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1                   **Disability and the Gym: Experiences, Barriers and Facilitators of Gym Use for**  
2   **Individuals with Physical Disabilities**

3   **Abstract**

4   **Purpose:** Individuals with physical disabilities are among the most inactive population in  
5 society, arguably due to a lack of suitable environments to exercise. The gym is a space  
6 dedicated to improving physical fitness in a controlled environment with specialized  
7 equipment and qualified instructors. The feasibility of using this space to promote health to  
8 this population, however, has yet to be established. **Method:** Over an eighteen month period  
9 twenty one people with physical disabilities were interviewed regarding their experiences in  
10 the gym. Data was collected using semi-structured interviews, transcribed verbatim and  
11 subject to thematic analysis. **Results:** Four broad themes were identified (1) experiencing  
12 enhanced well-ness (2) perceived conflict between gym values and disability (3) influence of  
13 a previous gym identity and (4) experiences of psycho-emotional disablism. **Conclusions:**  
14 Participants were perceived to experience a variety of health benefits however they also  
15 experienced many barriers such as not aligning to the cultural norms of the gym, limited  
16 interpretations of health, oppressive messages from the built environment and negative  
17 relational interactions. While there is potential for the gym to be used a place to promote  
18 health, more must be done to foster an inclusive atmosphere in this space.

## Introduction

It is well documented that having a disability can negatively impact physical, psychological and social health. Physically, as well as pain and trauma from initial injury<sup>[1]</sup>, individuals can experience secondary health issues such as obesity and heart disease<sup>[2]</sup>, muscle atrophy<sup>[3]</sup> and muscle degeneration<sup>[4]</sup>. Psychologically, having a disability can cause many mental health issues<sup>[5]</sup> including depression and anxiety<sup>[6]</sup>. Socially, instances of isolation<sup>[7]</sup> and feelings of abandonment<sup>[8]</sup> are also prevalent in this population. Many of these co-morbid deficits however, can be managed through exercise<sup>[1]</sup>.

Physically, exercise can reduce pain<sup>[9]</sup>, distribute body fat more evenly alleviating pressure on vital organs<sup>[10]</sup> and enhance physical function<sup>[11]</sup>. There is also evidence to suggest exercise can assuage negative psychological effects of disability through enhanced perceptions of empowerment<sup>[12]</sup>, self-confidence, self-belief<sup>[13]</sup>, positive identity<sup>[14]</sup> and subjective and psychological well-being<sup>[15]</sup>. Social well-being can also improve through increased social status<sup>[16]</sup>, reduced isolation<sup>[17]</sup> and a reduction in discriminatory behaviors from able-bodied individuals<sup>[18]</sup>. Nevertheless, despite this array of knowledge, individuals with disabilities remain the most inactive population in society<sup>[19]</sup>.

Research has been conducted to identify barriers and facilitators of exercise in the hope of informing exercise promotion. Common barriers included an inaccessible built environment, unsuitable equipment<sup>[20]</sup> lack of assistance<sup>[21]</sup> and a poor attitude from others<sup>[22]</sup>. Facilitators included full access and suitable equipment<sup>[20]</sup>, knowledgeable staff<sup>[23]</sup> and aspirations of improved health and independence<sup>[24]</sup>. Despite this knowledge of barriers and facilitators, there is still a marked absence of individuals with disabilities in exercise domains. This could be attributed to research providing a broad overview of barriers and facilitators from different exercise domains rather than a more in-depth investigation. This broad

1 approach does provide researchers with some knowledge regarding exercise and disability  
2 but it does not allow for a comprehensive investigation into meanings of exercise,  
3 mechanisms of motivations to exercise or how the values of a particular culture may  
4 influence understandings of exercise. A more domain specific investigation may allow  
5 researchers to gain an enhanced understanding of exercise experiences.

