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Perspectives of children and young people with a sensory loss: opportunities and experiences of engagement in leisure activities

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Research indicates that engaging in leisure activities has a positive effect on the wellbeing, development, and quality of life of children and young people with disabilities. However, there appears to be limited literature focusing on the participation of children and young people with a sensory loss in leisure activities and few studies which have gathered data from children and young people. To address this gap, this study explores the perspectives of children and young people with a sensory loss (visual impairment and/or deaf) about opportunities to participate in leisure activities with other children/young people and their experiences. The research was conducted in one locality in Scotland. Sixteen children and young people with a sensory loss from primary and secondary schools participated in four virtual focus groups. Findings revealed that the participants enjoyed having opportunities to be with other children outwith the school context. Psychosocial benefits from participation in leisure activities with other children with a sensory loss included feelings of not being alone and of being understood. Findings emphasised the lack of opportunities for children and young people with a sensory loss to engage in leisure activities in the community as well as barriers and facilitators to participation, such as communication. The study highlights the importance of increasing societal awareness of the needs of individuals with sensory loss and providing opportunities to engage in leisure activities in accessible environments.

KEYWORDS

children and young people (CYP), sensory loss, leisure activities, perspectives, opportunities, experiences

Introduction

This paper focuses on the perspectives of children and young people with a sensory loss (visual impairment and/or deaf) about opportunities and experiences of engagement in leisure activities. It forms part of a wider project to scope out and identify the feasibility of developing a young person's sensory service (YPSS) in a specific locality in Scotland. The project involved ascertaining the views of children and young people with a sensory loss, parents/carers of children and young people with a sensory loss, and professionals and volunteers working with children or young people with a sensory loss in the locality.

Engagement in leisure activities outwith the school context are important for all children. Studies have found a positive impact on academic attainment. For example, in a Canadian cohort study, Gonzalez-Sicilia et al. (2019) investigated the association between engagement in leisure-time physical activity at 6 years and academic performance at 12 years. They found a relationship between these factors utilising teacher-reported grades in language and maths, self-reported grades in language, and levels of classroom engagement. Research has also found a clear association between taking part in leisure time activities and children's physical health and wellbeing. Participation in organised leisure activities has been linked to improved health and wellbeing and better life satisfaction in adolescents (Badura et al., 2021). In a cross-sectional study in Denmark, Larsen et al. (2021) found that boys (aged 10–12 years) who took part in club-based sports had better physical health, improved fitness, and higher levels of psychological wellbeing compared with boys who did not participate in such activities. In a Canadian study, Oberle et al. (2019), investigating the benefits of transitioning from non-participation to participation in extracurricular activities during middle childhood, found that it correlated with improved mental health over time. Connectedness with peers was found to be a mediating factor. White et al. (2018) drew on self-determination theory to understand the relationship between physical activity and mental wellbeing in adolescents. Utilising a body worn accelerator, two self-report measures of motivation in relation to leisure-time physical activity and active travel, and a self-report measure of active wellbeing, the researchers found a positive association between self-reported leisure-time physical activity and affect. Interestingly, motivation was not found to be a moderating variable. Thus, there is clear research evidence of a positive relationship between children's engagement in leisure-time activities and their physical health and psychological well-being. Furthermore, early participation in such activities benefits future academic attainment.

For children and young people with disabilities, having the opportunity to engage in activities outwith school and in the community has a positive impact on their wellbeing, development, and quality of life (Powrie et al., 2020; Vänskä et al., 2020). Mogo et al. (2020) state that the participation of children with disabilities in physical and leisure activities is a determinant of their physical and mental health. Furthermore, such opportunities are valued by children and their families and are viewed as a means of developing social and community connectedness (Allard et al., 2014; Powrie et al., 2020).

Despite the perceived benefits, evidence from research indicates that children with disabilities participate less in physical and leisure activities than children without disabilities (Bedell et al., 2013; Shikako-Thomas et al., 2013; Arakelyan, 2020; Mogo et al., 2020; Vänskä et al., 2020). It is important to ascertain the opportunities offered to children and young people with disabilities and to understand the reasons underpinning their lower levels of participation. What are the facilitators and barriers to their engagement in such activities? This information will provide the basis for addressing those factors and enhancing participation levels (Engel-Yeger and Hamed-Daher, 2013; Powrie et al., 2020). Such understanding will also aid the development of programs in community settings and provide information for those tasked with creating more inclusive environmental settings.

