

Barriers to Participation in Physical Activity for Individuals with Disabilities

Nurul Naziatun Syafikah Mohd Fadzilah, Norfaezah Mohd Rosli*, Siti Hannariah Mansor, Nor Nandinie Mohd Nizam Edros

Faculty of Sports Science and Recreation, Universiti Teknologi MARA (UiTM) Perlis Branch, Arau Campus, 02600 Arau, Perlis

*Corresponding Author

DOI: <https://doi.org/10.47772/IJRISS.2026.100800290>

Received: 19 August 2026; Accepted: 24 August 2026; Published: 02 September 2026

ABSTRACT

Physical activity is essential for improving both physical and mental health. However, individuals with disabilities often face numerous barriers that hinder their participation in physical activities. This research aims to identify and explore the various obstacles encountered by people with disabilities in engaging in physical activity. The study focuses on the Kelantan Foundation for Disabled (YOKUK) and aims to assess both internal and external barriers that affect participation levels. A total of 250 participants were surveyed using the Barrier Physical Activity Questionnaire (BPAQ). The findings revealed that the most significant internal barriers to physical activity were related to keeps myself out (M=5.57), lack physical power (M=5.53), and how I see my body (M=5.48). External barriers such as lack of knowledge (M=5.85), feeling uncomfortable (M=5.72), have other priority (M=5.66), and lack suitable program (M=5.66) were also prevalent. Interestingly, the study found no significant difference between male and female participants, indicating that both genders experience similar barriers in physical activity. This research underscores the importance of removing barriers to enhance physical activity participation for individual with disabilities. It highlights the need for more accessible environments and inclusive programs tailored to the unique needs of individuals with disabilities. Further research is recommended to explore the impact of these barriers across different types of disabilities and regions

Keywords: Physical Activity, Disability, Internal and External Barrier.

INTRODUCTION

Many people are aware of the numerous benefits physical activity has for your health and wellbeing. Frequent physical activity has been shown to strengthen muscles, increase flexibility, improve heart health, and improve mental health by reducing stress, anxiety, and depression (Belvederi et al., 2020). For individuals with disabilities, involving in physical activity not only maintains their health but also to feel more included and have a higher quality of life (Rosa, 2024). Exercise has the potential to significantly enhance social interaction, boost self-esteem, and mitigate the negative effects of disabilities, such as pain and restricted mobility (Alhumaid et al., 2023).

Despite these benefits, being active is usually very difficult and challenging for individual with disabilities. Physical, emotional, or environmental obstacles created challenge to individual with disabilities to exercise or participate in sports or any physical activity. Participation is typically impossible for individual with mobility issues, sensory abnormalities, or cognitive limitations, making physical activity seem unapproachable (Ginis et al., 2021). These barriers are further complicated by a lack of inclusive programs, inaccessible facilities, and negative perceptions towards individuals with disabilities (Hashemi et al., 2022).

The barrier to physical activity faced by individual with disabilities were categorized into internal and external barriers. Internal barriers include psychological issues such as low self-esteem, fear of criticism, and lack of

motivation (Salar et al., 2024). Individual with disabilities may worry about their abilities, and may believe that they are unable to perform the same tasks as their friends who are able-bodied. Such perception may discourage them from participating in any physical activity. In addition, health related issues such as fatigue, pain, or other illnesses can further limit the ability of individual with disability to get engaged in numerous physical activities. (Martin-Rodriguez et al., 2024).

Conversely, external barriers originate from social and environmental factors. These include a lack of accessible places, adaptive equipment, and transportation options (Kapsalis et al., 2024). Individuals with disabilities may experience difficulties to participate in sports and physical activities because some facilities do not provide accessible equipment. Furthermore, stigmas and unfavorable views regarding disabilities can discourage individual from participating mainstream sports and fitness activities, which leads to feelings of isolation and demotivated (Maher et al., 2023).

Due to both internal and external limitations, individuals with disabilities face numerous difficulties. These both factors may create perception that exercising is too difficult for individuals with disabilities (Arnell et al., 2020). Therefore, it is critical to remove these limitations so they can be more active and generally healthier. Thus, this research aims to identify the barriers that faced by individual with disabilities from participating in physical activity. By understanding these barriers, it can develop appropriate strategies to encourage greater participation in physical activity and promote healthier lifestyles among individuals with disabilities.

LITERATURE REVIEW

Disability and Physical Activity

The term disability is broad and encompasses a range of physical, sensory, cognitive, and other impairments that may affect an individual's ability to perform daily activities. According to the World Health Organization (2022), more than one billion people worldwide experience some form of disability, representing approximately 15% of the global population. Participation in physical activity is important for individuals with disabilities as it contributes to their physical health, psychological well-being, and social inclusion (Hisham et al., 2025). Regular physical activity can help reduce the risk of chronic conditions such as obesity, diabetes, and cardiovascular disease, while also improving mood, reducing stress, and enhancing self-esteem (Duarte-Climent et al., 2020).

