."* Due to his adherence to his fitness regimen, Bing proudly spoke of his success at losing 75lbs through an intense cardio routine and healthy diet.

Relevant to the theme of motivation is the degree to which physical education motivated participation in later years. However, only one participant credited her physical education class as a contributor to her physical activity levels now. Conversely, an interesting opinion shared among the participants was a lack of enjoyment in their physical education classes that spanned from indifference to dislike. Sarah summed up her feelings by politely stating *"it just wasn't my cup of tea."* And both Linda and Jake, who are almost twenty years apart in age, made similar statements about their dislike for learning team sports and not focusing on fitness activities that they could participate in after their school years. Linda said, *"the thing is that most of the stuff we learned in PE was team sports and once you get out of high school there's not a lot of such things."* Jake also commented *"I just thought it was something we did for 30 [minutes]... We didn't really do any exercise we just did sports or activities."* When asked what effect physical education classes had on her physical activity development Melissa replied *"it was just something that was required by the school... it was just something we had to do like our homework or eating vegetables. It's more... a chore."* The differentiated factor, that seemed to influence the degree to which PE was enjoyed and motivating for the participants of this study was the sense of autonomy they experienced in the class. This was exemplified by Jake who noted that a turning point in his enjoyment of physical

education classes came in high school. *“When I was in PE it was mostly team sports we did for PE, but my freshman year [of high school] we started getting to choose what classes we wanted to take and that is truly when I started to like P.E.”* Bing also discussed the importance of having control over his physical activity experiences.

Throughout the interview, Bing described stress and anxiety during physical activity with peers. He revealed that he enjoys working out at the local gym because he is accountable for his own actions. *“[at the local gym] They treat you like an adult. They don’t take the blame for all of my actions.”*

Finally, related to the theme of motivation is the subtheme of ‘discovering interests’. The majority of participants (n = 8) spoke of how the discovery of a new physical activity interest was what motivated their current active lifestyle. For example, Melissa, who has lived with the effects of chronic Lyme Disease since her early teens, reported that one of the most meaningful physical activity experiences she had was enrolling in gymnastics. Melissa said, *“it made me feel kinda more confident.”* Other participants reported gaining similar confidence due to the discovery of an activity they were passionate about. Jake stated that his most meaningful experience was when he started doing ju jitsu at age 22, an activity that he continues to participate in. Jake said of that experience *“It feels great though when I go to martial arts. I also teach, I help teach kids classes though so that’s a good feeling, passing on what I have learned.”* The participants all expressed a curiosity for other physical activities. Notably, when asked what would help her be more active, Linda stated *“you know one thing I would really like to see? They have these in Germany, adult playgrounds. They’re actually for people with*

*Alzheimer's, but f**k Alzheimer's I love swings!*” Other activity interests discovered by respondents included, swimming and teaching children at a local pool, walking, hiking, and color guard.

Struggling with Barriers

A prevalent theme that arose in all interviews was that of struggling with barriers. This theme encapsulated the participants' experiences of facing, overcoming, and sometimes being obstructed by barriers. Subthemes include (1) Individual barriers; (2) Environmental Barriers.

Individual barriers to physical activity encompassed factors related to the impairment experienced by the individual. Most commonly participants in the study discussed their physical impairment as a barrier to participation in physical activity (n=6). For example, Mitchell discussed his difficulty participating in physical activity; *“my back and my legs, and my hips mostly that I am worried about... The way I walk, it could mess up my back... my lower back and my tailbone area.”* Sally, who also experiences limited mobility, fears further injury to her body as evident when she said *“What limits me as I get older is my walking, how long I can walk, how long I can stay on my feet... It starts hurting after long, my feet start hurting me after long. I need new feet. Just like you need new tires, I need new feet!”* Sarah also spoke about her current limitations to physical activity *“I try to avoid things that involve a lot of altitude or climbing so I have to be careful if it's too physically strenuous I can't keep up”*. Other participants reinforced the challenges posed at the individual level, discussing, for example, experiencing

clumsiness *“I just had a hard time physically... I was older than most kids.”* (Linda), an inability to *“play a lot of the sports they had to play”* (Barb), and fatigue *“I don’t have that much energy after [daily activities] to do it.”* (Melissa).