Studies investigating the views of children with disabilities and their parents have ascertained several barriers and facilitators to participation in leisure activities. Identified barriers include the accessibility of provision and having fewer opportunities to meet with peers outwith school (Bedell et al., 2013). Other factors which have been found to limit children's participation are environmental factors, such as loud noises, cold and smells (Vänskä et al., 2020). Factors which support children's participation include adaptations to activities based on the child's needs and having an accessible and supportive environment (Vänskä et al., 2020). In a realist evaluation of a physical activity participation intervention for children with disabilities and their parents, Willis et al. (2018) found an inter-relationship between the context (safe, learning, social and family) and mechanisms (choice, fun, friends, specialised health professionals and time) as determining factors in the outcomes. Woodmansee et al. (2016) compared the participation of children and young people (aged 6–17 years) with a range of disabilities with a matched group of children with typical development in 16 physical recreational activities (such as walking and cycling) using a self-report questionnaire (Children's Assessment of Participation and Enjoyment). They found differences between the two groups in 14 of the activities. Children and young people with disabilities were less likely to participate in 5 of 16 physical recreation activities; less likely to take part in their preferred activities; more likely to play games at home; and less likely to undertake some physical recreation activities on their own.

The views of service providers offer a complementary perspective to those of recipients. Gilor et al. (2022) provide some insights into the barriers and facilitators to involving children and young people with disabilities in leisure activities. In a qualitative study conducted in Israel, the authors conducted semi-structured interviews with adults involved in organising activities for children aged 10–21 years to explore their perspectives of the difficulties and strategies developed to address those issues. Identified difficulties in implementing leisure activities for children with disabilities included insufficient funding, accessibility issues, difficulties implementing the principle of inclusion, and the negative attitude of society towards individuals with disabilities. The researchers explored ways in which the participants in the various represented organisations coped with reported difficulties through resource development; improving accessibility to leisure activities; implementing the principle of inclusion; and developing an initiative to raise societal awareness of the needs of individuals with a physical disability. The study's findings highlighted the resourcefulness and motivation of the participants but also the need for a more strategic approach to the development of leisure activities for children and young people with disabilities.

Most of the sourced studies which have investigated the participation of children and young people with disabilities have been conducted in high income countries including Australia (Powrie et al., 2020), Canada (Bedell et al., 2013; Shikako-Thomas et al., 2013; Mogo et al., 2020), Finland (Vänskä et al., 2020), Israel (Engel-Yeger and Hamed-Daher, 2013), Norway (Willis et al., 2018), the United Kingdom (Allard et al., 2014; Arakelyan, 2020; Powrie et al., 2020), and the United States (Bedell et al., 2013). To address this perceived gap in the evidence base, Schlebusch et al. (2020) conducted a scoping review of studies undertaken in low and middle-income countries (LMICs), which investigated the participation of young people with disabilities and/or chronic conditions. The authors utilised the International Classification of Functioning, Disability and Health for Children and Youth definition of participation as 'involvement in a life situation' (World Health Organization, 2007, p.10). Only 4% of studies were conducted in low-income countries (Malawi, Nepal and Zimbabwe), 24% from lower middle-income counties (e.g., seven studies in India) and 68% from upper middle-income countries (e.g., eight papers based on studies conducted in South Africa). The authors concluded that there was limited research in this area and what had been investigated focused on attendance rather than securing a better understanding of the young people's experiences of taking part in daily life experiences. In another scoping review, Huus et al. (2021) focused on the barriers and facilitators to participation for children and adolescents with disabilities in low and middle-income countries, by further reviewing the papers included in the review of Schlebusch et al. (2020). They also reported a paucity of research in LMICs and only found one study in a low-income country which met the inclusion criteria. These two scoping reviews highlight the need for further research on the participation of children and young people with disabilities in LMICs to ensure that account is taken of the different contexts, which the International Classification of Functioning, Disability and Health acknowledges impacts participation.

