



Article

Navigating middle school physical education with a physical disability: Personal experiences and challenges

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Abstract: This study uses a social justice model, to explore the lived experiences of people with physical disabilities during their general physical education classes in middle school. In this qualitative study, the authors conducted semi-structured interviews with 10 participants to develop themes from participants' experiences through a social justice lens (equality, equity, participation, justice). Description and narrative are presented from the five central themes that developed from the interviews: a.) favouritism of athletes; b.) did not ask my opinion; c.) treated me like I had an intellectual disability; d.) did not know how to deal with me; e.) no equipment/rules modifications. These results support prior research indicating little has changed in the past few decades. The approach used in this research adds to previous literature by looking at experiences through a new lens, and the potential to address these findings in future research to support and accommodate students with physical disabilities in general physical education.

Keywords: social justice; inclusion; achondroplasia dwarfism; cerebral palsy; phenomenological

Introduction

Most students with disabilities receive their education in general education schools, with more than half spending most of their time in general education classrooms with their peers without disabilities (USDE, 2021). Participation in general education includes general physical education (GPE), with reports of close to 90% of children with disabilities placed in GPE settings (General Accounting Office, 2010). Unfortunately, interviews with students with disabilities consistently find that, while there are some positive experiences related to inclusion in GPE, most students with disabilities report negative experiences including feeling different, lacking competence, struggling to be accepted, and feel as if they were treated differently by their peers and GPE teachers (see Holland & Haegele, 2021; and Obrusnikova & Block, 2020, for a review). The situation in GPE is particularly challenging for middle and high school students with disabilities when the GPE curriculum tends towards team sports such as basketball and soccer, where the focus is often on competition rather than learning the skills, rules, and strategies of the game. A focus on competitive team sports can further exacerbate the different treatment of students with disabilities who may lack athletic abilities and team sport experiences (Petrie, Devcich, & Fitzgerald 2018).

While there is a growing body of research examining the experiences for students with disabilities in GPE, Holland and Haegele (2021) noted that very few of these studies were conducted in the United States. In fact, in the past twenty years there has been only one study focusing on experiences of children with physical disabilities in GPE (Holland et al., 2023). Results of this study, in which six children ages 10-14 with various physical

disabilities were interviewed about their experiences in GPE, revealed that participants felt they were treated differently due to their disability, sat out at various points during GPE, and felt they were isolated and had limited social interactions with peers. While only one study with a small sample, these results were similar to previous studies in Canada, Europe and Asia. Research conducted in Norway revealed that adverse encounters in PE classes had a long-lasting impact on individuals, resulting in negative attitudes toward physical activity in adulthood. These experiences encompassed feelings of failure, being unheard, and exclusion (Bredahl, 2013). Additional research in Europe emphasized that the predominant focus on pre- and in-service teachers' attitudes has led to a varied range of perceptions when it comes to the topic of inclusion (Wilhlmsen & Sorensen, 2017). Clearly, more research examining experience of children with physical disabilities in GPE is needed, particularly studies that focus on middle school children, which as noted earlier, is often a time where GPE in the United States focuses on team sports and thus a particularly challenging time for children with physical disabilities.

Research Approach

Most of the studies cited in the reviews by Holland and Haegele (2021) and Obrusnikova and Block (2020), as well as the recent study by Holland et al. (2023), used a phenomenological research approach when examining the inclusive physical education experiences of students with disabilities. This qualitative research approach is designed to help researchers understand lived experiences of a particular group of individuals (in this case, students with physical disabilities in GPE) to understand and interpret these experiences (Richards, Hemphill & Wright, 2023). However, research has indicated that the insights into the experiences of students with disabilities in PE have often originated from external sources rather than directly from the students themselves, thereby missing the crucial element of "lived experience" (Fitzgerald, 2005). In contrast to these studies, we employed a social justice model to guide the development of questions presented to participants and to analyze and interpret data to better understand experiences of students with physical disabilities in GPE.

Social justice supports the rights of all people to participate in life experiences with equal access to resources regardless of race, class, ability, ethnicity, identity, or gender. Social justice fights against unequal power, oppression, and imbalanced life experiences that infringe on individual rights and access to resources (Miller, 1999; Tollefsen, 2010). Four interrelated principles of social justice. *Equality* focuses on making sure all people, regardless of minority status, receive the same resources and benefits as those in the majority. *Equity* recognizes that treating everyone the same is not necessarily treating everyone fairly. Equity promotes fairness by removing barriers and/or providing extra supports and benefits as needed to ensure equality. *Participation* means involving people with disabilities in decisions that affect their lives. The phrase "nothing about us without us," provides a fitting description of the meaning of participation within a social justice framework. Finally, *rights* refer to individual liberties and to offer an appeal process when decisions by the majority undermine an individual's or minority group's liberties (Block & Fines, 2021).

The purpose of this study is to examine the experiences of middle school students with physical disabilities in GPE (or young adults recalling these experiences) using a combination of a phenomenological approach, critical disability theory (CDT), and a social justice model. Four interrelated principles of social justice – equality, equity, participants, and rights - were used to construct the questions with a particular focus on how the general physical education teacher supported and accommodated students with disabilities. All three approaches will be used to analyze and interpret the data. Our analysis also examines

other factors that may influence the experience of children with disabilities in GPE, including the PE curriculum, support from peers, and the general learning environment (e.g., equipment, gym space, etc.).

Materials and Methods

Purposive sampling through disability organizations (e.g., Little People of America, MOVE United Sports Clubs) as well as convenience sampling of persons with physical disabilities known to the researchers was used to recruit participants to the study. Participants were informed about the study by way of an introductory recruitment letter (sent to sports clubs to share with members or to individuals) describing the purpose of the study, nature of data collection, and information regarding confidentiality. All participants provided informed consent prior to each interview. Ethical approval for this project was granted from the second author's Institutional Review Board.