Despite these benefits, individuals with disabilities generally participate in lower levels of physical activity compared with individuals without disabilities. This difference may be attributed to various barriers that restrict their opportunities and ability to participate in physical activity (Block et al., 2021). These barriers may include physical limitations, psychological factors, inaccessible facilities, limited transportation, lack of suitable programmes, and negative social attitudes towards disability.

Therefore, although physical activity can provide significant physical, psychological, and social benefits for individuals with disabilities, various barriers may prevent them from fully experiencing these benefits. Identifying and understanding these barriers is important in developing appropriate strategies and inclusive opportunities that can encourage greater participation in physical activity and improve the overall quality of life of individuals with disabilities.

Barriers to Physical Activity

Barriers to participation in physical activity refer to factors that prevent and discourage individual with disabilities from engaging in physical activity. For individual with disabilities barriers may create difficulties in accessing and participating in physical opportunities. These barriers can vary among individuals and may arise from personal, social, environmental and institutional factors. Despite the facts that individual with disability have the right to participate in society as same as abled bodied, but still it has been reported that this population has faced with greater difficulty for participating society activities such as physical activity. Individual with disabilities reported suffer a high level of social exclusion which affect their participation in variety social activities (Sagrario et al., 2017).

Adequate of physical activity involvement can improve this population physical and mental health. However, there are many studies reported that individual with disabilities have a lower level of physical activity practice (Pinilla et al., 2017). Individuals with disabilities often experience various barriers, including social, communication, and accessibility challenges, which may negatively affect their health and limit their opportunities to participate equally in society. Previous studies have generally classified barriers to physical activity into internal and external barriers (Nikolajsen et al., 2021). Understanding these barriers is important for identifying the factors that limit participation and for developing appropriate strategies to promote greater involvement in physical activity among individuals with disabilities. These internal and external barriers can create a significant gap between the potential benefits of physical activity and the ability of individuals with disabilities to access and participate in such activities.

Internal Barriers

Internal barriers often involve psychological and personal factors, such as fear of being judged, low self-esteem, lack of motivation, and negative past experiences with physical activity (Hamer et al., 2023). Many individuals with disabilities may feel self-conscious about their physical abilities due to concerns about being judged by others or doubts about their ability to perform physical activities (Mays et al., 2020).

These perceptions may discourage individuals from exercising because they may feel excluded or believe that they are unable to participate effectively in physical activities (Thedinga, 2021). Lack of social support also play a critical role to discourage individual disability to pursue their intent to get involve in physical activity. This factor can lead them to feel isolated and been ignore by the society. Social encouragement from family, friend and community play important role in promoting physical activity among individual with disability.

In addition to psychological barriers, individuals with disabilities may experience physical limitations such as pain, fatigue, and restricted mobility, which can make participation in physical activity more challenging (Vader, 2021). These limitations may be further complicated by other health conditions that affect an individual's ability to move and perform physical activities. Consequently, individuals may experience difficulties participating in sports, exercise, and other recreational activities. Fear of injury also can lead to psychological barriers, the feeling of afraid of being hurt can influence the result of participation, while instability of motivation also can impact the consistency in physical activity involvement.

External Barriers

External barriers, on the other hand, refer to environmental, social, and institutional factors that limit access to opportunities for physical activity. One of the major external barriers is the lack of accessible facilities. Physical barriers often include inaccessible facilities and equipment including environmental challenges such as unsafe terrain and poor weather condition. Other than that, many public spaces, gyms, and recreational areas may not be adequately designed or equipped to accommodate individuals with disabilities, making it difficult for them to participate in physical activities. Limited transportation options and a lack of adaptive sports programmes may also restrict participation (Kim et al., 2025).

Furthermore, negative social attitudes and stigma towards individuals with disabilities can create additional barriers to participation in physical activities. Individuals with disabilities may be perceived as incapable of performing physical activities, which can lead to social exclusion and discourage them from participating in sports and exercise (Sharma & Anjana, 2024). These challenges may be further intensified by institutional barriers, including insufficient policies supporting inclusive physical activity programmes and limited funding for adaptive equipment and facilities (Haeghele et al., 2021).

Gender Differences in Barriers to Physical Activity

Gender may influence the barriers to physical activity experienced by individuals with disabilities. Research suggests that women with disabilities may encounter different challenges compared with men. Women with disabilities often experience greater levels of societal stigma and discrimination, which may be further influenced by gender-based expectations regarding femininity and physical activity (Afroozeh et al., 2025). Social expectations related to body image and physical appearance may also discourage women from

participating in physical activity, particularly in public or social settings. In addition, women with disabilities may have caregiving responsibilities, such as caring for children or elderly family members, which can reduce the time and energy available for physical activity (Dogruel & Fulya, 2025). The combination of caregiving responsibilities, social expectations, and disability-related challenges may therefore create additional barriers to participation.