There appears to be limited literature focusing on the participation of children and young people with a sensory loss (visual impairment and/or deaf) in leisure activities. Over the period 2013–2023, the researcher identified only five papers in this category (Engel-Yeger and Hamed-Daher, 2013; Perkins et al., 2013; Štěrbová and Kudláček, 2014; Ghanbari et al., 2016; De Schipper et al., 2017). A few other studies included children with a visual and/or hearing impairment but as part of a larger cohort of children with disabilities (Bedell et al., 2013; Woodmansee et al., 2016; Vänskä et al., 2020). Using data from questionnaires completed by children and their parents, Ghanbari et al. (2016) found that blind children, aged 5–11 years, were less likely to engage in recreational activities than their typical peers. Similarly, Engel-Yeger and Hamed-Daher (2013) found that children with a sensory loss were less likely to participate in leisure activities compared to peers without a sensory loss. They investigated the participation of children (aged 6–11 years) with a sensory loss (visual impairment and hearing impairment) and children without a sensory loss in activities taking place outwith school. The children completed a self-report measure (Children's Assessment of Participation and Enjoyment) which assessed diversity, intensity and enjoyment related to their participation in out of school activities. Compared to typical peers, children with hearing or visual impairments were involved in fewer activities, less frequently, and were more likely to be involved in activities at home. Interestingly, this finding was more apparent in children with a visual impairment. In a small-scale qualitative study, Štěrbová and Kudláček (2014) investigated the views of parents of children with deafblindness regarding their children's involvement in physical activities in their leisure time, perceived benefits of such activities and barriers to participation. Parents reported multiple benefits from engagement in such activities including providing a structure to the lives of their children; improving their physical health and fitness; developing wellbeing; opportunities to engage in what they described as 'normal' things; and offering support to them as parents of a child with deafblindness. Reported challenges included assistants having the knowledge and skill set to communicate with their child; the paucity of adapted physical activities; and the need for support systems for the families of children who are deafblind. In a study exploring the views of parents of children with a visual impairment about their children's participation in physical activities, identified benefits included creating a healthy lifestyle and developing confidence (Perkins et al., 2013). De Schipper et al. (2017) undertook a qualitative study involving children with a visual impairment about their lived experiences of engaging in physical activity and sports. The researchers were interested in assessing the children's physical self-concept which they found to be positive. Although some of the physical and sports activities occurred in the children's leisure time that was not the focus of the study. In conclusion, the limited sourced literature indicates that children and young people with a sensory loss are less likely to participate in leisure activities and the associated benefits.

In conclusion, there is limited literature focusing on the involvement of children and young people with a sensory loss in leisure activities. Through gathering the views of children and young people with a sensory loss on engaging in leisure activities with other children/young people, including those who have a sensory loss, this study aims to contribute to the limited body of knowledge in this area.

The importance of ascertaining children's views is well-documented. Internationally, the United Nations Convention on the Rights of the Child (UNCRC) (UNICEF, 1990) is a key international human rights treaty which set out the rights of children. Article 12 stipulates that 'States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child' (UNICEF, 1990, p. 5). Although ratified by the United Kingdom, the treaty is not enshrined in legislation. In Scotland, the UNCRC (Incorporation; Scotland) Bill was introduced to the Scottish Parliament on September 1, 2020 and was passed unanimously on March 16, 2021. This development reflected legislative and policy developments in Scotland designed to strengthen the rights of children including the Children and Young people (Scotland) Act 2014 (Scottish Government, 2014) and the Children (Scotland) Act 2020 (Scottish Government, 2020). However, researchers have offered a critical perspective on some the limitations of the UNCRC such as clarity in terminology and lack of consideration of cultural diversity (Urbina-Garcia et al., 2022). Despite these limitations, it is argued that researchers should, where possible, involve children and young people in research using appropriate methods.