Participants

In total, ten participants aged 15-31 within the United States were recruited and consented to participate in individual interviews. Six participants were currently or have been para-athletes in the past. To be included in the study, participants had to have (a) a physical disability, and (b) only attended GPE (no adapted physical education) in middle school. All of the participants attended their entire middle school education in GPE which ranged from two to three years. Initially, recruitment was attempted with participants aged 25 years and younger to ensure participants had the best possible recollection of their middle school physical education experience. However, it proved difficult to find participants with physical disabilities who met this age requirement, and ultimately the researchers decided to increase the age criteria to 31.

Data Collection

The research team conducted semi-structured interviews allowing both verbal and non-verbal cues as well as helping obtain an accurate and thorough analysis (Merriam & Tisdell, 2016). During these interviews, researchers had the opportunity to observe participants' body language as they responded to questions. For instance, when one participant discussed the embarrassment, she felt when students had to wait for her during running activities, her head lowered, visibly conveying the emotions she experienced. Interviews were conducted by both authors who have experience teaching general and adapted physical education, as well as knowledge in social justice aspects of physical education. The first author, MS (female), is a doctoral student in adapted physical education at a Mid-Atlantic university. The second author, PhD (male), is faculty at a Southeastern university.

All interviews took place via Zoom with participants located throughout the United States. Each interview between the researcher and participant was recorded for retroactive coding and lasted approximately 30 to 45 minutes. Interview questions included demographic questions, sense of belonging questions, social justice/critical disability theory questions focusing on experiences in general physical education (equality, equity, participation, justice), and finally an opportunity for participants to add any final thoughts on their experiences in middle school physical education. Initial interview questions were created by the research team, reviewed by two experts in adapted physical education and two in critical disability/social justice theory, revised, piloted with two individuals with physical disabilities, and then revised into a final series of questions to be used by the interviewers. Researcher one conducted interviews with six participants, while researcher two conducted interviews with four participants. Examples of interview questions included the following:

- (Sense of belonging) “Do you (or did you) feel that you are (were) welcomed by the general PE teacher? Explain why you feel (felt) this way? Do you (or did you) feel you are (were) welcomed by your peers? Explain why you feel (felt) this way?”
- (Equality) “Do you (or did you) feel you were treated the same as other students in the class? For example, did the physical education teacher talk to you like he or she did with other students in the class? Can you give an example?”
- (Equity) “Do you (or did you) feel you were accommodated when needed so you could benefit from physical education like your peers? For example, are (were) you given options in how to move (e.g., how to complete laps), can you give an example?”
- (Participation) “*Participation* – Do you (or did you) feel the PE teacher included you in decisions about your participation and accommodations in PE. For example, does (did) the PE teacher ask you if you wanted to use different equipment? If so, did he listen to your suggestions? Can you give an example?”
- (Justice) “Do you (or did you) Did you ever tell the PE teacher that you did not feel that you were being successful or accommodated. For example, does (did) the PE teacher listen to you and make changes based on you asking for changes? Can you give an example?”

Interviewers documented answers during the interview, and either used the automatic transcript feature of Zoom or took detailed notes during the interview. Following each interview, interviewers took reflective notes including how the interviews progressed, any questions that might have come up, and impressions of the data. Depending on the clarity and thoroughness of the interviews, some interviews were conducted once, while other interviews were conducted twice. The coding tree was comprised of positive and negative statements made by the participants from each category of the social justice model. To ensure interrater reliability, following coding of each interview by the conducting researcher, the transcription was forwarded to the other for independent coding. Subsequently, both researchers collaborated to address any disparities in their interpretations and reach a consensus.

Analysis

This qualitative analysis used a directed content analysis approach based on the social justice model. Directed content analysis used existing theory and prior research about experiences in middle school physical education for people with physical disabilities in order to obtain further description (Hsieh & Shannon, 2005). Each interview pulled positive and negative statements regarding participation in physical education from the participants in each aspect of social justice (equality, equity, participation, and justice) as well as if they felt welcomed by their peers and teachers. Data was organized into preexisting social justice categories (equality, equity, participation, justice) along with welcoming and final thoughts categories. Additionally, the subcategories of (positive and negative statements) and (athletes and non-athletes) are presented below. Pseudonyms have been used in place of participants' real names to provide anonymity. Demographic information of participants is presented in Table 1.

Results

Case study researchers “seek to portray the case comprehensively, using ample but non-technical description and narrative” (Stake, 1995, p. 134). Within this section, the findings are presented using description and narrative in the form of the following five central themes: (a) favoritism of athletes, (b) didn't ask my opinion, (c) treated me like I had an intellectual disability, (d) didn't know how to deal with me, and (e) no equipment/rules modifications. The researchers elected to identify these main themes in more neutral terms

given the variety of responses from the participants. The themes are not mutually exclusive as there is overlap in the ideas presented in one theme. These themes will be presented within the critical disability theory and social justice framework noting social and cultural expectations that present stigma, restricted access, and discrimination.

Table 1 Description of participants

Name	Sex	Age	Disability	Athlete
Ali	F	20	Achondroplasia Dwarfism	Yes (Paralympic Swimmer)
Andy	M	27	Cerebral Palsy	No
Anna	F	18	Spina Bifida	No
Bobbie	F	15	Limb Length Discrepancy	Yes (Wheelchair Basketball and Track)
Dixon	M	20	Paraplegia	No
Duke	M	18	Cerebral Palsy/Visual Impairment	No
Henry	M	18	Double Above-Knee Amputee	Yes (Paralympic Swimmer)
Josie	F	20	Ehlers Danilo's Type 4, Strokes, Right Side Ataxic	No
Marie	F	22	Achondroplasia Dwarfism	Yes (Parapan Swimmer)
Slater	M	31	Sacral Agenesis	Yes (Paralympic Track and Field)

Favoritism of Athletes

The theme of “favoritism of athletes” reflected an interesting phenomenon in which students with disabilities who were known by the PE teachers to be athletes were given preferential treatment, while those students with disabilities who were not athletes reported more discriminatory practices towards them. In discussing issues related to the social justice/critical disability theory focusing on experiences in physical education (equality, equity, participation, and justice), the participants responded by describing experiences and situations within the social justice model, and how they were affected from both an athlete and non-athlete perspective.