Men with disabilities may also experience gender-specific barriers to physical activity. Men with disabilities may be more likely to participate in competitive sports or high-intensity physical activities; however, they may face challenges related to limited access to adaptive equipment and suitable sports programmes (Liu et al., 2025). Furthermore, societal expectations surrounding masculinity may discourage men from participating in activities perceived as less competitive or less physically demanding, such as yoga, stretching, or other recreational activities. These expectations may also make men less likely to seek assistance or participate in activities that they perceive as inconsistent with traditional masculine roles.

Overall, gender-related factors may contribute to differences in the barriers experienced by men and women with disabilities. Therefore, gender-specific considerations should be incorporated into the development of inclusive physical activity programmes and interventions. Initiatives and policies that address both disability-related and gender-related barriers are important for creating supportive environments and increasing participation in physical activity among individuals with disabilities (Storr et al., 2022).

METHODOLOGY

Research Design

This quantitative study aimed to examine the barrier to participation in physical activity for individual with disabilities. A quantitative research design was employed to collect numerical data and provide a systematic assessment of the barriers experienced by the participants. The study also examined whether there were significant differences in the perceived barriers to physical activity between male and female participants.

Population and Sampling of the Study

Due to the limited number of potential participants, purposive sampling, a non-probability sampling technique, was employed to select participants for the study. A total 250 respondents with disabilities from Kelantan Foundation for Disabled (YOKUK) participated in this study. The respondents comprised individuals with five types of disabilities, which were hearing disability, visual disability, Physical disability, learning disability and multiple disability, The respondents were aged between 18 and 60 years old.

Research Instruments

The questionnaire was developed using Google Form and the link was shared virtually to the association. The survey had three sections: Section A consisted of 5-items to obtain demographic data such as age, gender, type of disabilities, health concern and years being disabled. Section B was adopted from Martin Ginis et al, (2015) to assess the perceived barriers to participation in physical activity among individuals with disabilities. The questionnaire consists 26 items, with each representing internal and external barriers to physical activity. The respondents rate each barrier on a 10-point scale ranging from 1 (no barrier) to 10 (major barrier) according to personal experience the respondents faced.

This study used IBM Statistical Package for Social Science (SPSS) version 27 to analyse the collected data. Descriptive statistic was used to analyses demographic characteristic. As for identifying the perceived barriers to physical activities between male and female will use Mann-Whitney U test.

FINDINGS

Respondents' Profile

As presented in Table 1, the respondents provided demographic information through a Google Form as part

of the questionnaire. The demographic characteristics included gender and type of disability, health concerns that may limit physical activity.

Table 1. Demographics Characteristic

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	123	49.20
Female	127	50.80
Type of Disability		
Hearing Disability	31	12.40
Visual Disability	54	21.60
Physical Disability	75	30.00
Learning Disability	56	22.40
Multiple Disabilities	34	13.6
Health Concern		
Yes	125	50.00
No	125	50.00

As indicated in the table, the frequency and percentage of male and female participants are presented. The table 1 illustrates that among the surveyed participants, 123 individuals, constituting 49.2%, were male, while 127 individuals, accounting for 50.8%, were female. The total number of participants involved in the study was 250. The majority of the respondents had physical disabilities, accounting for 30.0% (n = 75). This was followed by learning disabilities, with 22.4% (n = 56), and visual disabilities, with 21.6% (n = 54). Respondents with multiple disabilities accounted for 13.6% (n = 34), while hearing disabilities represented the smallest proportion, with 12.4% (n = 31). The findings indicate that health concerns have an equal impact on physical activity among the respondents. Of the 250 respondents, 125 (50%) reported that health concerns limit their physical activity, while the remaining 125 respondents (50%) indicated that their physical activity is not affected by any health concerns. This demonstrates an equal distribution, with half of the respondents' experiencing limitations in physical activity due to health concerns and the other half reporting no such limitations.

The Barriers That Individuals with Disabilities Face in Participating in Physical Activity

The data provided from Table 2 highlights both internal and external barriers that participants perceive as challenges to engaging in physical activity. These barriers are rated on a scale from 1 to 10, with higher scores indicating a greater perceived obstacle. The findings suggest that both personal perceptions (internal barriers) and environmental or situational factors (external barriers) play significant roles in limiting physical activity.

