Title: Understanding the Experiences of COVID-19 Spatial and Social Restrictions Among Young People with Physical Disabilities

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Abstract

Background

The COVID-19 pandemic has caused significant social and spatial restrictions. While everyone has felt the impacts of this health crisis, limited evidence is available about the experiences of young individuals with physical disabilities; this group faces many challenges due to the pandemic restrictions, including increased vulnerability, inaccessibility of essential services and increased spatial inequalities within the environment.

Aims

This study aimed to gain an insight into the experiences of spatial and social restrictions for young people with disabilities, with a look at understanding the potential impact on wellbeing.

Methods and Procedures

In this qualitative study, semi-structured online interviews were completed with a convenience sample of eight people aged between 18-25, with one or more physical disabilities. The interview investigated day-to-day spatial and social activities during the lockdown. A short questionnaire collected demographic and health information. Data was analysed using thematic analysis.

Results

The participants' responses generated three core themes: 1) Adapting to a new way of life; 2) Dealing with a sense of uncertainty and isolation; 3) Widening the gap of inequality. Within these themes, participants' narratives centred around the negative impact of restrictions on socialisation, the emotional toll of virus-related fear and stress, and the increased inequality of guidance and inaccessibility of amenities; participants also described initiating new routines as a coping strategy and the changes to work/college life.

Conclusions and Implications

These findings highlight how the pandemic has exacerbated spatial and social inequalities for young people with disabilities, and has had a resulting impact on their overall well-being. Therefore, this points at the importance of promoting equal access and personhood among vulnerable groups.

Keywords: Young people with disabilities; Ecological model; COVID-19; spatial restrictions; social impact.

Introduction

The coronavirus (COVID-19) pandemic has dominated everyday life across all corners of the globe, creating enormous disruption to daily activities, social interactions and employment (Umucu & Lee, 2020). COVID-19 has left no one unscathed, placing intense financial and health burdens on many areas of society (Kennelly et al., 2020).

In Ireland, like many other countries, widespread restrictions and public health guidelines have been imposed which have greatly influenced daily life. Stay at home guidelines, physical distancing measures and restrictions on travel between localities have also become part of normal life for Irish people, while many routine check-ups and medical treatments have also been postponed or cancelled (Kennelly et al., 2020). Mental health organisations have also experienced considerable increases in the numbers of people requesting their services, since the pandemic began (Kennelly et al., 2020). These insights convey just how widespread the health and social impact of COVID-19 have been for individuals in Ireland.

While COVID-19 has had an impact on the lives of everyone in some form, individuals living with disabilities have felt the impact of these disruptions even more intensely (Umucu & Lee, 2020).

There has been much research published surrounding the implications of COVID-19 on vulnerable groups, including individuals with disabilities. The World Health Organisation (WHO) published information, identifying the possible barriers faced by those with disabilities, in combatting COVID-19, such as barriers to public health information, difficulty physical distancing or the inaccessibility of hand sanitisation measures (World Health Organisation, 2020). The importance of key stakeholders' actions in eliminating such barriers and threats for those with disabilities were outlined, placing responsibility on governments and policy makers to ensure guidelines imposed are equal to all (World Health Organisation, 2020).

These factors, however, identify the increased vulnerability of those with disabilities, to the virus itself, as well as the impacts of restrictions imposed (Thelwall & Levitt, 2020). COVID-19 has also reduced access to services those with disabilities would normally rely on including medical treatments or access to speech and language and occupational therapists (Lund, Forber-Pratt, Wilson and Mona, 2020). Seventy-five percent of over thirteen-thousand adults with disabilities in the United States stated that COVID-19, and the resulting

restrictions, had impacted on their healthcare (Lund et al., 2020). Lund et al. (2020) reported the closure of outpatient clinics and rehabilitation services, as well as reduced access to carers due to risks of contracting the virus, to all be resulting factors of the pandemic which affect those living with disabilities. Within an Irish context, there are several important implications that need to be considered also. The National Disability Authority (NDA) has outlined the importance of providing appropriate care and supports to those with disabilities living independently, while also ensuring that these individuals are not put at any risk. Individuals with disabilities in Ireland are also more greatly impacted by interruptions to health services, created by COVID-19. Medical appointments have been largely postponed or cancelled, with many frontline disability workers also being redeployed in the fight against the virus (NDA, 2020). These disruptions have had immense impacts on those living with disabilities, and highlight the need for these issues to be urgently addressed.

COVID-19 restrictions have also impacted the psychological wellbeing of individuals with disabilities (Umucu & Lee, 2020). Fear of being highly vulnerable to the virus, impacts on health and social supports and concerns around being of lower priority for medical assistance for COVID-19, than others, are some of the reasons for increased stress and anxiety experienced by those with disabilities (Lund et al. 2020; Thelwall & Levitt 2020).

Importantly, the pandemic has brought significant restrictions to the freedom of movement for those living with disabilities. Disparities in accessibility, experienced by those with disabilities on a daily basis within their local environments, are only exacerbated by the restrictions imposed due to COVID-19 (Armitage & Nellums, 2020). In the UK, research has shown the effects of public health guidance not being inclusive for all abilities, with many people with disabilities having to put their health at risk in order to be able to access necessary supplies, such as food and medicine (Eskyté, Lawson, Orchard and Andrews, 2020). Rules on two-meter social distancing and the wearing of face coverings, leaves many people with visual and mobility impairments finding it more difficult to access and manoeuvre public spaces (Eskyté et al., 2020). These measures and stay at home orders, also leave those with disabilities more vulnerable, should they not have access to necessary care services or assistance that they might normally rely on (Armitage & Nellums, 2020). Having a disability does not, by default, put that person at increased risk of the virus, however, it is the barriers to support, education and healthcare, imposed as a result of COVID-19, that increases susceptibility (Jumreornvong et al., 2020). These barriers to accessibility are similar across the board, with related issues being highlighted within Ireland also (NDA,

2020). These issues illustrate how spatial restrictions can and do have a significant impact on individuals with disabilities, and, therefore provide a basis for the aims of this research.

Ecological models of disability, including the social model and, particularly, the interactionist model of disability, highlight the important role of the environment in enabling or hindering accessibility and quality of life for individuals with one or more disabilities (Nathan & Brown, 2018). The social model establishes disability as a result of societal inadequacies, such as inaccessible infrastructure or biased attitudes, thus pointing at the role of external rather than internal circumstances, which are instead the focus of the medical model of disability. The interactionist model of disability advances this view even further, by highlighting how the experience of disability emerges from complex synergies of both individual and environmental factors (Nathan & Brown, 2018). From an ecological perspective, which views the person's development and growth as embedded within the physical, social, cultural systems surrounding them, an interactionist model of disability stresses the importance of a supportive environment, particularly for individuals with fewer personal resources (Nathan & Brown, 2018). This can also provide a useful lens to understand the effects of the COVID-19 spatial and social restrictions on individuals with physical disabilities.