Equality means that all people, regardless of their minority status, receive the same resources and benefits as those in the majority (Khechen, 2013). Ali, who has dwarfism and is a Paralympic swimmer, was asked if her PE teacher talked to her the same as they did with other students in the class. She responded with “no, he talked to me differently because I was an athlete, and he knew I knew my health and PE stuff.” Moreover, Ali was allowed to sit out on days she had morning swim practice and was not ‘feeling up’ to participating. There was not equal treatment between Ali and her classmates. On the other hand, Bobbie who has multiple physical disabilities including limb length discrepancy and was not an athlete stated,

almost every time I asked, I was like hey can I sit this activity out like running up and down hills. My ankle doesn't go up and down very well so running up hills is not fun for me, and I don't do hills very well. The PE teacher's response was sorry, but I still had to do it. (Bobbie)

There was a significant difference in the experiences that Ali and Bobbie had in their PE classes. In Bobbie's case, equality was reflected with Bobbie and her typically developing peers when in fact she needed some equity to be successful.

While equality allows for all individuals to receive the same resources, equity brings in the aspect of fairness. Within the theme of “favoritism of athletes” the authors found in the results a lack of equitable treatment for all students. For example, when Slater, a Paralympic track and field athlete with sacral agenesis was asked the question, were you given options with equipment in your physical education class, he responded with “for the most part I used

the equipment everyone else used, however, anything I needed was brought in, such as a track chair since I am a Paralympic athlete in track and field.” Further, Slater was given his own key for the lift that he used to access different areas of the school. While these examples were helpful for Slater, other students who were not athletes were not given access to specialized equipment. Additionally, other participants in this study who were not athletes, did not receive this type of favoritism. In contrast, Andy, a non-athlete student with cerebral palsy, responded “no, the teacher said any special equipment would need to come out of the special education budget, but there was no money there.” The above experiences show that there were noteworthy differences in these two student’s experiences.

The social justice principle “participation” must allow everyone to voice their concerns and take part in making decisions. If something affects a person’s life, they need to be part of that process. Essentially, participation means empowering a person to participate in the decision process when in which the decision affects the individual. Allowing this type of participation is associated with feelings of inclusion (Spencer-Cavaliere & Watkinson, 2010). In this section of questions, participants were asked if their PE teacher asked them if they wanted different equipment, special rules in games, or if they wanted to sit out or participate in the activity. All but two participants stated that they did not recall being asked if they wanted to use different equipment. Slater (Paralympic track and field athlete) was given the option to use a track chair that was brought in for him. Duke, who has mild cerebral palsy, and a visual impairment, stated that “the PE teacher talked to my teacher assistant, and they asked me if I wanted a regular ball or the ball with the bells in it.” While Duke was not directly asked, in a roundabout way he was able to be part of the decision-making process. Ali (Paralympic swimmer) stated that her teacher did ask her if she wanted special rules in games, but she did not need any. Whereas Andy (non-athlete) did not participate with his class in games but rather as he worked with his therapist away from the rest of the class. Andy said he wanted to participate with his peers without disabilities, but he was never asked and thus was automatically relegated to being separated from his peers. While only two athletes were asked if they wanted different equipment, rules, or the choice of participation, the remaining three did say that if they would have asked for something, their teacher would have accommodated them.

In the justice section of the interview, we asked the participants if they ever told their PE teacher that they did not feel that they were being successful and could the PE teacher please provide some accommodations. One of the prompting questions was, ‘did the PE teacher listen to you and make changes based on what you were asking for. Slater (Paralympic track and field athlete) said “yes, if I asked, they listened, but I did not ask often.” On the other hand, Andy (non-athlete) said, “I never asked, it never occurred to me that I could ask.” Furthermore, a non-athlete stated,

I was kind of shy, but I was friendly to people so I wouldn’t try to have conflict with teachers, because I like to be a good kid in school, and I didn’t want to cause like drama. So, I didn’t bring up these issues, just because I didn’t think that it was necessary. It is PE, and I didn’t think at the time that it would have impacted me as much as it did. Now looking back, it wasn’t right that these teachers were doing these things. I should have stood up for myself more and said something, but, at the time I didn’t really do anything because I was nervous. (Anna).

The discrepancy between the athletes and non-athletes’ experiences in middle school physical education was very clear.

Did Not Ask My Opinion

The theme of “did not ask my opinion” was prevalent among the participants, with varying perspectives between athletes and non-athletes. The consensus among the participants was that they were not consulted about their needs for successful participation in PE. According to the athlete’s perspective, even though they were not asked, they believed they would have been accommodated for if they had spoken up. Conversely, non-athletes felt that their voices would not have been heard even if they had expressed their opinions.

Regarding equality, Marie, a Paralympic swimmer with achondroplasia dwarfism, mentioned “there were times my teacher purposely modified without asking me. This was okay, but I felt like I was being downgraded at the same time.” Duke, who has cerebral palsy and visual impairment, never recalled being asked about any aspect of his learning in PE. He was often asked to sit out or be secluded from his classmates, despite wanting to participate with his friends. This treatment highlights a lack of equality in these participants’ experiences.

In terms of equity, Bobbie, who participated in wheelchair basketball and track due to a limb length discrepancy, explained that most PE teachers would dictate what she should do without offering accommodations such as equipment modifications or differentiated instruction. Bobbie stated, “most of the gym teachers were like okay, this is what you’re going to be doing, and then they would just walk off.” As a result, she would typically stop at the same time as her peers, even if she had not completed the same number of laps as to not draw attention to herself. Marie, too, felt that she was rarely accommodated when needed and was not given options for modifying activities. When asked if she was given options in terms of activities, Marie recalls, “no, it would have been nice if she would have asked, but she came up with the modifications on her own without asking.” This resulted in her either doing the entire activity, following the teacher’s modifications, or sitting out. On the other hand, Henry, a double above-knee amputee, expressed gratitude for not being treated differently in class, as it made him feel more accepted. “If they [teachers] were to give me special rules or accommodations for certain sports, then it would make me feel like more of an outsider in my class.”