In addition to the individual barriers to physical activity, half of the participants in the study discussed how their environment posed a significant barrier to physical activity participation (n=4). Melissa revealed that her environment provides limited prospects for physical activity *“I live in a trailer so that’s like, it’s really hard to find space... I don’t have space to do it”*. When asked what would help him be more physically active, Mitchell stated *“like more places and more time”* when asked to elaborate on that response Mitchell said *“the area is so small. There’s only a couple of places... and places cost money too!”*

Influence of Peers and Teachers

All participants reported that peers and teachers influenced their enjoyment and participation in physical activity and physical education classes. Many participants (n=5) reported that their peers provided positive support in physical education class. When asked what her experience with peers in physical education class was like, Sally remembered how her classmates would help include her in activities. *“The kids were okay, someone would hit the ball... They would pick someone that was my speed... So, I would run the bases, but they would hit the ball for me.”* Sarah and Melissa also spoke about positive social experiences they had while in physical education classes, as voiced by Sarah; *“I liked the team spirit. It was sometimes fun to be interacting with people in a*

physical sort of way.” Melissa, who generally did not enjoy physical education class, also discussed that her peers were the part of physical education class she most enjoyed “*I had a lot of friends in my PE class, so if we were walking laps or something I would be talking with my friends, and that was positive.*” Mitchell recalled that his peers in physical education class were “*really nice people*”. He enjoyed P.E. because he enjoyed being around the other kids and making friends; “*I made a lot of friends that way, some of them I still remember*”.

Conversely, some participants (n=3) described negative interactions with peers that affected their enjoyment of physical activity. The most extreme example of negative interactions with peers was described by Linda. Linda experienced exclusion and ridicule in physical activity settings from an early age. She disclosed “*I did not do youth sports. My mother tried to get me into field hockey one year but that did not.. um, work out well. They were little b****es!*” When asked about her experience in physical education class Linda revealed that she “*hated PE.*” When asked to elaborate on that statement Linda stated “*Because the other kids knew I was bad and so they’d target me. Yeah because you know you have to catch the ball and get someone else [in dodgeball] well, I’d be in there for fifteen minutes... it felt like fifteen minutes. Basically, when I get hit in dodgeball I was in the middle until the teacher ended it. I was always chosen last*”. Jake also recalled negative experiences with peers in lower grades, especially participating in team sports during physical education class. When questioned further about his reasons for disliking team sports in P.E. Jake said, “*yeah, the thing is though, possibility of odd person out.*” He continued by saying “*Yeah, there are times that everybody feels that way, and that,*

reason being though, that's team sports I'm all for, but they could be better organized."

Upon further investigation Jake revealed that he sometimes felt left out of sports in physical education class. As a result he began to seek out other physical activities,

particularly in high school, and came to value physical fitness training over team sports.

Linda reported that she liked many of her physical education teachers, however they did not always understand how to support her and her needs in physical education class. *"The spirit was willing, but the knowledge wasn't always there in general."*

Half of the participants reported a positive relationship with their physical education teacher, however only two reported that their relationship with their physical education teacher influenced their physical activity habits as adults. Other participants reported limited or no relationship with their physical education teachers, leading to feelings of indifference. Sarah described her relationship with her P.E. teachers. *"I didn't have much interaction. Yeah it was just kind of like I was just another one of the kids."* Additionally, Melissa revealed that she did not feel like her physical education teachers were sympathetic to her needs, and were not interested in supporting her. *"At my school the teachers just kinda disregarded the people who had issues unless like a doctor proved it or a parent wrote you note. So, I guess I kinda resented that."*

DISCUSSION

The results of the interviews in this study add to a limited body of information that seeks to understand the perspectives of adults with disabilities and the development physical activity habits. Through this study three themes emerged that highlighted the various social, emotional, and physical facilitators and barriers to physical activity development. One factor that sets the results of this study apart from others on this topic is that it also elicited the perspective of the adult participants on the role physical education played in physical activity development in their lives. The three major themes that emerged were ‘sources of motivation’, ‘struggling with barriers’, and ‘the influence of peers and teachers’. In this section the discussion will focus on the topics of (1) barriers, (2) Motivation, and (3) The role of others.

Barriers

Research demonstrates barriers to physical activity for adults with disabilities, spanning all levels of the ecological model of health behavior (Rimmer, et al., 2008). In the current study environmental barriers, and individual level barriers were most apparent. Previous qualitative research involving adults with disabilities has repeatedly revealed environmental barriers to be an issue preventing participation. For example, in research by Rimmer at al., (2008) participants spoke about how the natural environment was inaccessible and prevented participation, noting specifically safety issue that arose. This perception was reflected in the words of the participants of the current study who

spoke of limited access to physical activity due to lack of transportation, and the distance they would need to travel to reach any venue appropriate for their ability. Interestingly, in addition to acknowledging the environmental barriers that surround them, many of the participants in the current study spoke of barriers through the lens of the medical model; highlighting individual level barriers to participation, noting how fatigue, pain, limited mobility prevented participation. This is in contrast to the perspective of adults with disabilities in previous research (Rimmer et al. 2008) in which participants primarily tended to focus on the built environment's accessibility to *allow* access, as opposed to their body's ability to *gain* access. However, personal (or individual) factors did emerge as barriers in other research involving adults with disabilities. For example, participants in research by Buffart, et al. (2009) spoke of experiencing a lack of energy, and fear of developing injuries or complications; individual level barriers echoed in the perspective of the adults with disabilities in the current study. Practitioners providing physical activity program to adults with disabilities should be aware of these concerns and plan the environment and physical activity program accordingly. Education about injury prevention may also help counteract fear of injury as a barrier to participation.