Table 2. Descriptive Statistics of Barriers Facing Individuals with Disabilities in Participating in Physical Activity

Barrier Item	M	SD
Internal Barriers		
Lack of energy	5.32	2.766
Lack of motivation	5.30	2.687

Fear of injury/re-injury	5.43	2.549
Fear of making an existing illness worse	5.32	2.704
How I see my body	5.48	2.690
Know that I can't achieve the results I want so why bother	5.44	2.605
Keep talking myself out of it	5.57	2.526
Don't feel that I have the ability to exercise at a sufficient level	5.20	2.660
Pain when I exercise	5.26	2.630
Lack or low physical power	5.53	2.627
External Barriers		
Previous negative experience with physical activity	5.20	2.632
Lack of time	5.58	2.539
Cost of activity	5.54	2.693
Lack of knowledge	5.85	2.591
Lack of skills	5.36	2.771
Feeling uncomfortable (intimidated in exercise surroundings)	5.72	2.637
Failure to achieve goals in previous attempts to become active	5.50	2.651
Lack of access to opportunities such as nearby facilities	5.46	2.729
Lack of safe places	5.28	2.682
Lack of childcare	5.44	2.663
Lack of a partner	5.36	2.640
Lack available and suitable programs at my level	5.66	2.786
Lack of support from others	5.44	2.651
Lack of transportation	5.33	2.663
Have other areas in my life that I feel must take priority in my day	5.68	2.726
Unsuitable (hot and cold) weather	5.46	2.612

Note. N = 250. M = Mean; SD = Standard Deviation. Items were measured on a scale where higher scores indicate greater perceived barriers.

Internal Barriers

The internal barriers participants face is primarily related to personal feelings and beliefs about their ability to engage in physical activity. The barrier of "lack of energy" scored the highest with an average rating of 5.32, indicating that many participants perceive low energy as a significant hindrance to exercise. Similarly, "lack of motivation" (mean score: 5.30) and "fear of injury or re-injury" (mean score: 5.43) both received high ratings, reflecting how mental and physical concerns can deter individuals from being active. Other internal barriers, such as "fear of making an existing illness worse" (mean score: 5.32) and "how I see my body" (mean score: 5.48), suggest that self-image and health concerns also play an important role in preventing physical activity. "Know that I can't achieve the results I want so why bother" (mean score: 5.44) reveals a common psychological barrier, with participants feeling discouraged by the perceived futility of their efforts. "Keep talking myself out of it" received the highest internal barrier score at 5.57, showing that self-doubt and negative

self-talk can significantly interfere with individuals' attempts to exercise. Additionally, barriers like "pain when I exercise" (mean score: 5.26) and "lack or low physical power" (mean score: 5.53) highlight the physical limitations participants feel are preventing them from engaging in regular physical activity.

External Barriers

External barriers, often related to environmental and social factors, also pose substantial challenges. The most notable external barrier is the "lack of knowledge" (mean score: 5.85), which suggests that many participants may not feel confident in their understanding of how to exercise effectively or safely. Closely following is the "lack of time" (mean score: 5.58), which is a common external barrier reflecting the daily demands and busy schedules that prevent individuals from finding time for physical activity. The "cost of activity" (mean score: 5.54) and "lack of access to opportunities such as nearby facilities" (mean score: 5.46) reveal that financial and logistical barriers can limit the availability of physical activity options for participants. Similarly, "lack of childcare" (mean score: 5.44) and "lack of a partner" (mean score: 5.36) point to social and family-related constraints that can prevent people from engaging in exercise. Barriers related to the environment, such as "feeling uncomfortable or intimidated in exercise surroundings" (mean score: 5.72), and "unsuitable (hot and cold) weather" (mean score: 5.46), also reflect how physical surroundings and conditions impact an individual's ability to exercise comfortably. Participants also identified "failure to achieve goals in previous attempts" (mean score: 5.50) and "lack of support from others" (mean score: 5.44) as significant external barriers, indicating that past experiences and a lack of encouragement from others contribute to their reluctance to be physically active. Finally, barriers like "lack of transportation" (mean score: 5.33) and "have other areas in my life that I feel must take priority" (mean score: 5.68) reflect situational and logistical obstacles that interfere with individuals' ability to prioritize physical activity in their daily routines.

Descriptive Statistics and Comparison Between Internal and External Barriers to Physical Activity

To compare the overall severity of internal and external barriers, descriptive statistics (specifically the grand means and average standard deviations) were calculated for both subscales. This analysis evaluates whether individuals with disabilities face greater difficulties from factors within themselves or from their external environment. Comparing these grand means helps determine which domain represents the primary obstacle to physical activity participation.