When it comes to participation, Marie mentioned that her teacher never asked her about how she wanted to participate in PE. For example, she was not asked if she would like to run fewer laps than her peers due to her shorter limbs, or if she would like to use a lower hoop during their basketball unit. Instead, the teacher assumed and instructed her without her input, occasionally telling her to sit out certain activities. Anna was also never asked if she needed any accommodations or modifications. Anna stated, “it definitely would have helped me [if they asked me what I needed]. I resented PE for such a long time because I didn’t feel I was accepted.” While she made modifications on her own, she resented feeling unaccepted due to the lack of consultation and choice. Slater could not recall being asked about different equipment, but he believed that if he had spoken up, his teachers would have listened. Overall, Slater had a positive experience and felt welcomed and included by both peers and teachers. Although he was never asked to sit out, he made the personal choice to do so during the dance unit due to concerns about hand placement while in his wheelchair.

In terms of justice, the participants’ experience illustrated the need for better consultation and consideration of individual needs in PE classes. The theme of “did not ask my opinion” emerged strongly among participants, indicating a lack of consultation and consideration for their needs in PE classes. While some athletes believed they would have been allowed changes in curriculum format, environment, or equipment if they had spoken up, non-athletes felt their voices would not have been heard even if they had expressed their opinions. This lack of consultation points to a disparity in experiences and highlights the

need for greater equality and equity in PE. The participants shared instances where they were told to change the rules, or sit-out, without their input, leading to feelings of being downgraded or excluded.

Treated Me Like I Had an Intellectual Disability

During the interviews, a recurring theme emerged, which was the participants felt the teachers “treated me like I had an intellectual disability.” Josie, who has Ehlers-Danlos syndrome type 4 with right-side ataxia from strokes, expressed this sentiment when discussing her sense of belonging in class and her overall experiences in PE. When discussing this section, Josie recalled “It seemed like the class thought that I couldn’t understand what was going on.” The theme of being treated as if they had an intellectual disability was evident in various aspects related to social justice.

In terms of equality, Anna, remembered feeling treated the same as everyone else and not being judged based on her physical disability. However, she sensed that others believed she had an intellectual disability, including her teachers.

In regard to equity, the three participants that brought about this theme were denied of their *right* to be part of a process that affected their education. This was due teachers and peers assuming they were not capable of having a voice in how they participated in class.

In the participation section, participants were asked if their PE teachers inquired about accommodations of their preferences for participating in PE, such as different equipment, modified rules, or the option to sit out. Andy recalled that his PE teacher never personally asked him anything; instead, they would speak to his therapist and aide. He perceived that his teacher assumed he had an intellectual disability and could not answer for himself.

Regarding justice, when asked if his PE teacher listened to him and made changes based on his requests, Andy responded, “My teacher only talked to my therapist about what I could or could not do. I do not recall ever being asked anything.” He also mentioned that the teacher treated him as if he had an intellectual disability when reflecting on his overall experience in PE and whether he felt welcomed by the teacher.

These accounts highlight the participants’ experiences of being treated as if they had an intellectual disability, which influenced their sense of belonging, access to equitable opportunities, active participation, and the extent to which their voices were heard and valued in the PE setting.

Did Not Know How to Deal with Me

The recurring theme “did not know how to deal with me” was prevalent across the sample of participants. Josie, who has Ehlers-Danlos syndrome type 4 with right-side ataxia from strokes, had an especially extreme experience. When asked if she felt welcomed by her PE teacher, she expressed feeling like a burden, stating, “not really, I felt like a burden that my teacher had to figure out things for.” When asked the same question about her peers, Josie stated “no, except for a select few friends. Others didn’t care, they wanted to do their own thing.” She did not feel like a true part of the class or a sense of belonging. Josie was never given the opportunity to express how she would like to participate in activities, often being asked to sit out of most sports. Furthermore, she was not offered any equipment or rules modifications, and the distance to outside fields made access difficult. Her teacher would simply ask her to stay back. Although not all participants had such extreme experiences, their accounts shed light on their respective encounters.

In terms of equality, Andy was asked if he felt like he was treated the same as other students in the class. He explained “my teacher had me doing separate tasks with my aide away from the class. They would be similar to what the class was doing, so if they were playing volleyball, he would have me volleying with my aide.” When it came to participation,

Andy was never explicitly asked to sit out, but “he [the teacher] would come over and tell us that they would be doing an activity such as football, and I would volunteer to sit out. I felt a little pushed towards sitting out.” This experience made him feel somewhat pressured to sit out, but alternative activities were offered, such as throwing the football with his aide. Ali and Marie, both with achondroplasia dwarfism, also shared instances of being asked to sit out of specific activities. Ali was given alternative exercises like abdominal work during the basketball unit, and Marie was often excluded from physically demanding sports like soccer due to being targeted by other students or her slower running pace. Marie recalls, “there were also times she [teacher] realized how slow I was with running and she would ask me to sit out and sit in the gym alone.”

Dixon expressed feeling excluded in activities such as football, soccer, and basketball, despite having better shooting skills than some of his peers. Additionally, he was excluded from portions of fitness testing and asked to sit and watch and added,

I was the only person with a physical disability who wasn't in a special education program. So, I was the only one in like generalized physical education which made it difficult. They [the teachers] hadn't really dealt with someone like me before. (Dixon)

In terms of equity, Andy mentioned that “the teacher gave me options by saying do what you can, or you have your choice between using your gait trainer or chair”, however, it was his therapist who had specific benchmarks for him to hit rather than his teacher. When asked if he was given options for participation to benefit from PE like his peers, Andy stated, “my teacher told me to do what I can. My therapist was great and worked with me more than the teacher to hit individual benchmarks. My teacher would come over occasionally to check in.” When asked if rules were adjusted when necessary to help him succeed (such as preventing others from stealing the ball in basketball or allowing him to stand closer to the net in volleyball), he replied that all the sport-related activities were done individually with his aide, and he did not participate with the class. For the Pacer test, his aide set goals for him to strive for. Additionally, Andy was asked if he had access to the locker rooms. He said he did have access, however, “I chose not to use it, because I had a female aid, and it would have been better if they would have asked me if I could change myself, because having a female aid was an issue.”