6 An exercise domain which has received little attention, yet could be a suitable space  
7 to promote exercise for individuals with disabilities, is the gym. The gym is a space dedicated  
8 to the improvement of physical fitness in a controlled environment with specialized  
9 equipment, health and safety legislations and qualified instructors<sup>[25]</sup>. Culturally, the gym can  
10 also be seen as the domain of the young and physically fit<sup>[26]</sup>. It is argued that individuals  
11 who do not align to the youthful, muscular stereotype therefore, may feel intimidated and  
12 unwelcome in this space<sup>[27]</sup>. There is, however, no research contextualizing disability in the  
13 gym, thus barriers and facilitators are unknown or speculative with no empirical grounding.

14 The feasibility of the gym as a suitable space to exercise for individuals with  
15 disabilities has yet to be established. The purpose of this research, therefore, is to investigate  
16 the gym as a potential place to promote health for this population. In order to do this, two  
17 specific aims were set out; (i) to lay a foundation of knowledge about what it is like to have a  
18 disability in the gym and (ii) to identify perceived barriers and facilitators of exercise in this  
19 space. From these findings, recommendations for future practice and research could be  
20 proposed.

## 21 **Methods**

### 22 **Philosophical Assumptions**



1 Data was collected through interviews. The majority of interviews were conducted  
2 face to face, however some novel methods were also implemented; video conferencing and  
3 mobile methods.

#### 4 **Semi structured interviews.**

5 Semi-structured interviews allowed participants freedom to discuss stories and  
6 experiences most important to them but also gave researchers the opportunity to focus on  
7 areas of interest<sup>[28]</sup>. This method also gave participants and the first author the opportunity to  
8 elaborate and make meaning out of experience, and discuss unexpected phenomena which  
9 would not otherwise have been investigated<sup>[29]</sup>. An interview guide was crafted before  
10 interviews began. Questions included, ‘can you tell me about your experiences in the gym?  
11 What would you say are the main reasons for not going to the gym? What are the key reasons  
12 that helped you go to the gym?’ Where necessary, elaboration and clarification probes were  
13 used to elicit more information and ensure understanding. Probes included ‘could you tell me  
14 more about that (gym experience)?’ ‘Can you give me an example?’ ‘How did that make you  
15 feel?’ ‘Could you explain that further?’ ‘What do you mean by excluded?’ Interview length  
16 ranged from 30 to 200 minutes.

#### 17 **Video conferencing.**

18 Some participants requested that interviews be conducted using a method allowing  
19 them to stay at home due to difficulties travelling or low energy. It was in these instances that  
20 video conferencing was used. Video conferencing is an emerging method of data collection  
21 used increasingly by qualitative researchers<sup>[32]</sup>. This method allowed for longer, more in  
22 depth interviews as there was little effort committed to travel<sup>[33]</sup>. Second, as interviews were  
23 conducted in the privacy of the respective homes of parties involved, more sensitive issues

1 could be freely discussed<sup>[34]</sup>. Third, there was also a reduced perceived power differential  
2 between the researcher and participant as they had the ability to terminate interviews  
3 instantaneously if they wished<sup>[35]</sup>.

#### 4 **Mobile interviews.**

5 A mobile interview is a means of interviewing participants as they move through  
6 space(s)<sup>[36]</sup>. For this research, participants guided the first author through their day to day  
7 routine in the gym. Here, issues could be discussed as they were encountered. This also  
8 stimulated participants' memories of past experiences and provided contextually meaningful  
9 stories in physical spaces. This method also enhanced the interviewer's understanding and  
10 appreciation of participants stories by providing a multi-sensory experience of both seeing  
11 and hearing about their stories<sup>[29]</sup>.

#### 12 **Data Analysis**

13 This research follows an inductive, qualitative design whereby themes were  
14 constructed from the data in a bottom-up approach<sup>[37]</sup>. As this is an area with no previous  
15 research, thematic analysis was selected as it allowed for a comprehensive overview  
16 reflecting the experiences of individuals with disabilities in the gym. Thematic analysis is a  
17 method used to organize and describe collected data in rich detail by identifying, analyzing  
18 and interpreting common themes<sup>[29]</sup>. To ensure analysis was conducted rigorously, the six-  
19 phase guide of Braun and Clarke (2006)<sup>[38]</sup> was followed.