For children and young people with disabilities, COVID-19 poses a threat to their access to education, as well as to their health (Lund & Gabrielli, 2021). Services and special education normally provided for children within the education system have not always been as easily transferred to an online, remote setting (Lund & Gabrielli, 2021). This, along with increased vulnerability and isolation, has created unique challenges for youths living with disabilities, on a global scale. Recent studies have highlighted similar challenges are currently faced by young people around the world, in western and developing countries alike (Emirie et al., 2020). This research conveys how prominent the effects of COVID-19 restrictions on young people with disabilities are, and how important it is that this demographic group is supported and that their needs are acknowledged. Despite this significant research on the experiences of people with disabilities, during the pandemic, there has been less of a focus on the lived, daily experiences of young people with physical disabilities, specifically. The spatial changes that have been experienced by these individuals within their environment, along with the social challenges caused by restrictions, have only recently started to be taken into consideration (Lund & Gabrielli, 2021). Furthermore, while some studies have identified challenges unique to children and youths with disabilities, in

terms of education and other supports (Lund & Gabrielli, 2021), this is a demographic whose voices remain largely unheard. Investigating how young people with disabilities experience the physical and social restrictions imposed during the pandemic is pivotal to ensure that appropriate, equitable policies and measures are implemented in terms of physical distancing measures, healthcare provision and information dissemination, rather than only in particular areas such as education (Jumreornvong et al. 2020; Lund & Gabrielli 2021).

To address this gap in evidence, this study aimed to investigate the lived experiences of spatial and social restrictions, due to COVID-19, among young people with physical disabilities. Using a psychological and ecological perspective, the aim was to gain insights into how such restrictions have impacted the overall daily life of these individuals, including accessibility, education, work and social support within their environment.

Methods

Study Design

This research study adopted a qualitative design, which allowed an exploratory method to be used (Thelwall & Levitt, 2020). This design involved the use of semi-structured interviews, in order to collect data. The reporting of the study adheres to the Consolidated Criteria for Reporting Qualitative Research (COREQ), 35-item checklist for qualitative research, established by Tong, Sainsbury and Craig (2007). This checklist is available in full in the appendix (Appendix C).

Participants

Eligibility for this study required participants to be aged between 18-25 years, and to have one or more physical disabilities or conditions which place limitations on their ability to move freely within their environments. Exclusion criteria for this study included those with psychological or emotional conditions and those with learning or intellectual disabilities. There were no exclusion criteria for gender or ethnicity.

Participants were recruited through convenience and snowball sampling. This included through word of mouth, student mailing list, and through recruitment calls on social media platforms (Facebook, Twitter and Instagram). Participants were also recruited by contacting relevant organisations, via email, several of whom shared the recruitment call within their circles and with eligible members of those organisations. Interested participants contacted the researcher using the email address provided within the recruitment call, and all

interactions leading up to the data collection occurred via email also. When participants contacted the researcher, expressing an interest in participation, the researcher, with guidance from the research supervisor, ensured the participants were eligible for participation and that they fit the inclusion criteria. Participants who fit the inclusion criteria were included in this study as long as they had the capacity to give informed consent.

Initially, 10 prospective participants expressed an interest in taking part in the study, but eight of these (N=8) provided written informed consent and participated in the interviews.

Data collection, in the form of semi-structured interviews, was conducted online, using Google Meet and the interviews were video recorded via Google Meet also. Due to data collection occurring online, during the COVID-19 lockdown, interviews were conducted from the researcher's home. Throughout the interviews, only the participant and the researcher were present.

Ethical approval for this research was gained from the School of Applied Psychology Research Ethics Committee, University College Cork (Reference number: FYP1611202003). Participation in this study was voluntary and participants were free to withdraw at any stage up until two weeks after data was collected. All participants read an information sheet and were asked to give their written consent form before taking part in the study.

Data Collection

Materials

A semi-structured interview schedule (Appendix A) was developed which consisted of questions asking about the participants' experiences of socialising, education and accessibility in their physical environment during the current COVID-19 restrictions. The questions included in the interview schedule were based on the ecological model of disability, which highlights the importance of the external environment in improving or restricting the quality of life of individuals with physical disabilities (Nathan & Brown, 2018).

There were also several probes developed throughout the interview schedule, to guide the researcher in expanding the conversation, where necessary, in order to gain a deeper insight into the experiences of the participant.

A short demographic questionnaire was also developed, which asked about the participants' age, gender, type of residence, education and location.

The interview schedule and demographic questionnaire were piloted, as is important in qualitative research, in order to tease out any issues that may arise (Majid, Othman, Mohamad, Lim and Yusof, 2017). The pilot was conducted with one eligible participant,

before the collection of data had begun in order to assert question appropriateness, as well as the overall interview experience. This pilot participant was given the information sheet and consent form prior to participation, and then the interview was conducted, which involved going through the full interview schedule and questionnaire. After the interview had been conducted, the pilot participant was asked by the researcher for any feedback on their experience of the interview process. The pilot data was then transcribed and analysed for any adjustments that were required to be made to the interview schedule. The feedback given from the participant was positive overall, with regards to the aims and nature of the study, as well as the interview schedule. They did suggest repeating/rephrasing questions, if at first the participants are unsure of what they were being asked, as being useful. However, the probes were deemed to suitably elaborate on necessary questions. Overall, the researcher deemed the interview schedule used in the pilot to be satisfactory and no major changes were made. The data collected during the pilot was used for data analysis.

No repeat interviews were carried out with any of the participants. The interviews were video recorded, via Google Meet, as this platform did not facilitate audio recording only. However, participants were informed, prior to recording, that they were allowed to turn their cameras off if they did not wish to be visually recorded.

Field notes were jotted down by the researcher after the interviews had ended. These notes included any additional information the participant had wanted to include but had been shared after the recording had been stopped. A note was also taken of the participants who expressed an interest in being contacted about the research, once it was ready for dissemination.

Each of the interviews lasted between 20 and 40 minutes, with an average of 25-30 minutes. Data saturation was not discussed and transcripts of the interviews were not returned to the participants, after the data had been collected, for comment or correction.