Anna faced challenges in how she was treated by her teachers due to limited diversity and accessibility in her school. She felt that her teachers were not adequately prepared to help her due to her disability. For instance, during the Pacer test, she was unable to run as much as her classmates, resulting in embarrassment and grade consequences. Anna wished for modifications in certain activities, but she did not want the class to change just for her. She also felt excluded during the timed mile and questioned her teachers' choices stating, “it was hard for me to wrap my head around why they [teachers] would make me do this when it was causing me pain.”

Regarding participation, Andy explained that his PE teacher rarely asked him personally about his preferences or if he wanted special rules for games. Instead, communication would primarily occur between the teacher and his therapist or aide. Similarly, Henry, felt that teachers lacked experience in dealing with his disability. Although they allowed him to do what he needed to do, he stated, “sometimes I felt like they [teachers] saw me as almost a burden, in which they had to change the entire activity for.” Duke, had the opportunity to join some activities alongside his classmates, including portions of fitness testing and softball. However, despite equipment and rule modifications being made for him during these activities, Duke was never consulted or asked if he wanted to participate. As a result, he often found himself in the hallway, working with his aide in isolation.

In conclusion, the recurring theme of “did not know how to deal with me” underscores challenges faced by participants with disabilities in PE. Josie’s extreme experience of feeling like a burden and lacking a sense of belonging highlights the need for greater understanding and support from PE teachers. Equality, as experienced by Andy, Ali, and Marie, varied among participants with some being asked to sit out of specific activities or being given alternative exercises. Dixon’s exclusion from certain sports and fitness testing demonstrates a lack of inclusivity. Equity on the other hand, showed glimpses of progress with options given to Andy and some equipment and rule modifications provided to Anna, Henry, and Duke. However, the lack of personal consultation and decision-making power for the participants remained a common thread. Overall, the experiences of the participants emphasized the need for PE teachers to acquire the knowledge, skill, and resources necessary to effectively accommodate students with disabilities.

No Equipment/Rules Modifications

The final recurring theme that emerged from the interviews was the lack of equipment and rules modifications, which was prevalent among almost all the participants. During the interviews, the participants were asked about receiving modifications in terms of equipment and rules, as well as whether they were given the opportunity to request any modifications. The responses varied, but the overall consensus was that the majority of the participants did not receive any equipment or rules modifications, nor were they asked about their preferences in this regard.

In terms of equality, Anna, was asked to participate in all activities without any modifications. “I had to participate in everything that they [the class] tried. The reason why they made me participate and everything was because they felt like they were being equal in a way and treating everybody the same.” However, Anna faced challenges when she could not perform certain tasks and would pretend to be injured because her teachers would not listen to her when she expressed her limitations. Anna did not receive any modifications in her PE classes regarding teaching, equipment, or rules. The aspect that affected her the most was running. Anna recalled going to the football field to run the timed mile,

I would always be the last one around the track in the mile. Or I wouldn’t be able to finish it because my knees or hips would hurt so bad from doing it. They (the PE teachers) would just be like take your time and go at your pace; it doesn’t matter what time you get. But to me it did matter because I didn’t want to be excluded. I didn’t want to be the odd one out, and I didn’t want to be like the last one to be finished. (Anna)

Despite her physical limitations, her teachers refused to modify activities such as the Pacer fitness test or the timed mile. The situation led to emotional embarrassment for Anna as she felt like a burden to her classmates who had to wait for her to finish. She also felt isolated from the rest of the class. Anna recalls that her teachers simply provided the rules and instructed the students to proceed without making any adjustments. In basketball, she tried to position herself closer to the basket to minimize the amount of running required. In volleyball, Anna faced difficulties due to her inability to jump and struggled to move into positions that allowed her to hit the ball over the net. “It would kind of embarrass me, the fact that I couldn’t jump and get the ball to hit over [the net], and our team would lose, and I would just get upset.” On the other hand, Henry, preferred not to receive any rules or equipment modifications because it made him feel more accepted, and not feel like an outsider.

Bobbie, experienced mixed treatment. While she was allowed to do push-ups on her knees to match the class’s expectations, running posed significant difficulties for her. During the mile run, she would fall behind, causing embarrassment,

During the mile, oh so embarrassing during the mile. I was really far behind everyone else. Everyone else had finished, and I still had like an entire lap to do. The entire time the class was just yelling and screaming and cheering me on, and there's no stopping. I don't need to call attention to the fact that I'm still doing this. (Bobbie)

Despite requesting to sit out or modify the activity due to her ankle issues, her PE teachers insisted she continue. Bobbie had to decide for herself when she could tap out from certain activities without any official rule changes to help her succeed.

In terms of participation, Anna found that she could manage most tasks in the weight room. However, due to the large class size, she often could not receive the necessary assistance when needed, as teachers were occupied with other students. Similarly, Dixon, did not receive any specialized equipment due to the school's lack of resources. However, he preferred not to have any modifications and rejected them when offered, as he did not want to be singled out or seen as less than capable than others. Dixon disliked adaptations for two reasons. First, "I hated it because it just kind of highlights like hey, we don't think you're as good as other people in this." Second, "I didn't want people to see me like, oh, that's the guy who needs adaptive rules."

When it came to justice, Marie, felt frustrated with her teachers' lack of willingness to modify activities to accommodate her disability. Running, in particular, posed a challenge for her, and despite requesting a change in the running distance, her teacher did not listen to her. Marie stated, "I would have to run the same distance as my classmates and they would have to wait for me, and it took me almost double the time. I felt like I was subject to humiliation." Bobbie (limb length discrepancy) also faced similar challenges, as her requests for modifications were often met with ambiguous responses or ignored by her PE teacher. At one point Bobbie asked to use her wheelchair for the Pacer test. The response she got was "I don't know, we'll see. And then when they remembered, we would talk about it, and every time they kind of gave me like a non-committal answer, so I never brought it (my wheelchair) in." Further, when Bobbie would sit down to rest her ankles and knees when they were hurting, her teachers said "no, you got to get up." She would tell them she was in pain and the teachers' response was "just go walk it off." Bobbie felt unheard and had to take matters into her own hands to find success.