20 Primarily, the first author immersed herself in the data through the conducting and  
21 transcribing of interviews. Each participant was assigned a pseudonym to conceal their  
22 identity. In phase two, codes were applied to the data highlighting potential areas of interest,  
23 generating a list of initial ideas for each participant. A code is a segment of data which

1 appears interesting to the researcher and has the potential to be a theme. It is highlighted  
2 through a worded description or a different color to identify what is of interest and why. The  
3 third phase was searching for themes. After codes were applied throughout all transcripts a  
4 list was crafted for each participant. This list of codes was then sorted and collated into  
5 potential themes. Similar codes were placed in the same group and from this a theme name  
6 assigned. In the fourth stage, these themes were reviewed to determine if they were too  
7 diverse, not sufficiently supported, could combine with a similar group or divided into more  
8 specific themes. The fifth phase consisted of naming a theme in a way that explained its data  
9 content and also identified if subthemes existed within another theme. The final phase of this  
10 analysis was producing the report which will be presented in the following section. Once  
11 themes were identified, conceptual and theoretical understandings were applied to provide a  
12 more in-depth interpretation of gym experiences.

## 13 **Results**

14 The results and discussion section will be combined allowing data to be immediately  
15 conceptualized and theorized. Through thematic analysis, four key themes regarding gym  
16 experiences were identified; (i) experiencing enhanced wellness, (ii) perceived conflict  
17 between gym values and disability (iii) influence of a previous gym identity and (iv)  
18 experiences of psycho-emotional disablism.

### 19 **Experiencing Enhanced Wellness**

20 Participants perceived the gym as a place they could improve their overall wellness  
21 and quality of life. They discussed three specific ways this was done: physical improvement,  
22 enhanced social life and psychological respite.

#### 23 **Physical improvement**

1 All participants stated their motivation to initiate gym behavior was the belief that it  
2 would result in physical improvement. This related to improved function, reduced pain and  
3 improved fitness that enhanced independence:

4 *I knew from the start (of recovery) how important exercise was to improve...I started*  
5 *to build my level of fitness and my pain was better... After that I thought 'ok fair*  
6 *enough, this (exercise) is the way forward' and that was the key point where I went*  
7 *back to the gym...I just rebadged gym fitness because that's what kept me*  
8 *strong...when I do go to the gym I can do my shopping on my own really easily and*  
9 *feel less vulnerable...I can build up to a level of fitness and performance that my GP*  
10 *couldn't give me an assurance on so that gave me a physical baseline of real, real*  
11 *positiveness for the future. (Julie, SCI, 60).*

12 The desire to physically improve has been highlighted in previous research<sup>[21]</sup>. This  
13 improvement, however, relates to reducing pain and increasing independence, function and  
14 overall quality of life rather than improvement of an aesthetic nature. To interpret this finding  
15 further, specifically why participants hold the belief that exercise has healing benefits,  
16 narrative theory can be drawn upon.

17 Narrative is a way of understanding human lives within a social world through  
18 investigating which stories an individual draws upon to make sense of their experience<sup>[39]</sup>. By  
19 analyzing which narratives an individual chooses, researchers can gain a greater understanding  
20 of the lived experience of that individual<sup>[40]</sup>. Put into context, participants' belief that exercise  
21 would improve physical health could relate to a narrative of 'exercise is medicine' which has  
22 the plot of "I experienced an ailment, then I engaged in exercise, then the ailment is eased or  
23 eradicated"<sup>[41]</sup>. All participants seemed to be aware of this narrative. This could be attributed  
24 to individuals' experiences in hospital and rehabilitation centers. Here, the exercise is

1 medicine narrative is told continually by doctors, nurses and specialists to encouraged  
2 patients to partake in active rehabilitation to regain as much physical function as possible<sup>[24]</sup>.