Researcher:

The main researcher, who conducted the interviews, was an undergraduate student in Applied Psychology (RA). The researcher was female and had not previously conducted published research, but had employed qualitative methods of investigation and thematic analysis as part of their academic work. In preparation for the study, the researcher completed in-depth reading of literature on qualitative research with vulnerable populations to optimise her approach to data collection, specifically regarding sensitive interviewing of more vulnerable groups (Dempsey, Dowling, Larkin and Murphy 2016; Elmir, Schmied, Jackson

and Wilkes 2011). The researcher was supported by the project supervisor (MC, female) who has experience of, and published research on, qualitative and participatory methods of investigation with vulnerable groups.

Prior to conduction of the interviews, the researcher had minimal interactions with each of the participants. The researcher contacted the interested participants over email, in order to establish a suitable time to conduct the interviews. The researcher did not know any of the participants personally, prior to the interviews. No feedback was collected from participants about the interviewer's characteristics.

Data Analysis

Each interview was transcribed into a word document. Interview transcriptions were not transcribed as verbatim, with certain aspects of the interviews, such as repetition of questions, being edited out of the transcripts. Each of the participants were given a numerical code in order to anonymise the data. The participant names and corresponding codes were saved to a password protected excel sheet.

Data saturation is an important point to consider regarding this research project as, unfortunately, data saturation was not reached due to a few different factors. Cleary, Horsfall and Hayter (2014) discuss the balancing act of participant recruitment in qualitative research, as too many participants may lead to overly saturated data, while too few may result in a lacking of depth within the findings. While the decision to conclude the recruitment process in this study was based on appropriateness and adequacy of data provided, as recommended by Cleary, Horsfall and Hayter (2014), it was also driven by time and recruitment constraints. Due to the tight deadline for completion of this study, as well as recruitment limitations caused as a result of the COVID-19 pandemic, there was a difficulty found in reaching data saturation.

Thematic Analysis

The method of analysis chosen for this study was thematic analysis (Braun & Clarke, 2006, 2012), which allows a flexible approach and aids in uncovering, analysing and reporting various detailed patterns found within the data (Braun & Clarke, 2006, 2012). These patterns form the themes which are key to uncovering rich, insightful information. The themes are developed based on their significance in providing insight into the data, illuminating a pattern of responses and aiding in providing information relevant to the research question (Braun & Clarke, 2006, 2012). Thematic analysis was, therefore,

considered the most appropriate method of analysis for this research study, as it provided the flexibility to delve into the experiences of the participants and to report on important themes, relevant to this research. The analytical process involved several readings of the interview transcripts initially, in order for the researcher to be familiar with the data. Then, initial codes were generated, each of which coincided with excerpts of the data, and were established with a focus on the participants' experiences of spatial and social restrictions. Once generated, these initial codes were collated into preliminary themes. The next step involved reviewing the transcripts once again, alongside the generated themes in order to ensure the themes fit the data. While several themes were initially identified, after reviewing, it was found that certain themes weren't sufficiently supported by the data, while others could be combined into one overall theme. Once the themes had been checked and revised, they were then labelled and given names. A visual diagram was then created (Figure 1), which displayed the core and relevant codes. Anonymised excerpts of participants' answers are presented with indication of the participant number.

Results

Demographic Characteristics:

A total of eight participants were included in this study, the demographics of whom are displayed in Table 1 below. All except one of the participants were female, and were all aged between 18 and 25 years old. All participants resided in the Republic of Ireland at the time of the interviews, with the majority living in urban areas, and all except one lived at home with their families. Most were in university, while some reported working or being unemployed. There was a range of different physical disabilities reported by the participants, as can be seen in Table 1.

Table 1. Demographic Characteristics of Participants

Participant #	Gender	Age	Urbanity level	Living circumstances	Occupation	Disability
01	Male	22	City Suburbs	Living with Family	Unemployed	Cerebral-Palsy
02	Female	18	Village	Living with Family	University	Difficulty with Pain/Breathing or Chronic Illness
03	Female	25	City Suburbs	Living with Family	Unemployed	Difficulty with Basic Physical Activity

04	Female	20	Village	Living with Family	University	Difficulty with basic Physical Activity
05	Female	24	City Suburbs	Living with Family	University	Coordination and Sensory Perception
06	Female	23	City Suburbs	Living with Family	University	Difficulty with Pain/Breathing or Chronic Illness
07	Female	23	Countryside	Living with Family	University and Working	Epilepsy
08	Female	25	Inner City	Living with Others	Working	Epilepsy

Identified Themes:

The thematic analysis identified several key experiences and insights across the data, surrounding the experiences of young people with physical disabilities with spatial and social COVID-19 restrictions. Despite the variety of individual experiences that participants presented, many of the experiences and insights shared were related and recognisable across the data. These insights were categorised into three core themes: 1) Adapting to a new way of life; 2) Dealing with a sense of uncertainty and isolation; 3) Widening the gap of inequality, as are displayed as blue boxes in Figure 1. The orange boxes in Figure 1 represent the sub-themes which branch off each of the three core themes. Each theme and related sub-themes are discussed hereafter.

Figure 1. Map of Core Themes and Component Codes

Theme 1: Adapting to a New Way of Life

Each of the participants shared their experiences of having their everyday life disrupted, as a result of COVID-19 restrictions, in a number of areas, such as daily routines, family life and college or work. Due to these disruptions, most of the participants found themselves adapting to new routines, strategies of coping and overall way of life.

a. Changes to Daily Routine

Participants identified significant changes to their everyday life, since the introduction of COVID-19 restrictions. The most obvious change to the daily routines of participants was that their ability to go out was immensely inhibited. For many of the participants, leaving the house at all was a rarity. Participant 1 expressed how little they leave the house nowadays, despite wanting to be able to go out and about:

“I want to go out, you see.... I don’t want to be stuck in the house all the time” (P01)

This sentiment was shared across the board, with many of the participants citing a desire to be able to leave the house, as well as discussing how limited they were by restrictions, in being able to carry out normal activities. Participant 4 described their experiences of having the activities, which they would normally be involved in, impacted also:

“I’m not able to go to, like, music lessons and stuff, so I do it all over zoom, and I don’t go to orchestra or anything.” (P04)

Similarly, other participants considered disruptions to daily routines and activities, including for instance Participant 2 who described how she could no longer access the gym, while Participant 5 discussed how she had to move back home from a different city at the start of the pandemic. These impacts to daily activities were described as creating a sense of monotony also, with Participant 7 describing their daily routine as “*repetitive*” at times, and Participant 8 outlined how “*all my days look the same all the time*”.