Motivation

Participants spoke of a variety of intrinsic and extrinsic motivating factors to physical activity participation. Having a sense of autonomy emerged as being an important factor contributing to their enjoyment of physical activity, especially later in life, for many participants. The importance of having a sense of autonomy has long been

reflected in other research involving the perspective of people with disabilities. For example Goudas M. Biddle et al. (1995) conducted research that found that giving choice and influence over the way lessons are conducted increases motivation and willingness to make an effort in physical education classes. Similarly, in research by Johnson, Goodwin and Leo (2015) the importance of autonomy and choice was also seen as participants reported that as independence and choice were removed due to changes brought on by impairment, a sense of indignity emerged. Gaining a sense of autonomy contributed to the participants physical activity habits evolving over time. Many participants sought novel physical activity opportunities, and as a result discovered interests. Participants reported becoming motivated to engage in these activities not only because they had the autonomy to choose them, but also because their participation was meaningful and relevant to their lives.

Another factor that contributed to motivation was a concern for maintaining and improving health. Many participants reported feeling an increase in pain, lack of mobility, or weight gain as they age, prompting them to take initiative to seek out other activities. These findings are also similar to findings from the study on facilitators and barriers to physical activity in adults with childhood onset disability conducted by Buffart et.al. (2009) in which these individual factors were barriers, but also a motivator, for activity participation. Practitioners should assess and recognize the physical fitness and physical health needs of clients with disabilities. Programs should be individualized, and progress tracked, so as participants the participants can receive the health benefits they seek.

The Role of Others

The social environment playing an interesting and varied role in the physical activity habits of the participants in the current study. First, the presence of peers contributed to some participants' attitude of "if they can do it, I can do it" which pushed them to participate in physical activity. When discussing the social influences on physical activity many participants reflected on their earlier experience of physical activity, in school settings. Many participants reported that physical education classes were a place where they developed friendships, and had enjoyable social encounters, thus motivating participation. This is similar to the findings of Buffart, et.al., (2009) who used focus groups to examine the facilitators and barriers to physical activity in young adults with childhood onset disabilities. Buffart et al. (2009) found that participants mentioned physical activity as a fun social activity. Children with disabilities, interviewed about their perspective of physical education, also attest to the potential of physical education as a setting for friendship development and positive social experiences (Seymour, Reid, & Bloom, 2009). However, in the current study, peers as motivators was a much more common theme described by adults experiencing a physical disability rather than and social, emotional, cognitive disability. The participants experiencing social, emotional, or cognitive disabilities (for example, three participants experiencing ASD and TBI) spoke about how participation with peers was a cause of stress, and recalled often not enjoying physical education classes as a result. All three of these participants reported that they did not begin to enjoy physical activity until high school, when they had more control to

choose their activities, most often choosing more solitary activities. Several studies who sought the perspective of children with disabilities in physical education attest to this negative experience; for example, Healy et al., (2014) revealed how children with autism spectrum disorder reported experiencing bullying in physical education, preventing participation.

LIMITATIONS

While the information gleaned from this study is useful in providing a snapshot of the perspective of adults with disabilities on physical activity participation, it does have some limitations. First, similar to previous research involving adults with disabilities (Johnson, Goodwin, & Leo, 2010), a maximum-variation sampling strategy was employed, resulting in a heterogeneous sample. It was the intent of the primary researcher to identify themes shared by adults who experience disability. Although several shared themes did emerge, a notable difference in opinion was evident between participants with physical disabilities and autism spectrum disorder regarding certain topics. Future research should examine how experiences, barriers, and facilitators may be unique depending on the impairment experienced by the individual, in addition to other characteristics including gender, socio-economic status, and environment (urban versus rural). Second, participants in this study were recruited from an adapted physical education program. This fact that they were members of this program reflects a positive attitude and motivation for physical activity. Future research should specifically seek to elicit the perspective of inactive adults with disabilities.

CONCLUSION

The findings of this study contribute to a larger body of research that seeks to identify the facilitators and barriers to physical activity experienced by adults with disabilities. It is important to seek the perspective of adults with disabilities to understand how physical activity habits develop across a lifespan. Practitioners should not only be aware of the factors that contribute to participation in adults, but also how those factors evolve and influence the development of physical activity habits across a lifespan to better inform teaching strategies for individuals with disabilities at all levels.

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