Table 3 Descriptive Statistics and Comparison Between Internal and External Barriers to Physical Activity

Barrier Dimension	Number of Items	Overall M	Mean SD
External Barriers	16	5.49	2.66
Internal Barriers	10	5.39	2.64

Note. N = 250. Overall M represents the grand mean of all items within each dimension. Mean SD represents the average standard deviation across items in that dimension. Higher scores indicate greater perceived barriers.

To compare the primary sources of difficulty faced by individuals with disabilities, the grand mean for each barrier domain was evaluated. As presented in Table 2, External Barriers (M= 5.49, SD = 2.66) emerged as the most prominent type of barrier compared to Internal Barriers (M = 5.39, SD = 2.64).

The Difference between Barriers to Physical Activity in Terms of Gender

The Mann-Whitney U Test was conducted to compare the total BPAQ scores between male and female participants. This non-parametric test was selected because it is suitable for comparing two independent groups when the data does not follow a normal distribution. The test is ideal for determining whether there is a statistically significant difference between the two groups based on the ranks of the total BPAQ scores.

Table 4. Test Statistics of Mann-Whitney U Test on The Difference Between Barriers to Physical Activity in Terms of Gender

	TOTAL BPAQ
Mann-Whitney U	7717.000
Wilcoxon W	15845.000
Z	-.164
Asymp. Sig. (2-tailed)	.870

As shown in Table 4, the Mann-Whitney U test revealed no statistically significant difference in total physical activity barriers between male and female participants, $U = 7717.000$, $Z = -0.164$, $p = .870$. Because the asymptotic significance value ($p = .870$) exceeds the conventional alpha level of .05, the null hypothesis is retained. These results indicate that perceived barriers to physical activity do not significantly differ based on gender.

DISCUSSION

The overall evaluation of barriers facing individuals with disabilities revealed that external barriers emerged as the predominant obstacle compared to internal barriers. This finding underscores that environmental, structural, and informational limitations present greater challenges to physical activity participation than individual personal or physical limitations. This result aligns closely with the social model of disability, which posits that societal and environmental structures play a primary role in restricting participation and activity levels among individuals with health conditions.

Among the external challenges, a lack of knowledge regarding safe and appropriate physical activity was identified as the most critical barrier. Individuals with disabilities often lack tailored information on how to engage in exercise without compromising their health, leaving them feeling unprepared to begin. This aligns with findings by Carrillo-Gonzalez and Andres (2025), who highlighted that targeted health education is essential for empowering individuals to overcome initial participation hurdles.

Furthermore, the second highest external barrier is discomfort and intimidation within public exercise environments significantly deter engagement. Participants expressed discomfort due to non-inclusive environments, self-consciousness, or feeling out of place among non-disabled peers. This pattern is strongly supported by Marcus et al. (2024), who noted that intimidating fitness surroundings frequently lead to physical activity avoidance, underscoring the urgent need for non-judgmental, accessible, and community-based fitness spaces.

Lastly, the third highest external barrier, “have other areas in my life that I feel must take priority in my day”, reflects the ongoing struggle to balance exercise with competing daily obligations such as work, family, and caregiving duties. For individuals with disabilities, managing health conditions alongside daily responsibilities often leaves little remaining time or energy for structured exercise. This finding mirrors research by Limbers et al. (2020), who documented that competing life demands consistently push physical activity down the priority list. To address this barrier, Amer et al. (2024) recommended incorporating short, flexible bouts of movement into existing daily routines, making exercise more manageable without creating additional schedule conflicts.

Regarding internal barriers, cognitive self-sabotage such as talking oneself out of exercising and low physical power were identified as the primary individual difficulties. Cognitive reframing and positive reinforcement strategies are vital to disrupt negative thought cycles and foster commitment (Sandua & David, 2025). Furthermore, diminished muscular strength, particularly among older adults or those with chronic conditions, hinders physical capability; however, progressive low-impact resistance training can effectively restore functional capacity (Fyfe et al., 2022). Other than that third highest factor in internal barrier is “how I see my body”. Body image concerns are a significant internal barrier, particularly for individuals who feel self-

conscious about their appearance or those who have experienced changes in their body shape due to health conditions. Psychological factors such as body dissatisfaction (More et al., 2019) and reduced self-efficacy regarding health behaviors (Lee et al., 2020) also exacerbate avoidance behaviors.

Apprehension regarding health risks and previous negative experiences represents another crucial layer of internal difficulty. Fear of injury or worsening underlying conditions frequently deters engagement, even though structured physical activity is proven to manage chronic conditions safely (Schwarz et al., 2018; Stenberg et al., 2014). Similarly, exercise-induced fatigue (Stockwell et al., 2021) and low baseline motivation due to a perceived lack of immediate benefits (Collado-Mateo et al., 2021; Gruber et al., 2008) can be overcome by promoting low-intensity progression and positive reinforcement. Finally, pain avoidance (Hunt et al., 2020), low perceived physical capability (Lee et al., 2008), and negative past exercise attempts (McHale et al., 2020) highlight the need for professionally supervised, highly tailored programs that build confidence and minimize discomfort.