This study was carried out in one local authority in Scotland. In a survey conducted in 2022, covering all 32 Scottish local authorities, the Consortium for Research in Deaf Education (CRIDE) (2022) ascertained that there were at least 3,313 deaf children and young people in Scotland. For children of school age, 84% attend mainstream schools, 6% mainstream schools with resource provisions, 2% special schools for deaf children, 9% special schools which are not exclusively deaf children and fewer than 1% are educated at home. As of 2020 there were 2,500 children and young people with a visual impairment in Scotland (NHS Scotland, 2020). Around 70% of children with VI in the United Kingdom attend mainstream schools [Royal National Institute for the Blind (RNIB), 2023]. The high proportion of children with a sensory loss being educated in mainstream provision, as evidenced in this data, reflects the legislative and policy context in Scotland. The presumption of mainstream education was a key element of the Standards in Scotland's Schools etc. Act 2000, Section 15 of which stipulated that education should be provided in mainstream schools unless there were specific exceptional circumstances (Scottish Executive, 2000). The Education (Scotland) Act 2016 (Scottish Government, 2016), which incorporated amendments to the Standards in Scotland's Schools etc. Act 2000 extended the rights of children with additional support needs. Specifically, the Act legislated that any child aged 12 years and over who was deemed to have capacity should have a say in relation to the identification, planning and review of their educational support needs.

The relative proportion of children being educated in mainstream schools was an important factor in this study. All the children were being educated in mainstream schools or in mainstream schools with resource provision. Thus, they may have limited opportunities to socially interact with other children and young people with a sensory loss in school. This strengthened the importance of having opportunities outwith the school context.

In considering a theoretical perspective to underpin the study, the researcher considered different models of disability. The medical model of disability was prominent during the twentieth century. Critiques of this model have taken two forms, one being antireductionist and the other exclusionary. The former perspective critiqued the focus on physiochemical factors in disease and disability and proposed that there should be more consideration of psychosocial factors. The latter view argued that there was no role for medical intervention in areas such as mental health and disability and that the focus should be on reforms in society. A key and influential proponent of the antireductionist perspective was a psychiatrist, George Engel (Engel, 1977). Engel proposed the biopsychosocial model and argued that it was not possible to exclude the underpinning medical causes of disease whilst acknowledging the importance of psychosocial factors. A key proponent of the exclusionary view was Thomas Szasz, a psychiatrist (Hogan, 2019). Hogan (2019) argues that this perspective was influential in the development of Oliver's social model of disability, which focuses on the impact of society, including environmental, social and attitudinal barriers. During the 1990s, a 'renewed social model of disability' was advocated by feminist disability scholars such as Liz Crow (Crow, 2010). This model, whilst acknowledging the important role of societal factors, argues that it is not possible to ignore impairments such as chronic pain on an individual's functioning. This model influenced the researcher's thinking and approach to the design of the study and interpretation of the findings.

Participatory approaches involving direct stakeholders are increasingly being used in disability research. These approaches focus on the importance of conducting research *with* individuals rather than *on* individuals (Barton, 2005). Most studies to date have involved adults with disabilities as co-researchers at different stages of the research cycle and using a range of approaches. The use of community-based participatory research with people with disabilities (e.g., McDonald and Stack, 2016; Vaughan et al., 2020) is well-established. However, in comparison, there appears to be limited literature involving children and young people with disabilities as co-researchers. In a systematic review, Freire et al. (2022) investigated the use of participatory approaches with children and adolescents and their families in the development of health resources and interventions for children and adolescents. Eleven of the 26 included studies included children or adolescents with medical conditions or physical disabilities as co-researchers. The authors identified limitations in the extent to which researchers adapted their methods to address the developmental needs of the children and young people. In relation to participation in the various research stages, children and adolescents were less likely to be involved in the later stages of development of resources and interventions, namely implementing, sharing and evaluating. Furthermore, they concluded that researchers did not provide sufficient information on the participatory approaches employed and recommended the development of reporting guidelines.

Different frameworks have been developed to conceptualise levels of participation of children and young people in co-produced research. These include Hart's participation ladder (Hart, 1997) with eight levels, Shier's five levels of participation (Shier, 2001) and a recently developed 'Involvement Matrix' utilised as a framework to inform three phases of a project involving youth with severe communication disabilities (Dada et al., 2022). For the purposes of this study, Shier's participatory framework will be used as a framework to analyse the role of the children and young people in the study.