### 3 **Enhanced social life**

4 Participants saw the gym as a social space where they could make new friends and  
5 interact with people; “it’s (the gym) social because people do speak to you and say hello and  
6 you just feel part of something rather than being secluded again” (Susan, SCI, 34). Many of  
7 these social experiences in the gym then progressed to outside the gym walls:

8 *We’ll (friends made in the gym) meet up and somebody will say “I’ll see you next*  
9 *week then?” and I’ll then think ‘ok.’ Then I’ll think (next gym trip) ‘oh so and so’s*  
10 *going to be there and so and so’s going to be there.’ It sort of makes me think ‘I don’t*  
11 *want to let them down so I’ll go.’ It builds up this peer support...It’s that rapport I*  
12 *look forward to and it’s just very nice to get other people to recognize that you can*  
13 *actually make a really nice social life, and you feel great afterward and you can*  
14 *actually help post recovery. I’ve made a collection of friends and even after the*  
15 *healthy eating we all go out for a curry! (Tara, SCI, 32)*

16 The importance of this finding must be contextualized within the wider social  
17 experiences of participants. This perception of belonging and acceptance is very different  
18 from general social experiences where participants discussed feelings of being ostracized  
19 through negative interactions; “I didn’t go out for months because I could not stand the stares  
20 and being continually ignored...you just feel completely worthless and abandoned” (Arthur,  
21 transverse myelitis, 32). Society as a whole may see disability as a personal tragedy<sup>[42]</sup>  
22 resulting in individuals with disabilities feeling isolated, lacking self-worth and othered<sup>[43]</sup>.  
23 Within the gym, however, positive social interactions with others could counter this negative

1 experience through fostering an inclusive environment resulting in individuals feeling they  
2 belong to a community and enhancing perceptions of social acceptance and self-worth.

### 3 **Psychological respite**

4 Participants also discussed how exercising in the gym gave them a sense of  
5 psychological respite from the stresses associated with having a disability. These stresses  
6 included the presence of a disability itself, medications and claiming benefits:

7 *It's (working in the gym) freeing I guess, peaceful... You just forget everything that's*  
8 *wrong, forget the benefits stress, forget all the medication you're on, forget sometimes*  
9 *that you have a disability because you are doing something. I can't tell you the*  
10 *psychological boost it gives, it's that hour, hour and a half break from the stresses of*  
11 *life that gives you new energy to face the challenges ahead. (Carl, chronic head and*  
12 *shoulder injuries, 56)*

13 The finding of respite through exercise has also been discussed by Caddick, Smith  
14 and Phoenix (2015)<sup>[44]</sup> who found retired veterans suffering from post-traumatic stress  
15 disorder fully embodied a sense of relief from their suffering through surfing. In this study, a  
16 similar conclusion can be made. Having a disability is more than a physical impairment and  
17 there are many personal, social and legal anxieties which may be experienced contributing to  
18 poor mental health<sup>[5]</sup>. Exercising in the gym however, provided a sense of release from these  
19 stresses and, for some, left them feeling energized to tackle awaiting challenges.

### 20 **Perceived Conflict Between Gym Values and Disability**

21 The previous theme highlighted the many benefits individuals experienced through  
22 gym use, however for many the gym environment itself was a barrier. Not aligning to cultural  
23 values of the gym and limited interpretations of health inhibited gym use, however these

1 barriers were tempered by the presence of other clients with disabilities who acted as  
2 aspirational figures.

### 3 **Not aligning to cultural gym values**

4 Participants discussed how a particular physical image (strong, muscular and  
5 aesthetically pleasing) was valued in the gym. Not looking like this image resulted in feeling  
6 othered:

7 *Not all gyms are the same but...in most I've been to if you're not what I call a*  
8 *meathead then you just do not belong and you are not wanted there and you are made*  
9 *to feel not wanted...if you don't have an excessive amount of testosterone, are the*  
10 *perfect physical specimen or grunting your way lifting weights then you do not*  
11 *belong... We're (individuals with disabilities) not necessarily the image they (gyms)*  
12 *want to portray. I think that's the problem. Image is an old hat but that's still what*  
13 *they want to sell themselves on. (Susan, SCI, 35)*

14 The valuing of particular traits in the gym over others can be interpreted through the  
15 concept of ableism. Ableism is “a network of beliefs, processes and practices that produces a  
16 particular kind of self and body (the corporeal standard) that is projected as the perfect,  
17 species-typical and therefore essential and fully human. Disability is cast as a diminished  
18 state of being human” (p.42)<sup>[45]</sup>. Individuals are seen as less worthy if they do not conform to  
19 strict corporeal standards and values set by an institution<sup>[46]</sup>. In the gym, the rigidity of values  
20 such as musculature and physical aesthetic can become culturally embedded resulting in an  
21 unwavering understanding of what constitutes health. Individuals who perceive health a  
22 different way e.g. physical function may feel invalidated and marginalized as an  
23 understanding of their needs is left wanting.