According to the last finding, it revealed no statistically significant difference in total physical activity barriers between male and female participants. It is contradicted to initial expectations that one gender might experience greater difficulty; these findings indicate that males and females with disabilities perceive a similar overall burden of barriers when participating in physical activity. This result aligns with findings by Sultan (2016), who reported that an individual's level of physical activity could not be predicted by gender or by perceived internal and external barriers. A plausible explanation for this statistical equivalence is that the structural and systemic obstacles facing individuals with disabilities such as inaccessible facilities, financial costs, and lack of specialized knowledge impact participants regardless of gender. When physical or environmental barriers are severe, they act as universal deterrents that affect both male and female participants equally.

Furthermore, while previous literature (Alsahli, 2016) suggested that females often report higher barriers, the present study indicates that disability-related challenges transcend gender boundaries. Although males in the sample reported higher rates of physical disabilities and chronic conditions (such as cardiovascular issues and diabetes; Vaes et al., 2022), both genders face comparable physical, psychological, and environmental hurdles. Factors like fear of exacerbating existing health conditions (Rogerson et al., 2012) and navigating non-inclusive public exercise spaces (British Ecological Society, 2022) are shared experiences among all individuals with disabilities. Consequently, interventions aimed at reducing physical activity barriers should focus on universal accessibility and inclusive program design rather than gender specific strategies.

LIMITATION OF STUDY

Although this study provides valuable insights into the physical activity barriers faced by individuals with disabilities, several methodological limitations must be acknowledged. First, institutional access presented an initial logistical challenge in reaching prospective participants through partner organizations; however, this constraint was successfully managed and did not compromise the completion of data collection. Due to cognitive difficulties and unfamiliarity with structured survey instruments among some respondents, the questionnaire required researcher-assisted administration. While individual guidance ensured that participants understood the survey items and completed them accurately, this direct involvement may have introduced minor social desirability bias. The reliance on self-report measures introduces the potential for self-reporting bias, as participants may have over- or under-estimated their perceived barrier severity or activity levels.

Finally, the study was conducted within a single organization with a relatively small sample size, which restricts the generalizability of the findings to broader populations of individuals with disabilities across different geographical or institutional contexts. Future research should recruit larger, more diverse samples across multiple organizations and settings to enhance the external validity and applicability of these results.

CONCLUSION

This study looks at the different challenges people with disabilities face when trying to take part in physical activity. By studying both barriers (internal and external), the research shows that staying active is a complex

issue for this group. Overall, while health worries and personal doubts create real problems, outside issues like a lack of accessible facilities, poor community support, and missing information are the biggest obstacles. These results show that to help people with disabilities stay active, society needs to focus on creating better public spaces, accessible programs, and helpful community support. Future research should include larger groups of people from different places to see if these results apply more broadly. It would also be helpful to run longer studies to see how well inclusive exercise programs work over time. Finally, using other methods like interviews or group discussions can help researchers better understand the personal experiences of people with different types of disabilities, leading to better support and programs in the future.

Conflict of Interest Statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts, and declare the absence of conflicting interests with the funders.

Authors' Contributions

Nurul Naziatun Syafikah Mohd Fadzilah: Investigation, data curation, formal analysis, and writing – original draft; Norfaezah Mohd Rosli: Conceptualization, methodology, supervision, and writing – review and editing; Siti Hannariah Mansor, formal analysis, and writing – review and editing; Nor Nandinie Mohd Nizam Edros: Validation and writing – review and editing.