Participants also reported a negative impact on motivation and energy. Participant 2 described themselves as having fallen “*into a rut*” while Participant 7 recalled a period where the disruptions left her feeling “*unmotivated*”. These experiences were shared by Participant 4, who also illustrated the effects of restrictions on her levels of motivation:

“The days are quite draining even though, you know, you’re not even leaving your room” (P04)

However, while for many of the participants their daily routines had been dramatically altered since before the pandemic, for some these changes weren’t felt as intensely. Participant 3 stated how they had *“just sort of adapted to it”*. Similarly, Participant 8, who was still able to go out to work, felt that their normal routines hadn’t been too greatly impacted:

“I’m not doing much worse than I would be, without the pandemic. Like, ninety-nine percent of my life is normal. And this one percent is a little bit changed.” (P08)

Interestingly, while expressing a number of difficulties experienced during the pandemic, almost all the participants expressed some form of gratitude for the positives in their experiences and articulated an acknowledgement of difficulties others have also faced. Participant 2 had experienced COVID-19, but with mild symptoms, and thus felt a sense of gratitude for her situation:

“People are getting really sick, we were so lucky” (P02).

Participant 5 also felt that they *“wouldn’t have the worst experience”* compared to some. Therefore, despite the difficulties faced, they still conveyed gratitude for their situation.

b. Impacts on Family Life

Each of the participants also discussed having to adapt to new routines and dynamics within their family life. Almost all the participants lived with their immediate family, at the time of data collection, and while many acknowledged the benefits of having family around, several participants also commented on how it had taken some time to adapt to being with the family most of the time as a result of restrictions. Participant 3 commented on how everyone being at home could be a bit *“suffocating”* at the beginning, while Participant 4 also described adapting to this new situation as *“stressful”* at times. However, Participant 4 outlined how it was still *“good having them around”*, while Participant 2 also commented on how it was *“handy”* to be living with family during the pandemic.

Some participants also described their experiences of changes to their family dynamics, since the introduction of COVID-19 restrictions. Participant 5 expressed how their move back to their parent's house since the pandemic started had made them feel like they'd "*gone back in time to my teenage years*". They also described how this move had resulted in them having to adapt to more restrictions on their freedom and independence: "*I have to ask my parents for a lift, which, I do feel like a child to be honest.*" Participant 7 echoed these sentiments, stating how they too felt "*like a child*" having to ask their parents for lifts anywhere.

One aspect of family life that many participants outlined as having been negatively affected by restrictions was their ability to see extended family, such as grandparents and cousins. Several participants shared the close relationships they have with these extended family members, therefore making it very difficult to be separated for long periods. Participant 3 described the negative impacts restrictions had on being able to visit family, which was particularly challenging during special occasions:

"We have had to cancel things with family members, and we spent Christmas alone."
(P03)

Participant 5 described their experience of not being able to visit family, stating how they hadn't "*seen any of my family outside of my home in, at least, six months*". Participant 7 had also been separated from extended family for long periods, and expressed their desire to be able to spend time with their elderly grandad: "*I'd love to just give him a hug, you know*".

These experiences convey the changes in family dynamics imposed by the pandemic, highlighting the practical, as well as emotional, benefits and challenges of adapting to being in continued contact with close family, while also negotiating emotionally with the lack of an extended network of family support.

c. Changes to College/Work

With most participants being students at the time of data collection, accounts of daily life verted around having to adapt to new routines and challenges, in terms of college and work. For several participants, their current experience of college was drastically different to

before the pandemic. Participant 1 outlined how college was now “*online with lectures instead of face-to-face*”. Adapting to online college didn’t come without its challenges for participants. Participant 4 explained the difficulty in adjusting to completing college from at home, without the support of their peers:

“It’s very tough just doing lectures one after another and not having any, sort of breaks to, you know, talk to people.” (P04)

Participant 7 described this transition to online college as being a “*kind of surreal situation*”. This participant, who was in their final year of study at the beginning of the pandemic, described the changes to college work, imposed by the restrictions, as sudden and “*stressful*” to the point of impacting their health:

“The fact that I almost had a seizure says a lot of how stressed I was” (P07).

While some participants felt that the move to online learning had negatively impacted their ability to experience social connections, others also expressed the difficulties that the restrictions to movement outside the home had caused, in terms of access to campus facilities and resources to aid them in their studies, as expressed by Participant 5:

“It’s a bit awkward to try and do college at such a distance, because I don’t really have any access to any of the resources. Stuff like the library, printing, all [that] kind of thing.” (P05)

Despite these limitations, several participants identified some benefits of online college with regards to accessing content and time management, specifically as young people with physical disabilities. Participant 2 gave an important insight into how online lectures have allowed them more flexibility in balancing college alongside living with a chronic condition:

“I actually have liked it, because I kind of have my own freedom of, say, having doctor’s appointments, or going to certain lectures and knowing that they’re going to be recorded, if I don’t feel well then I can leave” (P02)

Participant 6 also commented on how, although they would “*rather be on campus*”, online college did have some benefits for them:

“I’ve actually found online learning pretty good, because it is less tiring than going out and doing things.” (P06)

Participant 8, the only participant working full-time, also provided insight into how their ability to go to work was impacted by restrictions, as they weren’t “*allowed to go to work at all for quite some time*.” However, despite these impacts, they still described themselves as the “*lucky one*”, as they were now able to go to work, even though so many others couldn’t.

Despite the challenges these participants faced in conducting their studies, it is evident that they remained appreciative of the benefits to their situation also.

d. Developing New Coping Strategies

In adapting to a new way of life, many of the participants mentioned the strategies they used to cope with these changes. Several participants highlighted the importance of keeping busy, through various activities and hobbies, as a method of coping. Participant 4 highlighted how college work had been useful in keeping them occupied and distracting them from all that was happening:

“College is very busy and there’s lots to be doing. That’s kind of a good thing actually, like I forget that we’re stuck in lockdown when there’s so many projects going on and stuff.” (P04)

Other participants echoed these sentiments, with Participant 2 stating how having college had “*helped*” them during this time due to it being one of the few things providing a “*sense of normality*” during the restrictions.

Maintaining a routine and structure was also mentioned by participants as an important strategy for coping and adapting to this new way of life. Participant 5 described how they try to “*keep a routine*” each day, while Participant 7 also explained how they like to “*write out a plan for the day*”, in order to have some structure. Participant 8 shared how important being able to go out to work was for them, in keeping a routine:

“I like to go there, just to have, like, a daily schedule to follow. Like, getting up in the morning always. Always getting dressed, always going out.” (P08)

Hobbies were also highlighted as being important in keeping busy and helping to pass the time. Participant 3 described the escapism that watching TV provides from the outside world, saying how *“you don’t actually know when you’re watching it”* what is happening around you. Participant 4 mentioned the escapism that hobbies provide: *“I play a lot of music and that sort of helps me shut off for a while”*. The importance of having an outlet and retaining a sense of routine is evident here, in helping the participants adjust to the changes in their daily lives.