## 1           **Limited interpretations of health**

2           Linked to the previous sub theme, participants noted the values of the gym were  
3 embedded within the gym's sociocultural fabric and gave very few alternative interpretations  
4 of health. For example, slogans on gym walls such as 'no pain, no gain' promoted the  
5 experience of pain as a positive, necessary step to achieving health. These discourses left  
6 little room for the possibility of an alternate experience resulting in perceptions of  
7 invalidation when participants tried to share their stories:

8           *The little boys just tell you to pump till it hurts. For someone who's got fibromyalgia*  
9           *or anyone over 40, any age, if your body is telling you something is hurting you,*  
10           *please stop!...when I said to him "my knee hurts", he said "do another 20" '. And I*  
11           *looked at him and I wanted to call him the b word so I did the other 20 and it killed*  
12           *me. I got off the leg press, I got off it, before I knew it I was flat on my bum looking at*  
13           *the ceiling. My knee gave way. Know what he said to me? "When you've got up, on*  
14           *the running machine." (Brenda, fibromyalgia and ME, 57)*

15           Frank (2006)<sup>[47]</sup> stated there is often incongruity between what individuals with a  
16 disability are experiencing and the institutionally legitimated stories that are told about their  
17 experience. Participants discussed a similar phenomenon when trying to share their stories of  
18 exercise which went against the dominant discourses in the gym. The pain experienced by  
19 individuals with disabilities was seen as a warning that they were causing harm to their body;  
20 however instructors were perceived to understand this pain to be a positive, necessary step to  
21 earn the body admired in gym culture<sup>[48]</sup>. These conflicting understandings of exercise  
22 illustrate there is a limited availability of interpretations of health for those who do not fit the  
23 typical model presented in dominant discourses<sup>[49]</sup>.

## 24           **Clients with a disability as aspirational role models**

1           While the previous two subthemes discussed issues regarding a lack of alternative  
2 understandings of health in the gym, the presence of other individuals with disabilities in this  
3 space provided aspirational figures they could relate to:

4           *I did come across a guy with a disability using the gym...and that reinforced for me*  
5           *that it (going to the gym) was ok regardless because I enjoyed it. I think seeing*  
6           *someone else with a disability made me think 'yeah he's doing it and so I can do it' ...I*  
7           *talked to him a lot and we developed a bond and friendship. It was because of seeing*  
8           *someone else who was working with an impairment in the gym and he encouraged me*  
9           *saying "if it's something you want to do, don't just discard it and think you can't do it.*  
10           *Pursue it." So that's what I did. (Jerzy, cerebral palsy, 30)*

11           Frank (2006)<sup>[47]</sup> stated people need to “hear their own voices and, by knowing others’  
12 stories, become empowered to tell their own” (p. 422). In other words, individuals with  
13 disabilities may feel more supported and accepted in the gym if there is someone they can  
14 relate to. For many, this came in the shape of another individual with a disability who acted  
15 as an aspirational figure strengthening the belief that an individual with a disability can  
16 exercise in the gym and do so on their own terms. The presence of an individual with a  
17 disability in the gym may provide additional resources and interpretations of health which  
18 others can draw upon, reduce perceptions of otherness and promote the gym as an inclusive  
19 space to exercise.

## 20 **Influences of A Previous Gym User Identity**

21           Many participants had been a gym user before acquiring their disabilities. The  
22 influence of this previous identity, however, was markedly different for women and men. For  
23 women, this acted as a facilitator to reinitiate gym use as they sought to reclaim a sense of  
24 self. For men, they negatively compared their current body to their past body.