In relation to the use of language, the researcher is aware of the debate regarding the use of identity-first language and person-first language. However, Andrews et al. (2019) highlight that there is no consensus amongst individuals with disabilities about the use of person first or identity first language. Hence, during this study, the researcher decided to respect the views of the participants regarding their preferred use of language.

The specific objectives of the research were to:

- Explore opportunities to engage in out of school activities with other children/young people.
- Explore opportunities to engage in out of school activities with other children/young people who have a sensory loss.
- Explore perspectives on being with other children/young people who have a sensory loss.
- Explore perspectives on taking part in activities with other children/young people who have a sensory loss.

Materials and methods

The wider study from which this data were drawn, utilised a mixed methods research paradigm underpinned by critical realism (Johnson and Onwuegbuzie, 2004; Robson and McCartan, 2016).

It was deemed important from the outset to involve stakeholders in the research process. This aligned with the researcher's position of the importance of adopting a participatory approach whilst acknowledging the time constraints of the project. The project involved collaboration with relevant stakeholders and utilised a co-production methodology (Arribas Lozano, 2018) with the aim of ensuring that potential users of an YPSS were involved at all stages of the scoping and feasibility study.

The creation of a Reference group was intended to create a collaborative research process which enabled stakeholders with experiential knowledge to be involved at different phases of the project. The Reference group comprised children and young people with a sensory loss; parents/carers of children and young people with a sensory loss; representatives from statutory services and third sector organisations for children and young people with a sensory loss; representatives from the third sector organisation commissioning the study; and representatives from the YPSS run by the organisation in another locality in Scotland. The Reference group was able to provide invaluable information and feedback during the planning and implementation phases. This included feedback on draft versions of questionnaires, focus group questions, participant information sheets and consent forms, and feedback on a draft research report. It was important to ensure that the specific needs of this vulnerable group were considered at all stages of the project. Issues of consent, participation, accessibility, and the use of language and terminology were discussed.

Ethical approval was obtained from University of Dundee.

Participants

The participants were children and young people of primary and secondary school age in Scotland, i.e., primary stage 1 up to secondary stage 6. 'Sensory loss' has been used as an umbrella term to cover four types of sensory impairment: hearing impairment, visual impairment, deafblind and deaf (BSL) user. A purposive sampling strategy was employed to ensure representativeness of the population of interest (Cohen et al., 2018). However, the goal was not to generalise from the sample to the population but to achieve insights into a phenomenon by specific individuals (Onwuegbuzie and Leech, 2007). In this study, the phenomenon of interest was participation in leisure activities and the individuals were children and young people with a sensory loss. The inclusion criteria were that the child or young person should have a sensory loss; should be of school age; and should attend a school in the local authority in which the study took place. The exclusion criteria were that the child or young person was of pre-school age; had left school; and had severe and profound learning needs (South Lanarkshire Council, 2015).

Focus groups

Drawing on literature (e.g., Morgan et al., 2002; Gibson, 2007), personal experience, and consultation with members of the Reference group, it was decided that the focus group size should be no larger than 6. It is recommended that when using a virtual format, the size of the focus group is 4–6 participants (Lobe, 2017). Regarding group composition, school stage was used to differentiate groups resulting in two primary school aged groups and one secondary school aged group. The fourth group was a mixture of upper primary to mid-secondary school age. This decision was based on the researcher's knowledge of group dynamics and child development and discussion with members of the Reference group.

Following discussion with the Head of Accessibility and Inclusion service for the Local Authority and consultation with the Reference group, four focus groups for children and young people with a sensory loss were established:

- Primary 1–3 group for children with visual impairment and/or deaf [non-British Sign Language (BSL) users].
- Primary 4–7 group for children/young people with visual impairment and/or deaf (non-BSL users).
- Secondary 1–6 group for young people with visual impairment and/or deaf (non-BSL users).
- P4-S3 group for children and young people who are BSL users (note: this is an established group and although of different ages the researcher was advised that they work well together).

TABLE 1 Participants in the children and young people's focus groups.