In conclusion, the experiences of these individuals highlight the need for a more equitable and inclusive approach to PE. While some students prefer equal treatment without modifications, others face significant challenges and require adaptations to participate fully.

Final Thoughts and Closing Comments

During the final segment of the interviews, participants were given the opportunity to suggest additional questions they felt would have helped convey their perceptions of middle school PE in this study. Marie mentioned that she would have liked to be asked whether she wanted guidance or instructions on what to do in certain situations. She explained that there were times when she preferred to be asked, depending on her personal preferences, enjoyment, and sense of belonging. At other times, she wanted to be treated equally and meet the same standards as her peers.

Henry offered closing comments directed towards PE teachers. He emphasized the importance of listening to students, as teachers may not fully understand what a student with a disability is experiencing. Henry urged teachers to be receptive, keep an open mind, and be willing to listen. He emphasized that while it is essential to acknowledge a person's disability, it is equally crucial to avoid alienating them from their peers. "The last thing a 12-year-old wants to be is alienated from every other 12-year-old in the class, you know."

Dixon, concluded by stating that individuals with disabilities are the best judges of their own capabilities and limitations. He encouraged teachers to ask students about their abilities and preferences, as the person with the disability is in the best position to provide accurate information.

Slater acknowledged in his final thoughts that he had a relatively easier time in PE compared to others with disabilities. He attributed this to having supportive teachers, advocates, and his own self-advocacy skills. Slater mentioned that being an athlete and an honor roll student provided him with a physical and social context that gave him an advantage over many other individuals with disabilities.

Bobbie, in her closing comments, emphasized the importance of PE teachers listening to the concerns and limitations expressed by students. She urged teachers to take such statements seriously and not dismiss them, highlighting that if a student expresses doubts about their physical abilities, it is crucial to listen and provide appropriate support.

In conclusion, the participants expressed a desire to be asked about their needs and preferences, recognizing that there are times when they want to be treated equally and times when they require modifications to be successful, or to not stand out. The importance of listening to students and considering their unique perspectives was emphasized, as they are the ones best equipped to judge their own capabilities. The closing remarks from the participants highlighted the need for PE teachers to be receptive, understanding, and attentive to the needs of students with disabilities.

Discussion

This study examined the lived experiences of middle school students with physical disabilities in a GPE setting using social justice lens. The five themes, (a) favoritism of athletes, (b) not being asked for their opinion, (c) being treated as if they had an intellectual disability, (d) not knowing how to deal with them, and (e) lack of equipment and rules modifications, demonstrated how GPE teachers support and accommodate students with disabilities in their class.

The data collected in these interviews provided evidence that the lived experiences of the participants fell in line with prior research. While there were some positive experiences from inclusion in GPE, mostly from those who were athletes, there were many negative experiences as well (Holland & Haegele, 2021; Obrusnikova & Block, 2020). These experiences included not having equipment, environment, or curriculum modifications, feeling embarrassed when others had to wait on them, being asked to sit out, not being listened to, and not having a choice in how they participated in class. Similarly, participants, including those who were athletes, struggled with team sport units. This matches the results from the study by Petrie and her colleagues (2018) where students were either asked to sit out or participate in alternative activities away from the class. Regarding the one study looking at PE experiences of students with disabilities in the United States by Holland and colleagues (2023), our study had similar findings, revealing that students felt they were treated differently due to their disability, were asked to sit out during certain activities, and some were isolated from their peers during specific units. These findings match previous research on the inclusion of children with physical disabilities in general PE dating back over 20 years (Blinde and McCallister, 1998; Goodwin and Watkinson, 2000). Each theme within this study comes back to findings in prior research adding to the notion that little has been done to correct how GPE teachers are supporting students with disabilities and improve the experiences of students with disabilities.

The theme of favoritism of athletes reveals that students with disabilities who were known to be athletes received preferential treatment, while those who were not athletes reported discriminatory practices. While some of these athletes had positive experiences,

each of the athletes were asked to sit out in at least one team sport, supporting prior research showing students with disabilities have a difficult time when GPE curriculum focuses on team sports (Petrie, Devcich, & Fitzgerald 2018). This theme also reflects Orr and colleagues (2018) study which found that students with physical disabilities often described negative sport experiences in PE. They felt as if they were treated differently due to their disability, leaving them disconnected from their peers. Because of these experiences, many students removed themselves from these situations by asking to sit out, or worse, by not enrolling in PE when it was no longer required (Orr et al., 2018). Similarly, Smith's (2004) research supports this theme with findings suggesting that team sports, which are often a large part of middle and high school PE curricula, can lead to the exclusion of students with disabilities. Although PE teachers may have positive attitudes towards inclusion of students with disabilities into their programs, the nature of team sports when conducted without modifications result in students with disabilities feeling different from their peers (Smith, 2004).

The theme of not being asked their opinion reflects a lack of consultation and involvement of students with disabilities in decision-making processes related to their PE experience. This lack of consultation undermines the social justice principles of equality and equity and emphasizes the importance of involving students in decisions that affect their lives (Khechen, 2013). Furthermore, the social justice principle of participation means involving students with disabilities in those decisions that affect their lives demonstrating their rights are not being met (Block & Fines, 2022). Participation is best described as "nothing about us without us," which is the motto of many organizations for individuals with disabilities who seek full participation and equal opportunities for, by, and with people with disabilities. Additionally, this motto was the theme of the International Day of Disabled Persons in the year 2004, which aimed to provide opportunities to focus on active involvement and participation of people with disabilities in the planning of strategies and policies that affect their lives. This definition of participation was clearly not met according to the experiences of students with disabilities in this study. Interestingly, the simple act of consulting with the student with a disability is an easy, low-cost way for PE teachers to better understand the needs of the student with a disability and how to best support them. Who knows more about their bodies and their abilities than students with disabilities, and thus they are the perfect resource for PE teachers to learn about effective equipment, environment, and curriculum modifications to help their students be successful, and obtain the same benefits from PE that typically developing students do. Unfortunately, our research suggests that students with disabilities are an untapped resource by most PE teachers. The importance of consultation and individualized approaches to participation was emphasized, with the understanding that students with disabilities are best positioned to judge their own capabilities. Moving forward, fostering an inclusive and supportive environment in PE requires active listening, open communication, and meaningful collaboration between teachers and students to ensure that everyone can fully participate, feel valued, and experience success in their PE classes.