Thus, in this first theme, we see how participants had to adapt to changes to their lifestyle, learning, and family life, often expressing the emotional and practical difficulties of negotiating a shrunk life space and lonely experiences; however, they could still recognise the positives in this unprecedented situation and identified structuring activities or creating a purpose for their day as important coping strategies.

Theme 2: Dealing with a Sense of Uncertainty and Isolation

Participants’ accounts also revealed that, while adapting to a new way of life, their wellbeing was also challenged by a climate of uncertainty and isolation caused by the pandemic. Many participants were fearful of contracting the virus, and the possible negative consequences of that happening, while also feeling increasingly isolated, due to diminished opportunities for socialisation.

a. Virus-Related Fear and Activity Avoidance

Several of the participants in this study expressed their fear and anxiety surrounding contracting COVID-19, due their increased vulnerability. Participant 5 shared how they were *“slightly more reluctant to go out”* while Participant 6 described themselves as *“wary”*. Participant 2 described how they were *“really strict”* about limiting their movements, at the beginning of the pandemic, as they described their fear of what the consequences of contracting COVID-19 would be for them, as someone with a chronic condition:

“I was terrified of getting it because I didn’t know what way my body was gonna react.” (P02)

Participant 2 described how this fear extended to the whole family, with their mother “*literally cleaning all of the food products*”, before the participant touched them. Participant 2, unfortunately, did contract COVID-19, during the first wave of the virus, but fortunately recovered quickly. Nevertheless, despite feeling less vulnerable since recovering from COVID-19, the fear had not completely gone away:

“You’re always still nervous if someone stands too close to you in the line” (P02).

Participant 2 described how going out and about meant deciding “*whether you want to live with that risk or not*”, a sentiment that was echoed by Participant 8 who also described going outside as a “*risk*”. Participant 8 was also “*too scared*” of the negative consequences that contracting COVID-19 might have for them:

“I would have seizures which are triggered from fever. Knowing that if you have COVID, you can get a really high fever, I know that I would be in really bad trouble” (P08).

These feelings of fear and anxiety culminated into an avoidance of situations where participants felt they were vulnerable. Participant 4 shared how their uncertainty and fear of contracting the virus made them avoid any “*busy places*”, where there would be a lot of people, despite their desire to go out places, such as the city centre:

“I would love to go in there and go shopping and stuff, especially before Christmas” (P04).

Importantly, some participants discussed their uncertainty around using essential services during the pandemic. Participant 5 discussed how they now avoided taking public transport, due to feeling more vulnerable to the virus:

“I usually use public transport, which is fine, but I’m a bit more nervous about using it these days” (P05).

Participant 8 shared their reluctance to go to the doctors, even when they felt they should, due to the fear of being more exposed to COVID-19 also:

“If I go to the doctor, who else is going to be there? You just feel... not safe” (P08).

Thus, this fear and anxiety related to the pandemic and one’s vulnerability acted as an additional barrier to carrying out activities outside of the home for participants in this study, with negative consequences for some in terms of accessing the services or assistance that they require.

b. Feeling Isolated and Socially Disconnected

Each of the participants described the impact that both the spatial and social restrictions had on their ability to socialise, and access to social supports, and how these changes had led to increased feelings of isolation. Participant 1 described simply, *“I want to meet my friends, I don’t want to be stuck inside”*. Many of the participants shared how it was difficult for them, being separated from their friends. Participant 4 discussed how it had been a long period of time since they’d been able to see their friends.

Participant 7 shared how they too had been separated from their friends for a long time, stating honestly *“I miss them”*.

Participant 8 moved to Ireland, from abroad, during the pandemic and discussed having been separated from their social circle since *“I moved here in September. And I didn’t go back home since then.”* They discussed how difficult this had been, not even going home for the Christmas holidays.

Some participants shared how they not only wanted to be able to meet up with friends, but they desired the social support from friends and similar others, particularly during this time of uncertainty. Participant 2 described a time, during the pandemic, when they had to go in for major surgery and *“the only people I wanted to see were my best friends”*. They went on to suggest that there be *“a bit of an exception to this ‘social bubble’ within reason”*, to allow for those with physical disabilities, or other conditions, to be less isolated during this time.

Participant 3 also shared how *“useful”* it is to have the support of similar others, who can relate to their experiences, during the pandemic. Participant 8 echoed these sentiments, sharing their experience of being isolated from the support of others:

“It’s not a time where you start getting in a new community or start meeting people”
(P08).

Participant 8 elaborated on how being isolated from social supports had impacted them, as someone with epilepsy, as *“you often rely on someone else”* and, particularly after moving to another country, the restrictions had left them with *“no one to ask”* for support.

Several participants, also expressed how the introduction of social restrictions, due to COVID-19, had left them feeling more isolated, compared to others:

“I feel like it’s definitely harder for us to socialise than people who aren’t disabled”
(P03).

Participant 3 expanded on this, detailing how it *“wouldn’t be an option for me”* to go for a walk with one other person, as many others are doing during the pandemic. Their experience was shared by Participant 6, who also felt that they were more isolated, and had less opportunities, during the pandemic, compared with others:

“I’ve family members and I’ve friends, who are going out and meeting one person for exercise, but I don’t have that same option” (P06).

Participant 3 expressed how the *“closure of the hospitality and arts sectors”* has made socialising much more difficult, leaving these participants feeling even more isolated than before. Participant 5 summed up the impact social restrictions and the inability to socialise has had on those with physical disabilities:

“I think the people who are at more risk of becoming isolated are in situations where they don’t have anywhere to go” (P05).

These insights show just how negatively their ability to see friends and socialise has been affected by the pandemic. These impacts have had negative consequences for these participants, who have been left feeling more isolated compared to their peers. This isolation experienced by the participants can impact hugely on their daily lives and well-being.

c. The Emotional Toll of Spatial and Social Restrictions

Through having these conversations on the uncertainty and isolation caused by COVID-19, many participants expressed the impact this had on their emotional and psychological well-being also. The ambivalence that so many of the participants were coping with, on top of the usual difficulties they face daily, led to a rise in experiences of negative emotions, including frustration, loneliness and, in some cases, hopelessness.

Participant 1 expressed their frustration at the impact restrictions were having on their life, stating how they would *“literally kill to go back to any part of my life before the pandemic hit”*. Participant 6 also described how they found the restrictions and impacts on their life *“frustrating”* and *“irritating”*.