## 1           **Reclaiming a sense of self**

2           A previous identity as a gym user was a key reason for initiating gym use for women.  
3 They saw reengaging in a particular activity they had done before their injury as a way they  
4 could reclaim a sense of self:

5           *I would get into the bathroom and I would just cry my heart out. I would sob and sob*  
6           *and sob and just think I can't kill myself. I wanted to...I was in hospital and I was like,*  
7           *if there's one thing I can get back, if there's one thing from my previous life I can get*  
8           *back again, I can get back to exercise...I thought this is something I can get back to*  
9           *and I love and I know that I love. I was at that point of grieving. I was grieving my*  
10          *lost identity and exercise was a huge part of that. (Kathleen, SCI, 32)*

11          Acquiring a disability can result in a fracturing of identity leaving the individual  
12 lacking a sense of self<sup>[50]</sup>. Giddens (2001)<sup>[51]</sup> stated that if an identity can be sustained  
13 through life, this enables individuals to maintain a sense of self. Put in the context of this  
14 study, if an individual is able to sustain an identity of a gym user before and after injury their  
15 sense of self can be reclaimed after a potential loss of identity. The women in this study  
16 identified with this as they felt exercising in the gym was something they could 'get back'  
17 from their previous life. Arguably, this continuity provided a sense of 'normality' despite  
18 having a 'new' identity as an individual with a disability. Indeed, Shakespeare (1996)<sup>[52]</sup>  
19 noted that newly disabled people often try to align to their old self in order to feel as  
20 'ordinary' as possibly. Watson (2002)<sup>[53]</sup> concurred stating that some people with a disability  
21 redefine their identity not by including bodily traits but through a construction of what, to  
22 them, normalcy is. In this case, it was normal to be active and go to the gym.

## 23          **Negative comparisons with a past identity**

1           While a previous identity as a gym user enabled women to reclaim a sense of self, for  
2 men this past identity acted as a barrier to their engagement in the gym as they felt ashamed  
3 or embarrassed at the body they now possessed compared to the body they had before injury:

4           *I just felt intimidated going into the gym because I was big and now over the years*  
5           *I've put on weight and I feel ashamed or embarrassed because of who I am now. I*  
6           *used to run for miles with a backpack on! So that put me off...you look at it totally the*  
7           *wrong angle. You think they're (other gym users) looking at you or judging you but*  
8           *they're not. You know you have an issue or know you have a problem or you've*  
9           *suffered from putting weight on because of your problem.* (Frank, chronic leg injury,  
10           38)

11           While previous research investigating the intersection of gender and disability has  
12 concluded women with a disability experienced a 'double handicap'<sup>[54]</sup> as men were given the  
13 opportunity to embody masculine practices (such as lifting weights)<sup>[55]</sup>, in this study the  
14 opposite was the case; the intersection of *masculinity* and disability was the 'double handicap.'  
15 Men were continually comparing their past body to their current disabled body. This  
16 comparison lead to feelings of embarrassment, disappointment and shame as their body no  
17 longer looked or functioned in a way they felt it should, an essence of what Frank (1996)<sup>[56]</sup>  
18 described as a 'dys-appeared' body. This dys-appeared body may have impacted the men in  
19 this study rather than the women as, before injury, they had fully embodied the masculine,  
20 muscular values of the gym. As these values became embodied, returning to the gym after  
21 injury was problematic as they were no longer able to fully identify and achieve what they  
22 believed a man in the gym should be.

### 23 **Experiences of Psycho-emotional Disablism**

1 Participants discussed a key barrier to gym use was through experiencing oppressive  
2 practices from both the physical structure of the gym and interactions with others in the gym.

### 3 **Disabling messages from physical environment**

4 Participants discussed the difficulties they had in managing the structural barriers of  
5 the gym. This included a lack of access into and within the building, and unsuitable,  
6 inaccessible equipment; “if you can’t provide physical access it’s pretty pointless going  
7 further than that... there’s a lot of machines I can’t use because I can’t get my chair in or I  
8 just can’t physically do it” (Aadi, polio, 33). Although previous literature has highlighted  
9 access as a key barrier to exercise<sup>[20]</sup> these studies have not delved deeper into how these  
10 experiences can compound psycho-emotional well-being, a defining experience of  
11 participants:

12 *At the end of the day, if they're (gyms) meeting legal requirements they're doing more*  
13 *than enough and they're not gonna get sued and some care so little that they're*  
14 *willing to take the chance and still not make it accessible. You will get that in a lot of*  
15 *places, a hell of a lot. Even though you have the law that states they have to they still*  
16 *don't... The access only relates to the frontage, getting in and out. How is that*  
17 *inclusive if you don't provide a toilet for someone? How can you feel anything but*  
18 *you're not wanted? Your money isn't as valuable as the next persons. (Kathleen, SCI,*  
19 *35).*

20 By drawing on disability theory, the experiences described above can be interpreted  
21 using the social relational model proposed by Thomas (1999)<sup>[57]</sup> and the concept of disablism.  
22 Disablism is “a form of social oppression involving the social imposition of restrictions of  
23 activity on people with impairments and the socially engendered undermining of their  
24 psycho-emotional well-being” (p.73). Disablism arises in two forms; indirect psycho-

1 emotional disablism relating to the impact of exclusory messages through encounters with  
2 structural barriers and direct psycho-emotional disablism pertaining to negative interactions  
3 an individual with a disability has with other people or themselves<sup>[58]</sup>.

4         The experience of structural disablism described above is an example of indirect  
5 psycho-emotional disablism. This experience can evoke emotional responses such as anger,  
6 perception of a lack of self-worth and hurt at being excluded<sup>[43]</sup>. These physical barriers act as  
7 ‘landscapes of exclusion’ sending individuals with disabilities the message “you are out of  
8 place, you are different”<sup>[59]</sup> which can have a detrimental effect on psycho-emotional well-  
9 being as individuals with disabilities feel more othered, isolated, and lacking self-worth<sup>[60]</sup>.  
10 Morris (2014)<sup>[61]</sup> concurred stating the experience of being excluded from physical  
11 environments reminds individuals with disability that they are different and can leave them  
12 with a feeling of not belonging in the places where non-disabled people spend their lives.

### 13         **Disabling interactions within the gym environment**

14         Participants also discussed experiences of direct psycho-emotional disablism in their  
15 interactions with instructors in the gym which made them feel unwelcome:

16         *I went in as a guide to find out what the prices were and have a look round to see who*  
17         *was there. I can actually remember...the look on the face of the receptionist like*  
18         *‘Christ!’ and one of the membership guys came round...I didn't go to the gym that day,*  
19         *I went back the next say at the crack of dawn 6 o'clock...you can kind of, in the gym*  
20         *you can feel the eyes on the back of your head; ‘what's fatty doing in the gym?’ (Terry,*  
21         *visual impairment, 35)*

22         Direct psycho-emotional disablism occurs at the point a stranger reacts to the person  
23 with a disability and in the words and deeds that exclude or invalidate<sup>[58]</sup>. The experience of

1 being stared at by others is an action which invalidates an individual based on public  
2 perceptions of normality, beauty and perfection<sup>[62]</sup>. Hargreaves (2000)<sup>[63]</sup> developed this  
3 further stating people with disabilities “are looked upon, identified, judged and represented  
4 primarily through their bodies, which are perceived in popular consciousness to be imperfect,  
5 incomplete and inadequate” (p.185). Effectively, disabled bodies in the gym go completely  
6 against the aesthetic values the gym aligns to. A failure to match the culturally ‘normal’ body  
7 can result in perceptions of being stigmatized and judged<sup>[64]</sup>. This finding illustrates how and  
8 why an individual with a disability may perceive the gym as unsuitable for them to exercise,  
9 despite the specialized equipment and knowledgeable instructors.

10

## **Discussion**

11 This is the first study to contextualize disability in the gym and has provided  
12 important insights into the experiences of individuals in this space. From these findings,  
13 multiple recommendations for future practice can be made to improve the exercise experience  
14 for this population. First, although a lack of access is not an original finding, the psycho-  
15 emotional impact of this social barrier has not been given due attention. Practitioners and  
16 activists must be cognizant of the psycho-emotional distress which may be experienced in  
17 conjunction with structural barriers. It is more than a mere inability to enter an establishment  
18 or use certain pieces of equipment; these barriers are messengers of oppression which tell  
19 individuals with disabilities that they are not welcome or wanted in this space. This can be  
20 detrimental to the recipients’ self-esteem, sense of self-worth and creates a more cemented  
21 perception that an individual does not ‘fit in’. Moreover, those in a position of responsibility  
22 in reinforcing access requirements (e.g. managers) must be advocates of full access to leisure  
23 facilities and committed to implementing these adaptations.