The theme of being treated as if they had an intellectual disability highlights the participants' negative experiences, which are similar to prior research showing students with disabilities feel they are treated differently by their peers and GPE teachers (Holland & Haegele, 2021; and Obrusnikova & Block, 2020). It is one thing to be treated differently in terms of providing accommodations such as hitting a ball off a tee when playing softball, moving closer to the net when serving a volleyball, or differentiating distances when doing a pacer or mile test. However, treating someone who does not have an intellectual disability as if they did was viewed as extremely demeaning by participants in our study. This theme underscores the need for teachers to recognize and address the diverse needs and abilities

of students with disabilities, ensuring they are not subjected to unfair assumptions or treatment. This theme also speaks to the need for PE teachers to participate in Individualized Education Plan meetings, or at minimum, talk to each student's special education teacher to learn about the student's strengths and needs (Kowalski et al., 2006). As our study found, simply assuming that a student with any type of disability must have an intellectual disability occurs too often in PE and is viewed by students with disabilities as demeaning.

The theme of not knowing how to deal with students with disabilities reflects Smart's (2009) notion of two cultural expectations that negatively affect people with disabilities. The authors found in the results that participants were both (a) expected to conform to normalcy by not allowing modifications or not giving students a choice in how they participate, and (b) GPE teachers had low expectations of abilities and capabilities, and thus asked students to sit out and not participate with their peers (Smart, 2009). This was demonstrated by how Andy was expected to conform to normalcy by not giving options for him to be able to dress down for PE by either asking him if he could dress himself or finding a male aid who could help him. Further, Andy himself was never asked what modifications he needed or would like, rather the teacher spoke directly to his aid to get this information. These examples illustrate both of Smart's notions of cultural expectations by not giving Andy a choice in how he participated, as well as having low expectations of his abilities and leaving it up to his aide and therapist as to whether and how Andy would be participating in the activities. The majority of the time he was isolated from his peers working independently with his aide or therapist, which falls in line with Petrie and colleagues (2018) findings that students in their study were either asked to sit out or participate in activities away from the rest of the class. Active involvement, consultation, and collaboration with students in determining their preferred participation and adaptations are essential for creating an inclusive and supportive environment. By prioritizing the individual needs and perspectives of students, PE can become a space that fosters belonging, promotes equity, and empowers students with disabilities to fully engage in physical activities alongside their peers.

The theme of lack of equipment or rules modifications also highlights Smart's (2009) notion that individuals are expected to conform to normalcy in the fact that they were not offered any equipment, environment, or rules modifications. This could be due to the teacher not being willing to modify or give the student a choice or say in their education, or simply the fact that they prepared to work with individuals with disabilities. It is essential for PE teachers to listen to their students, consider their unique needs, and make reasonable equipment, environment, and curriculum accommodations to ensure a fair and inclusive environment for all.

Overall, the study findings emphasize the need for a more inclusive and socially just approach to PE, that has continuously not been addressed within our school systems (Holland et al., 2023). The themes identified demonstrate the challenges and barriers faced by students with disabilities in accessing equal opportunities and fair treatment in PE. Further, these themes illustrate children with disabilities *rights* are not being accommodated, and they are being stripped of their liberties as a minority (Block & Fines, 2021). With up to 90% of children with disabilities in general PE (General Accounting Office, 2010), the current and previous findings can no longer be ignored, as social justice supports the rights of all people, regardless of ability level, to participate in life experiences with equal access.

To address the issues of inclusion and a socially just PE experience, it is crucial to promote equality, equity, participation, and justice for students with disabilities. Using the social justice model to fight against unequal PE experiences and resources (Miller, 1999; Tollefsen, 2010) a more positive experience can be achieved by involving students in decision-making processes, providing appropriate accommodations and modifications,

fostering a supportive and inclusive environment, and equipping PE teachers with the knowledge and skills needed to effectively support students with physical disabilities in their classroom. Currently, most physical education teacher education (PETE) programs only require one adapted physical education course, and only a small amount of course time is devoted to discussing practical ways to accommodate students with disabilities in general PE programs (McNamara et al., 2022; Piletic & Davis, 2010). However, there is published literature on how to promote inclusion and socially just experiences for all students within PETE programs (Nowland et al., 2023). To address the high proportion of students with disabilities in GPE, particularly 92% in grades 1-7 and 88% in grades 8-12 according to the General Accounting Office (2010), there is a pressing need for improved performance among GPE teachers, and higher education institutions must enhance their training programs accordingly. By fostering a supportive and inclusive environment, teachers can ensure that all students can actively participate, feel a sense of belonging, and experience success in PE.