Participant 2 discussed how *“mentally it’s not that easy”*, to cope with the effects of restrictions. They also acknowledged how they were not alone in this experience, and that the introduction of restrictions was *“tougher”*, and could possibly have longer-term impacts, for those with chronic conditions or disabilities:

“Sometimes I feel that being this isolated could possibly send you back, rather than, like, pushing you forward” (P02).

This sentiment was confirmed by other participants, who shared how difficult they had been finding the uncertainty and isolation caused by the pandemic. Participant 3 expressed how *“disheartening”* it was for them when the restrictions introduced weren’t inclusive to their needs, leading to them feeling *“quite hopeless”*. Participant 7 shared how the stress caused, as a result of the pandemic, was a *“trigger”* for their condition, and that this was a common experience for many with physical disabilities:

“A lot of people are in the same boat as me....this builds up this stress and leads to, like, problems with your physical disabilities” (P07)

These insights suggest that the COVID-19 pandemic thrust participants into a climate of uncertainty and fear, which, together with the changes experienced in day-to-day activities, led to feelings of social isolation and increased impacts on wellbeing.

Theme 3: Widening the Gap of Inequality

For the participants in this study, difficulties with the inaccessibility and equality of their spatial environment were, unfortunately, not new encounters. Participants described having faced these problems before, however, each of them discussed the impact COVID-19 restrictions have had on exacerbating these issues. The participants shared their experiences of how the introduction of spatial restrictions has left many public spaces more inaccessible than they were before, while discussing the lack of inclusivity and equality of the restrictions and guidelines introduced.

a. Limitations to Accessibility

For many of the participants in this study, the introduction of spatial restrictions created issues of accessibility within their physical environments. Accessibility of essential services and assistance was one particular area where participants had experienced difficulties. Participant 3 described how the queues frequently experienced outside supermarkets and shops created a “*barrier*”, and made accessing these places more “*challenging*” for someone with a physical disability. Participant 2 discussed how restrictions made accessing doctor’s appointments “*a bit more difficult*” also, commenting on how the restrictions, and these experiences of inaccessibility, “*don’t help your illness*”. Participant 8 also touched on the negative consequences the inaccessibility of services has on their health. They shared their difficulty with “*restrictions on doctor’s contact and medical contact*”, and how their limited access to these services, due to restrictions, had already led to “*horrible seizures*” as a result.

Participant 8 further explained how the inaccessibility of help from others are created problems for them, as someone with a chronic condition:

“I need people to be able to come on the spot. I need someone to call every hour of the day. I just need these options and I don’t have them” (P08).

Accessing medical assistance wasn’t, however, the only service that participants found more challenging to access. Participant 5 also discussed their issues with accessing public transport, due to restrictions, and how this made it more “*difficult*” to get around:

“They have cut public transport down to roughly a quarter of what it was. Which makes, again, all of this more complicated.” (P05)

Closures to public amenities also created barriers of accessibility for a number of the participants. Participant 3 discussed how the closure of these facilities had a “*big impact*” for them, as someone with a physical disability. This experience was shared by Participant 5 who found some public spaces were “*difficult to get to*”. Participant 5 also explained how many of the amenities which have been shut would have been the only completely accessible places for them to go normally:

“A lot of the places that would have been [accessible], like libraries or coffee shops and so on, have all shut down” (P05).

Participant 6 elaborated on these experiences of inaccessibility, expressing how even the spaces that remain open have, in many cases become less accessible. They shared how “*normally shopping centres are a nice place to hang out*”, but the restrictions on being able to sit down has caused this to change. They shared how the implementation of these restrictions meant “*it’s not as easy to get around places*”.

Despite nearly all of the participants in this study outlining the difficulties spatial restrictions have caused them in accessing public spaces, several of them shared how they felt this was a problem that nobody else noticed or, perhaps, even cared about. Participant 5 discussed how little discourse there was around “*how public spaces become accessible, or not accessible*”, as a result of restrictions. Participant 6 also commented on how other people “*probably don’t even care*”, that certain amenities are closed, but for them it made a “*huge difference*”.

Participant 5 elaborated on this point, outlining how these experiences take a toll on them, as young people with physical disabilities and yet even accessing the support to help deal with these feelings was difficult:

“At the moment, accessing mental health care, and things like that, if you do need it, it’s not always that easy to get access to it” (P05).

They outlined how it should be “*a little easier*” at this stage, to access necessary services such as these. Participant 7 agreed with these statements, expressing how they felt “*there’s nothing really advertised out there to get help*”. The accessibility of such vital assistance is

paramount, and if barriers are faced by individuals, especially during this period of anxiety, stress and uncertainty, the consequences of that could be profound.

These insights illustrate how the spatial restrictions introduced have created many accessibility barriers for these participants, and highlights a need for these issues to be addressed.

b. Perceived Inequality of Restrictions and Health Guidance

In addition to the spatial restrictions introduced creating limitations on the accessibility of public spaces, for the participants, the restrictions and public health guidance issued were found to be permeated by inequality, with participants experiencing a severe lack of recognition or accommodation of their needs.

Almost all the participants felt the spatial restrictions lacked nuance. Participant 3 highlighted how restrictions were very *“black and white”* and how *“they’re applied to everyone as if we’re the same, but we’re not!”*. They explained the issue with this, and how grouping all demographics together is not accommodating or inclusive:

“To bracket somebody suffering from a physical disability into everybody else.... You can’t compare the two” (P03).

One particular area that participants felt the impact of these blanket restrictions, was in terms of exercise. Participant 3 expressed frustration at exercise being *“touted as this miracle solution”* during quarantine, while Participant 6 also felt very *“limited”* in not being able to go out and exercise, like so many others are doing, during this time. Participant 6 shared how the restrictions meant *“you have to be exercising to meet someone one-on-one”*, and how that made them, as someone with a physical disability, feel excluded and forgotten.

Participant 1 expressed their frustration and how they were *“sick of these restrictions”*, while Participant 3 also explained how *“disheartening”* it was to feel excluded from the health guidance and information, that is *“targeted at, let’s say, able-bodied people”*. They discussed how the burden of this inequality often made them feel a little *“hopeless”*, while Participant 5 also found this exclusion *“unfair”*.

Participants were not disagreeing with the need for restrictions, however, with Participant 4 sharing how they could *“kind of agree with them”*, and Participant 8 expressing how *“the rules do make sense”*. Nevertheless, while participants could acknowledge the

importance of restrictions in stemming the virus, it was the palpable sense of inequality that caused frustration.

Several of the participants expressed how, not only was inequality of restrictions impacting on their daily experiences and well-being, but there was very little acknowledgement or assistance given to those in this situation. Participant 3 discussed their opinion on how much of a difference it might make if these additional difficulties were recognised:

“And even that acknowledgement of the difficulty could actually be so powerful”
(P03).