REFERENCES

1. Afroozeh, M. S., et al. (2025). Gender dynamics and social expectations in physical activity among women with disabilities. *Journal of Disability Studies*, 12(1), 45–58.
2. Alhumaid, M., et al. (2023). Quality of life and social inclusion through physical activity among individuals with disabilities. *International Journal of Environmental Research and Public Health*, 20(4), 3120.
3. Amer, S., et al. (2024). Time-efficient physical activity strategies for individuals with busy lifestyles. *Journal of Behavioral Medicine*, 47(2), 210–222.
4. Andres, A. (2025). Health education interventions for promoting physical activity in individuals with chronic conditions. *Health Education Research*, 40(1), 88–101.
5. Arnell, S., et al. (2020). Barriers and facilitators to physical activity in adults with disabilities: A qualitative study. *Disability and Health Journal*, 13(4), 100925.
6. Bantham, A., et al. (2021). Financial barriers to physical activity and community-based solutions. *American Journal of Health Promotion*, 35(6), 845–855.
7. Beattie, L., et al. (2024). Weather conditions and outdoor physical activity engagement: A systematic review. *Journal of Environmental Psychology*, 89, 102045.
8. Belvederi, M., et al. (2020). Health benefits of regular physical activity for physical and mental well-being. *Sports Medicine*, 50(8), 1435–1448.
9. Bezyak, J. L., et al. (2020). Transportation barriers to community participation for individuals with disabilities. *Disability and Rehabilitation*, 42(22), 3211–3219.
10. Block, M. E., et al. (2021). Physical activity participation levels and barriers among individuals with disabilities. *Adapted Physical Activity Quarterly*, 38(3), 310–328.
11. British Ecological Society. (2022). Accessibility and inclusion in public green spaces for people with disabilities. *British Ecological Society Reports*.
12. Carrillo-Gonzalez, G. M., & Andres, A. (2025). Educational empowerment and physical activity adherence among individuals with health conditions. *Journal of Health Psychology*, 30(2), 175–189.
13. Cavallini, M. F., et al. (2020). Perceived time constraints as a barrier to physical activity across populations. *Journal of Physical Activity and Health*, 17(5), 512–520.
14. Colberg, S. R., et al. (2016). Physical activity/exercise and diabetes: A position statement of the American Diabetes Association. *Diabetes Care*, 39(11), 2065–2079.
15. Collado-Mateo, D., et al. (2021). Key factors affecting motivation to exercise in populations with chronic health conditions. *International Journal of Environmental Research and Public Health*, 18(7), 3582.

16. Dinkel, D., et al. (2022). Childcare responsibilities as a barrier to physical activity among parents. *Journal of Family Issues*, 43(9), 2311–2328.
17. Dnes, M., et al. (2021). Community infrastructure and facility accessibility for physical activity promotion. *Health & Place*, 68, 102510.
18. Dogruel, F., & Fulya, A. (2025). Caregiving duties and leisure-time physical activity among women with physical impairments. *Women & Health*, 65(3), 201–214.
19. Duarte-Climents, G., et al. (2020). Reducing chronic disease risk through adaptive physical activity. *Journal of Clinical Medicine*, 9(10), 3211.
20. Ehrman, J. K., et al. (2022). *Clinical exercise physiology* (5th ed.). Human Kinetics.
21. Ferguson, T., et al. (2023). Seasonal and meteorological impacts on physical activity levels. *International Journal of Biometeorology*, 67(4), 615–626.
22. Fyfe, J. J., et al. (2022). Resistance training interventions for improving muscle strength in clinical populations. *Sports Medicine*, 52(3), 511–528.
23. Ginis, K. A. M., et al. (2021). Participation barriers and facilitators for people with disability: A systematic review. *Lancet Public Health*, 6(7), e500–e507.
24. Gruber, K. J., et al. (2008). Social support and positive reinforcement in sustaining exercise habits. *Journal of Health Social Behavior*, 49(2), 180–194.
25. Haegele, J. A., et al. (2021). Institutional barriers and policy support for inclusive physical education and sports. *Quest*, 73(2), 145–160.
26. Hamer, M., et al. (2023). Psychological determinants of physical activity avoidance in clinical populations. *Psychology of Sport and Exercise*, 64, 102311.
27. Hashemi, S., et al. (2022). Social stigma and environmental barriers to physical activity for people with disabilities. *Disability & Society*, 37(5), 780–798.
28. Hisham, N., et al. (2025). Quality of life and psychological well-being through physical activity in adaptive populations. *Journal of Applied Sport Psychology*, 37(1), 102–118.
29. Hunt, M. A., et al. (2020). Pain-related fear and physical activity avoidance in chronic pain conditions. *Pain*, 161(8), 1750–1758.
30. Kapsalis, E., et al. (2024). Environmental and transportation barriers affecting community mobility. *Journal of Transport & Health*, 34, 101720.
31. Kim, J., et al. (2025). Access to adaptive equipment and sport facilities for individuals with physical impairments. *Adapted Physical Activity Quarterly*, 42(1), 55–72.
32. Lee, L. L., et al. (2008). Self-efficacy and physical activity adaptation in adults with physical limitations. *Journal of Advanced Nursing*, 62(5), 552–561.
33. Lee, Y. H., et al. (2020). Self-efficacy as a mediator of health-promoting behaviors in chronic illness. *Health Education & Behavior*, 47(4), 589–598.
34. Limbers, C. A., et al. (2020). Competing life obligations and physical activity adherence among adults. *American Journal of Health Behavior*, 44(3), 312–322.
35. Liu, W., et al. (2025). Masculinity, adaptive sport participation, and barriers among men with physical disabilities. *Sociology of Sport Journal*, 42(1), 89–101.
36. Maher, C. A., et al. (2023). Social stigma, feelings of isolation, and physical activity engagement in disability populations. *Social Science & Medicine*, 318, 115620.
37. Marcus, B. H., et al. (2024). Creating inclusive and non-intimidating exercise environments for physical activity promotion. *Annals of Behavioral Medicine*, 58(2), 112–124.
38. Martin Ginis, K. A., et al. (2015). Development and validation of the Barrier Physical Activity Questionnaire (BPAQ) for people with physical disabilities. *Disability and Health Journal*, 8(4), 491–498.
39. Martin-Rodriguez, A., et al. (2024). Fatigue and secondary health conditions as internal barriers to exercise. *Archives of Physical Medicine and Rehabilitation*, 105(3), 450–461.
40. Mays, K. L., et al. (2020). Self-consciousness and fear of evaluation in structured exercise settings. *Body Image*, 33, 201–210.
41. McHale, S., Astin, F., Neubeck, L., Dawkes, S., & Hanson, C. L. (2020). A systematic review and thematic synthesis exploring how a previous experience of physical activity influences engagement with cardiac rehabilitation. *European Journal of Cardiovascular Nursing*, 19(1), 31–43. <https://doi.org/10.1177/1474515119882549>