Conclusions

This study adds to the research of the experiences of students with physical disabilities in the GPE setting but with the addition of the unique focus on the use of critical disability theory and social justice as a means to analyze the data. Specifically, it adds to the research that has been conducted in the United States focusing on experiences of students with physical disabilities in general PE. Holland and colleagues (2023) note that little has been done about the negative experiences' students are experiencing and that these research findings date back to the turn of the century (Blinde & McCallister, 1998; Goodwin & Watkinson, 2000; Holland et al., 2023). Each of the five themes, (a) favoritism of athletes, (b) not being asked for their opinion, (c) being treated as if they had an intellectual disability, (d) not knowing how to deal with them, and (e) lack of equipment and rules modifications, demonstrate that PE teachers struggle to support and accommodate students with disabilities in their class. While many physical education teacher education (PETE) programs say they promote inclusion, researchers have reported that most programs only require one APE course, and most of these courses only touch on practical solutions to including students with disabilities (McNamara et al., 2022). Future research should focus on effects of more practical-focused content and experiences in the one APE course to prepare future educators in PETE programs. Moreover, future research should investigate the impact of integrating inclusive education research into various courses within PETE programs. This exploration aims to tackle the challenges where students with disabilities perceive inadequate accommodation, and GPE teachers express a lack of readiness to effectively engage with students with disabilities (Haegle, 2019; Obrusnikova & Block, 2020). Additionally, future research should look at the effects of various types of professional development opportunities for current PE teachers specifically designed to help them learn how to use differentiated instruction to accommodate students with disabilities and make them feel more welcome in PE. Professional development opportunities present an ideal platform for disseminating research findings on the inclusion of students with disabilities in GPE. Ultimately, a comprehensive reassessment of physical education programs is imperative. Curricula heavily centered on sports primarily cater to boys and highly skilled students, despite the fact that these individuals can pursue competitive sports outside the realm of physical education. A crucial initial measure involves providing curricula that hold significance and applicability for all students, with a particular emphasis on those at a higher risk of physical inactivity, including students with disabilities, girls, those yet to develop sport skills, and overweight students.

Participants in this study represented a wide range of disabilities from across the United States, an equal number of athletes versus non-athletes, and a mix of genders. Although

there was a diverse representation of participants within the study, there were also some limitations. First, the sample size was relatively small with only ten participants. Some of the participants were older (late 20s to early 30s), requiring recalling their experiences, while other participants were currently in middle or high school with fresher recollections of their experiences. Finally, two of the participants had difficulty communicating, and with these two participants parents helped interpret what participants were saying and added their own point of view to their child's experiences.

Perspectives

There has been an abundance of research regarding inclusion in GPE, however, little has been done to change the environment in which students with disabilities participate (Blinde and McCallister, 1998; Goodwin and Watkinson, 2000). This study supports prior research in that students do not feel welcomed and are not accommodated for to fully participate in the same manner as their typically developing peers (Holland & Haegele, 2021; Obrusnikova & Block, 2020). Further, themes were developed with the use of the social justice model to reflect what practices can be changed in order to help students be successful in GPE. For instance, engaging students in decision-making processes enables them to communicate their requirements to teachers, fostering an environment that is conducive to their success. This study adds to existing research by providing perceptions of experiences of individuals with physical disabilities in GPE, and future steps that can be taken to meet students' *rights* (Block & Fines, 2021) by providing them with the tools to be successful. This study introduces the idea that even individuals who perceived adequate accommodation and found enjoyment in PE faced challenges within a sports-centric model. This underscores the importance of transitioning towards a curriculum that promotes physical activity engagement for all students, not exclusively catering to highly skilled and athletic individuals, who are the minority.

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Appendix A

Semi-structured interview questions

Demographic Questions

- What is your name?
- What is your age?
- What is your disability?
- Do (or did you) only go to general physical education, or did you also have adapted physical education?
- What is (was) the major focus of middle school PE-
- Playing games/sports such as basketball, soccer, volleyball
- Learn sports skills and play a little bit of game play
- Physical fitness
- How many students are (were) typically in your general PE class?
- one class of 20-30 students
- two classes combined with about 40-60 students
- Three classes combined with about 60-90 students

Sense of Belonging Question

- Please tell me about your overall experiences in general physical education, and how did you feel? (The following are probing questions to get more detail)
- Do you (or did you) feel that you are (were) welcomed by the general PE teacher? Explain why you feel (felt) this way?
- Do you (or did you) feel you are (were) welcomed by your peers? Explain why you feel (felt) this way?
- Do you (or did you) have friends in general PE who you regularly talk(ed) to, partner(ed) with, or are (was) part of a group? Give some examples.
- Do you (or did you) feel that you are (were) a true part of the class and belonged in this class? Please explain why you feel (felt) why you feel (felt) you belonged in this class.
- What did you like most about being in general PE?
- What did you dislike most about being in general PE?

Social Justice Questions Focusing on Experiences in General PE

- **Equality** - Do you (or did you) feel you were treated the same as other students in the class? For example,
- Does (or did) the PE teacher talk to you like he did with other students in the class? Can you give an example?
- Does (or did) you participate in all activities, or were there times the PE teacher had you sit out and not participate? Can you give an example?
- Are (were) you allowed to use the locker room to change?
- Are (were) you allowed to use the weight room (if applicable)?

Equity – *Do you (or did you) feel you were accommodated when needed so you could benefit from PE like your peers? For example,*

- Are (were) you given options in how to move (e.g., how to complete laps). Can you give an example?
- Are (were) you given options in terms of how far or how many of an activity to do (e.g., run fewer laps, do fewer push-ups)? Can you give an example?
- Are (were) you given options with equipment (e.g., different size balls, lower baskets for basketball)? Can you give an example?
- Are (were) rules changed when needed to help you be successful (e.g., no one could steal the ball from you in basketball, you could stand closer to the net when serving in volleyball)? Can you give an example?

Participation – *Do you (or did you) feel the PE teacher included you in decisions about your participation and accommodations in PE. For example,*

- Does (did) the PE teacher ask you if you wanted to use different equipment? If so, did he listen to your suggestions? Can you give an example?
- Does (did) the PE teacher ask you if you wanted special rules in games? If so, did he listen to your suggestions? Can you give an example?
- Does (did) the PE teacher ask you if you wanted to sit out or participate in certain activities? If so, did he listen to your suggestions? Can you give an example?

Justice – *Do you (or did you) Did you ever tell the PE teacher that you did not feel that you were being successful or accommodated.*

- Does (did) the PE teacher listen to you and make changes based on you asking for changes? Can you give an example?
- Is (was) the locker room accessible to your needs?
- Is (was) the weight room accessible to your needs?
- Are (were) the outside fields accessible to your needs?

Final Thoughts

- Are there any other comments you would like to share with us about your experiences in middle school physical education?
- Are there other questions we should have asked?



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