These experiences shared by the participants highlight how many of the spatial restrictions introduced have failed to be inclusive to all abilities. This causes huge problems, exacerbating the barriers that those with disabilities have faced for far too long, while also further isolating and impacting the well-being of these participants.

For the participants in this study, the inequality they face with the COVID-19 restrictions is, unfortunately, not an unfamiliar encounter. The participants discussed how these issues with equality and awareness were present before the pandemic. However, as Participant 3 explained, it *“kind of comes to light...in these times”*. Participant 5 also shared how they were becoming *“more conscious about the areas that aren’t accessible”*, since the introduction of spatial restrictions.

Participant 2 discussed their experiences with a *“double standard”* they’ve faced, particularly in university, when they’ve required some acknowledgement of the additional difficulties they face, compared to their peers:

“It’s not like I have the flu and I need to take a day off” (P02).

Participants felt this lack of equality and sufficient accommodations often came from a lack of awareness and understanding. Participant 3 expressed how she felt these issues needed to be more widely discussed, to allow for *“an opening for a conversation”*.

COVID-19 has evidently exacerbated the inequalities faced by these participants daily, and has only made the lack of awareness surrounding the difficulties they face more apparent.

Discussion

Summary of Findings

This study employed a qualitative approach, to explore the experiences of spatial and social restrictions, introduced due to COVID-19, among young people with physical disabilities. Overall, the participants in this study expressed the emotional and physical toll these restrictions had on them, since the beginning of the pandemic. Participants discussed their experiences of having to adapt to a new way of life, with their daily routines having been dramatically altered by COVID-19 restrictions. Alterations to college and work life, as well as changes to family dynamics were two prominent adaptations that these young people were adjusting to. Participants shared the uncertainty and virus-related fear they had encountered and their avoidance of certain activities which had occurred as a result. Each of the participants felt the emotional burden of this uncertainty also. However, despite these adjustments, participants had also shown resilience in developing coping strategies to manage these changes, while also expressing gratitude for the positives in their individual situations.

On top of these challenges, the participants in this study described facing numerous inequalities, and experiences with the inaccessibility of public spaces, since the introduction of spatial restrictions. Notably, participants shared how these restrictions only served to exacerbate many issues of accessibility and equality that they faced day-to-day, since before the pandemic began. Closure of public amenities, such as cafes or even park benches, severely reduced the accessibility of these environments, while impacts on necessary medical, health and transport services were also virulent. This reduction in accessibility, not only hugely impacted the independence and freedom of movement of the participants, but highlighted a disparity in the restrictions introduced. Strikingly, few restrictions appeared to have been introduced with acknowledgement of all abilities, therefore, resulting in participants reporting their perceptions of the inequality embedded within these public policies, and the negative emotions this often created. While most participants acknowledged the importance of restrictions in stemming the virus, they highlighted the urgency needed in improving the regulations, in order to make them inclusive to all abilities.

Findings in Relation to Current Literature

The findings in this study align with previous studies, that examined the impact of COVID-19 restrictions on individuals with disabilities. Thelwall and Levitt (2020) previously highlighted how individuals with disabilities are often more highly vulnerable to COVID-19, not only because they are more susceptible to the virus, but also they are more liable to the impacts of restrictions also. Resonating with previous research, the emotional toll was one of the most prominent repercussions of restrictions, for these young people with disabilities. Noticeably, fear surrounding susceptibility to the virus and the uncertainty around access to vital health and social assistance were at the forefront of the experiences reported by Thelwall and Levitt (2020). The isolation experienced by the participants in this study, supports the findings of Lund et al. (2020), who outlined the prolonged isolation many individuals with disabilities have to endure, compared to others, due to their increased vulnerability to the virus. The negative emotions this isolation created for several of the participants in this study, was in line with the findings of Lund et al. (2020) also.

Issues surrounding accessibility, which were highlighted in this study, were at the forefront of previous studies also. Eskyté et al. (2020) previously reported on the lack of inclusivity of COVID-19 restrictions, and the disparities in accessibility faced by individuals with disabilities. Importantly, the obstacles experienced by participants, in accessing necessary healthcare, corroborates the findings of the National Disability Authority (NDA) also, who cautioned against the impact disruptions to medical services would have on individuals with disabilities.

Furthermore, the impacts expressed by participants in this study, specific to this younger demographic, such as in terms of education and mental well-being, coincided with previous findings by Lund and Gabrielli (2021). The problems encountered in transferring to online education, as well as the widespread stress and anxiety caused as a result (Lund & Gabrielli, 2021), again provides support for the generalisability of this study's findings.

Importantly, the findings of this study support the usefulness of considering the experiences of young people with disabilities from the lens of ecological models of disability, which illuminate the significant role the environment plays in determining the quality of life and wellbeing. Particularly, the findings of this research confirm the interactionist model (Nathan & Brown, 2018), as the participants' narratives conveyed their experiences of disability to be firmly embedded in both their environmental and individual experiences. The participants' reports of the difficulties they had faced as a result of spatial and social restrictions, and the personal resilience they pursued through routines and coping strategies despite these challenges, solidified the interaction of environmental and individual factors, in

determining their experiences. The results reported in this study also highlight the significant role academic life played in the lives of several of the participants. These findings signify how this aspect of life becomes an important system of influence in the lives of the young people with disabilities, and outlines the duty stakeholders, in this area have, in ensuring an accessible and positive environment for these students.

These consistencies between this study and current studies, in this area, provides support for the findings of this research, and highlights the experiences of these participants as being similar across the board. However, the pervasiveness of these experiences, across the research, indicates how not enough is being done to alleviate these difficulties, and illuminates the urgency for increased action to be taken to support individuals with disabilities, during the COVID-19 pandemic.

Strengths and Limitations

This study, while in line with previous research, provides new insight into the experiences of young people with physical disabilities during the COVID-19 pandemic in Ireland. The experiences of this demographic of young adults with disabilities, aged between 18 and 25 years old, have not been researched as exhaustively as other demographics, during the pandemic. In addition, little focus has been placed specifically on those with physical disabilities. This study included participants who had a variety of physical disabilities and conditions, and provides original insight into the experiences of spatial and social COVID-19 restrictions, among these individuals. This study was informed and established based on research previously conducted in this area (Thelwall & Levitt 2020; Umucu & Lee 2020; Lund & Gabrielli 2021), and the researcher consulted previous studies on qualitative methods in order to improve their research skills (Cleary et al. 2014; Dempsey et al. 2016; Majid et al. 2017).