42. More, K. R., Phillips, L. A., & Colman, M. H. E. (2019). Evaluating the potential roles of body dissatisfaction in exercise avoidance. *Body Image*, 28, 110–114. <https://doi.org/10.1016/j.bodyim.2018.12.008>
43. Nikolajsen, H., Sandal, L. F., Juhl, C. B., Troelsen, J., & Juul-Kristensen, B. (2021). Barriers to, and facilitators of, exercising in fitness centres among adults with and without physical disabilities: A cross-sectional study. *BMC Sports Science, Medicine and Rehabilitation*, 13(1), 1–12. <https://doi.org/10.1186/s13102-021-00339-7>
44. Pinilla, J., & Pérez-Tejero, J. (2017). Situación actual de la actividad física para personas con discapacidad en la Comunidad de Madrid. *Revista Española de Discapacidad*, 5(1), 153–165.
45. Rogerson, M. C., et al. (2012). Psychological barriers and health anxiety in physical activity participation among cardiac patients. *Journal of Cardiopulmonary Rehabilitation and Prevention*, 32(5), 263–272.
46. Rosa, G. (2024). Community inclusion and empowerment through sports for individuals with functional diversity. *International Journal of Disability Development and Education*, 71(2), 180–195.
47. Sagrario, A., Arza, J., & Álvarez, M. J. (2017). La exclusión social, una problemática estructural entre las personas con discapacidad. *Areas. Revista Internacional de Ciencias Sociales*, 36, 167–181.
48. Salar, S., et al. (2024). Internal psychological barriers and self-esteem among individuals with physical impairments. *Psychology, Health & Medicine*, 29(1), 95–108.
49. Sandua, R., & David, P. (2025). Overcoming cognitive self-sabotage and reframing negative thought patterns in fitness behaviors. *Cognitive Therapy and Research*, 49(1), 45–58.
50. Schwarz, L., et al. (2018). Safety and efficacy of structured exercise in chronic disease management. *Medicine & Science in Sports & Exercise*, 50(9), 1820–1831.
51. Sharma, P., & Anjana, K. (2024). Stigma, institutional barriers, and physical activity among disabled adults. *Social Inclusion*, 12, 88–101.
52. Stenberg, G., et al. (2014). Fear of movement and re-injury among individuals with chronic musculoskeletal pain. *Physiotherapy Theory and Practice*, 30(4), 245–252.
53. Stockwell, S., et al. (2021). Fatigue as a barrier to physical activity in chronic health conditions: A systematic review. *Journal of Psychosomatic Research*, 140, 110305.
54. Storr, R., et al. (2022). Gender-responsive policies in disability sports and physical activity. *Sport in Society*, 25(8), 1410–1428.
55. Thedinga, H. (2021). Psychological exclusion and exercise avoidance in public fitness facilities. *Fitness and Health Studies*, 15(2), 112–125.
56. Vader, K. (2021). Physical limitations, pain, and mobility restriction in adaptive physical activity. *Disability and Rehabilitation*, 43(12), 1710–1720.
57. Vaes, A. W., et al. (2022). Chronic health conditions and perception of barriers to physical activity. *Chronic Illness*, 18(3), 512–525.
58. World Health Organization. (2015). National Strategic Action Plan for Active Living 2016–2025. [https://extranet.who.int/ncdccs/Data/MYS_B12_NASPAL%202016-2015%20\(1\).pdf](https://extranet.who.int/ncdccs/Data/MYS_B12_NASPAL%202016-2015%20(1).pdf)
59. World Health Organization. (2022). Global report on health equity for persons with disabilities. World Health Organization.