1           Second, instructors were perceived as paramount to creating a positive gym  
2 experience. These people are the face of the gym, holders of knowledge and represent the  
3 gym at the experiential level. Issues which were discussed regarding poor experiences with  
4 instructors were a lack of understanding of disability and an invalidation of the corporeal  
5 experience of the clients. Instructors therefore need a greater understanding and appreciation  
6 of disability and what it is like being disabled in a gym. This can be done through education,  
7 specifically through the level 3 disability and the gym qualification. This qualification  
8 teaches gym instructors about disability and how to treat and adapt exercise to suit various  
9 needs. With this knowledge and experience, instructors may feel more comfortable and  
10 confident working with someone with a disability.

11           Third, relating to the above recommendation, participants felt they were other in the  
12 gym as they did not align to cultural values or dominant institutional discourses. To address  
13 this, having someone able to bridge the gap between disability and the gym may be a viable  
14 means to enhance understandings of disability and temper a potentially intimidating cultural  
15 image. Indeed, the presence of individuals with a disability in the gym was perceived to make  
16 the gym environment more accessible by providing aspirational figures who were relatable.  
17 Future research should investigate whether having a fitness instructor who has a disability  
18 her/himself could a) reduce the perception of this population feeling othered in the gym b) act  
19 as an aspirational role model for individuals and c) be a support for able bodied instructors  
20 who feel apprehensive working with clients with a disability.

21           Fourth, having a previous identity as a gym goer had very different ramifications for  
22 men and women. Men found it difficult to accept a new body and identity as a gym user with  
23 a disability due to comparisons with a past self while women perceived a rebuilding of their  
24 sense of self. Taking this finding forward, women who are having difficulty processing their  
25 new identity could be encouraged by medical personnel to reclaim a part of themselves by

1 exercising, going to the gym or participating in an activity they enjoyed before their injury.  
2 For men, as they negatively contrasted to their past self, a group exercise program with other  
3 men with disabilities, and potentially run by an instructor with a disability, may create a  
4 system of support and encourage them to positively identify with a role model who has had a  
5 similar experience. This theme may have arisen due to the majority of participants having an  
6 acquired disability so they had gym experience as an able bodied individual.

7 More research is required to better understand the lived experience of individuals with  
8 disabilities in the gym and lay a solid foundation of knowledge for future research and  
9 interventions to build on. The findings in this study may have been influenced by the number  
10 of individuals with acquired disabilities; future research should investigate the experiences of  
11 individuals with a congenital disability to see if their experiences are markedly different from  
12 those who have acquired their disabilities. Research must also be conducted to highlight ways  
13 exercising in the gym can be improved. For example, applying narrative theory such as  
14 Frank's (2006)<sup>[47]</sup> ideas of health consciousness or McAdams (2006)<sup>[65]</sup> cultural menu may  
15 provide important insights into the narrative environment of the gym and the narratives (or  
16 lack of narratives) available for this population to draw upon. Alternatively, applying social  
17 comparison theory (SCT) can be used to emphasize the importance of the instructor/ client  
18 relationship and the impact this has on sustaining exercise behavior. Also, while the findings  
19 of this study are contextualized in the gym, future research should consider how the results  
20 and experiences of participants in this study could be applied in a broader view concerning  
21 participation of people with disabilities in society, particularly with regards to psycho-  
22 emotional disablism and aspirational figures.

23 While there are benefits to exercising in the gym there is an issue regarding gym  
24 culture and understandings of health. If the gym can provide a more inclusive atmosphere

1 with alternative interpretations of health made available, the gym can be promoted as a  
2 suitable space for individuals to engage in health enhancing behaviors.

3 **Declaration of Interest**

4 The authors report no declarations of interest.

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