Group	Deaf	VI	VI and deaf	Male	Female
Primary 1–3 group for children with visual impairment and/or deaf (non-BSL users)	2	1	0	2	1
Primary 4–7 group for children/young people with visual impairment and/or deaf (non-BSL users)	3	1	0	2	2
Secondary 1–6 group for young people with visual impairment and/or deaf (non-BSL users)	3	1	0	1	3
P4-S3 group for children and young people (BSL users)	5	0	0	1	4

The composition of the focus groups is detailed in Table 1. In total, there were 16 participants. Three children/young people had a visual impairment. Thirteen children/young people were deaf. The gender balance was six male and 10 female. The number of participants in each of the focus groups ranged from 3 to 5.

The Head of Accessibility and Inclusion service was able to contact parents/carers and, with their informed consent, arrange for children and young people to take part in one of the focus groups. The purpose of the research was explained in an age-appropriate fashion at the beginning of the focus group, and the children/young people were asked to indicate whether they agreed to participate. This was done in a variety of ways depending on the nature of their sensory loss. In addition to the researcher other adults were present. For the children/young people who were deaf and used BSL, a BSL interpreter was present. Assent could be provided verbally or non-verbally (e.g., thumbs up signal). For BSL users, the BSL interpreter indicated that they had agreed to take part.

The researcher conducted all the focus groups remotely using Microsoft Teams and acted as the main facilitator. This method was adopted for pragmatic reasons, namely savings in time and travel costs associated with conducting face to face interviews. Furthermore, the COVID-19 pandemic has resulted in greater familiarity and confidence in the use of platforms and applications to engage in virtual means of communication (Lobe et al., 2020). In advance of the focus group sessions, the researcher checked that various technological requirements were met, including access to the internet, suitable hardware and software; and that the participants would have access to a suitable environment in a school to minimise interruptions. At the beginning of the sessions, the room was set up so that the researcher could see and hear all the children and young people and test that the transcription software was operating effectively. However, it is acknowledged that there are some limitations conducting focus groups online with children, including difficulties picking up on nonverbal cues and the moderator using nonverbal means to facilitate the discussion (Lobe et al., 2022). This was mitigated to some extent in that adults in the room would have been able to pick up on some cues which the researcher missed e.g., a child indicating non-verbally that they wanted to speak.

The researcher was aware of the potential negative impact of a stranger facilitating the group interview, thus for each of the focus groups the children/young people were in a room in a school with two known adults (Fraser et al., 2004). The Head of Accessibility and Inclusion service, Local Authority X, was present at all sessions and thus a consistent known figure. Although potentially the presence of adults could have had a negative impact on the process due to the power imbalance, with the children/young people feeling constrained to share their opinions, this did not appear to be the case as the participants were able to share positive and negative aspects of their experiences. A further reason for the presence of adults was to facilitate set up of equipment and be available to address any technical issues which might develop (Hennessey et al., 2022). Finally, from an ethical perspective, the researcher wanted to ensure that there was ongoing assent from the participants and should any of the children/young people indicate verbally or non-verbally that they no longer wished to participate then there would be an adult present who could assist (Oates et al., 2021).

A BSL interpreter supported the group involving children and young people who are BSL users. She was well known to the participants as she worked in schools in the local authority. The interpreter translated what the children were communicating in sign language. As evidenced when reviewing the transcripts, occasionally the interpreter asked for clarification of the researcher's questions to ensure that she was asking the correct question.

The focus group questions were linked to the objectives of the study (see Table 2). They were designed to explore the participants' views of different aspects of their experiences of being with other children and young people with a sensory loss. The questions were posed in a flexible fashion such that the researcher was able to adapt follow-up questions in response to the participants' responses.

Focus group sessions were audio and video recorded using Microsoft Teams. MS Teams enabled the production of simultaneous text transcription.

Data analysis

The transcriptions of the focus group were checked for accuracy by cross-reference to the recordings and anonymised. This was a lengthy process which enabled the researcher to become immersed in the data which, in turn, facilitated the data analysis process.