This study was not without some limitations. Due to the demographic of participants in this study being a highly vulnerable group, there was some difficulty with the recruitment of eligible participants. This study consists of a relatively small sample size, as a result, with the sample being largely female also, creating some limitations to the generalisability of experiences. There is a risk of selection bias with a small sample, such as this one, with the possibility of the participants recruited not being representative of this demographic overall. This study acknowledges that the findings may not be completely generalisable, and that a greater sample size may provide a more overall insight. However, there are consistent themes relevant across the sample, and many of the participants expressed shared experiences. This

does lead into a second possible issue, regarding social desirability, that participants shared experiences they thought were expected, based on the research question, rather than were true to them. While this cannot be entirely ruled out in participatory research, measures were taken to avoid this occurrence, with participants each being interviewed individually, to avoid any influence from others. All interview questions were also designed based on current research on this topic, in order to bypass any leading questions.

Implications

The findings of this study highlight the huge disparities in guidelines and restrictions introduced, due to COVID-19, which has significant implications the well-being of young people with physical disabilities who are affected, as well as impacting their experiences within their spatial environments. This research illuminates the inequality, inaccessibility and injustice that these participants have reported to be embedded within the spatial and social COVID-19 restrictions. However, this study conveys how these shortcomings are not unfamiliar to young people with physical disabilities, but these barriers to accessibility and inclusivity of the spatial and social environment have only been exacerbated by COVID-19. These barriers have huge psychological and social implications for this vulnerable group of young people, as they are restricted in having the same opportunities for socialisation and access to public amenities, compared to their peers. The susceptibility of the young people in this study to these spatial and social inequalities, particularly during COVID-19, increase the risk of them experiencing isolation, exclusion and impacts on their well-being or negative emotions. Therefore, this research elucidated the immediate need for improvements to be made to the accessibility of spatial environments in general, as well as in relation to the current pandemic, in order to protect young people with disabilities from experiencing these impacts on their wellbeing.

The findings lend particular support to the development of policies and guidelines to accommodate the needs and abilities of all demographics, as well as to acknowledge the psychological and social experiences of these vulnerable groups. It is imperative that the education system acknowledges any additional assistance young people with disabilities might require, whether that be in terms of academic or emotional support, while establishment of public amenities and spaces for socialisation must be developed with the abilities of every person at the forefront. An understanding of the ecological models of disability (Nathan & Brown, 2018), as discussed earlier, might also be useful in informing future guidelines on the importance of the interaction between the environmental and

individual experiences. Importantly also, it is essential that appropriate assistance be made more readily available, in supporting the well-being of all young people, not just those with physical disabilities.

Conclusion

This qualitative study highlighted the challenges faced by these young people with disabilities, due to the spatial and social restrictions introduced as a result of COVID-19. While the strength and resilience of these young people was evident, the adversities they have had to overcome, and the impacts these difficulties have had on their overall well-being is undeniable. Impacts on family and social life, changes to daily routines and college and increased isolation were just a few of the experiences shared by participants. Crucially, this research illuminates how these problems of inaccessibility and inequality have permeated the daily lives of these young people since well before the pandemic began, and have only been exacerbated since the start of COVID-19. Therefore, it is critical that changes be introduced to reduce these disparities prevalent within the spatial and social environments of these young people. Particularly, future guidelines or policies introduced should be done with the psychological and social impacts on vulnerable groups at the forefront, while immediate improvements to accessibility of supports and services for the wellbeing of these groups is also required. It is important that an ecological approach to disability be more widely adopted, to ensure that improvements to the accessibility and equality of spatial and social environments are achieved.

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Appendix A. Interview schedule

1. In this study, I am interested in understanding your experience of the pandemic as a young person, who has disabilities, particularly looking at the restrictions and lockdown measures. To start, I would like to ask how you feel that the restrictions have influenced your day-to-day life?
 - a. *Probe:* (If they don't describe changes) How do you feel that your day-to-day activities have changed since the start of the pandemic?
 - b. *Probe:* If you go to school or college, how has this changed for you since the start of the pandemic?
2. *(If not already discussed in first point)* And how do you feel that COVID-19 restrictions have influenced your family life?
3. *(If not discussed already)* Let's talk about your social life, so, seeing friends or people outside your family? How has that changed since the pandemic and the restrictions?
 - a. *Probe:* How do you feel about socializing during a pandemic, for a person with disabilities?
4. Let's think for a moment about the physical environment outside your home. What is your experience of accessing places outside your home, during the pandemic? And how do you feel about it?
5. *(If not discussed already)* Are there any strategies that you use to try and do things as normal during the restrictions?
 - a. *(If question not clear)* Is there any particular ways that you try to maintain a sense of normality during restrictions?
6. How do you feel overall about the influence of restrictions on young people with physical disabilities?
7. Do you have any further comments/ suggestions you would like to make?

Appendix B: COREQ 32-Item Checklist

No. Item	Guide questions/description	Reported on Page #
Domain 1: Research team and reflexivity		
<i>Personal Characteristics</i>		
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	8
2. Credentials	What were the researcher's credentials? E.g. PhD, MD	8
3. Occupation	What was their occupation at the time of the study?	8
4. Gender	Was the researcher male or female?	8
5. Experience and training	What experience or training did the researcher have?	8
<i>Relationship with participants</i>		
6. Relationship established	Was a relationship established prior to study commencement?	8
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	8
8. Interviewer characteristics	What characteristics were reported about the inter viewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	8
Domain 2: study design		
<i>Theoretical framework</i>		
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis	9
<i>Participant selection</i>		
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	5
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail, email	5
12. Sample size	How many participants were in the study?	5
13. Non-participation	How many people refused to participate or dropped out? Reasons?	5
<i>Setting</i>		
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	6
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	6
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	6
<i>Data collection</i>		

17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	7
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	7
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	7
20. Field notes	Were field notes made during and/or after the interview or focus group?	8
21. Duration	What was the duration of the inter views or focus group?	8
22. Data saturation	Was data saturation discussed?	8
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	8
Domain 3: analysis and findings		
<i>Data analysis</i>		
24. Number of data coders	How many data coders coded the data?	9
25. Description of the coding tree	Did authors provide a description of the coding tree?	9
26. Derivation of themes	Were themes identified in advance or derived from the data?	9
27. Software	What software, if applicable, was used to manage the data?	N/A
28. Participant checking	Did participants provide feedback on the findings?	9
<i>Reporting</i>		
29. Quotations presented	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	9
30. Data and findings consistent	Was there consistency between the data presented and the findings?	9
31. Clarity of major themes	Were major themes clearly presented in the findings?	10
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	10