During the planning stages of the project, the researcher considered member checking to enhance the rigour of the process. However, it was decided not to ask the children/young people to check the accuracy of the transcripts for three reasons. Firstly, there would be a significant time lag between undertaking the interviews in mid-June 2022 and completing the transcriptions by the end of July 2022. Due to the timing of the school holidays in Scotland, it would not have been possible to contact the children and young people concerned until mid-late August 2022. It was the researcher's view that the children and young people would have difficulty recollecting what they said after an interval of 2 months from taking part in the focus groups to receiving a copy of the transcript. Secondly, undertaking member checking would have required additional time and resources from the researcher and participants (Motulsky, 2021) which were not feasible given the time constraints of the project. Thirdly, the researcher was aware of the debate in the literature on the utility of member checking to improve the rigour of qualitative research. For example, in a narrative review of the literature referring to member checks, Thomas (2017) concluded that 'member checks have little or no effect on findings' (p. 37). Weighing up these factors, it was decided not to ask the children/young people to engage in member checking.

TABLE 2 Focus group questions for children and young people with a sensory loss.

Question no	Detail of question
1	What opportunities do you have to meet up with other children/young people who have a sensory loss?
2	What do you like about being with other children/young people who have a sensory loss?
3	Is there anything you do not like about being with other children/young people who have a sensory loss?
4	What activities do you take part in with other children/young people who have a sensory loss?
5	What do you like about the activities you take part in with other children/young people who have a sensory loss?
6	Is there anything you do not like about the activities you take part in with other children/young people who have a sensory loss?
7	In what ways is it different from being with other children/young people who do not have a sensory loss?

The terms visual impairment and deaf were used to cover the whole range of sensory loss as these are terms familiar to the children/young people.

Qualitative data from the focus groups were analysed using a form of qualitative content analysis (Graneheim and Lundman, 2004). The researcher decided to adopt an inductive approach to the data analysis given the limited research in this area. The unit of analysis utilised was the focus group interview text. The text was read several times to get a sense of the meaning. Meaning units were identified using the definition 'words, sentences or paragraphs containing aspects related to each other through their content and context' (Graneheim and Lundman, 2004, p. 106). The next step involved distillation of the key meaning in each of the units to produce condensed meaning units where the description was close to the text. In the next stage of the process, the researcher collated the condensed meaning units, viewing them in their entirety and then abstracted the sub-themes. During this process, the researcher went back and forth to the original text until she was confident that the sub-themes reflected the data. The final stage of the process involved the development of overarching themes. A holistic approach was adopted for the generation of the themes and sub-themes in the focus group data. In reporting the findings, it is possible to identify which group the quote emanated from.

The data analysis process for the focus group data is summarised in Table 3.

The researcher considered involving the research participants in reviewing the generated themes and sub-themes. This was discounted for two reasons. Firstly, the researcher developed themes and sub-themes from analysis across all the focus group data. In contrast, participants would not have the benefit of being involved in that process (Motulsky, 2021). Secondly, undertaking member checking of the developed themes and sub-themes would have required additional

TABLE 3 Data analysis process.

Stage	Comments
1	The unit of analysis was the focus group interview text for the children and young people participants. The transcribed text was divided into meaning units. Condensed meaning units were abstracted.
2	The condensed meaning units were collated, seen as a whole, and abstracted into sub-themes. There was reference back and forth to the original text during this process.
3	List of sub-themes generated. Development of themes. Reference back and forth to the original text during this process.

time and resources from the researcher and participants (Motulsky, 2021), which were not feasible given the time constraints of the project.

The Reference group was involved in providing feedback on a draft research report which included details of the data analysis process and the generated themes and sub-themes. Given members' expertise as professionals/volunteers or lived experience as parents/carers or as individuals with a sensory loss, it was deemed important to seek and benefit from their perspectives. This enabled the researcher to ascertain whether the generated themes and sub-themes resonated with their experiences. This was undertaken through sharing a copy of the draft report and seeking feedback from members either by email or during a meeting of the Reference Group.

Results

Twenty-eight sub-themes were generated, and these were grouped into 12 themes as illustrated in Table 4.

Subsumed in the theme '*Opportunities to engage in activities with children with sensory loss*' children and young people reported a range of opportunities both in school and in the community. However, it was apparent from the theme '*Lack of or desired provision*' that they desired more opportunities to engage in activities with children with sensory loss. They expressed the view that there was a limited range of activities for children with sensory loss in the locality. Furthermore, the COVID 19 pandemic had impacted on provision.

The theme '*Opportunities to engage in activities with children without sensory loss*' illuminated opportunities both in school (if in mainstream provision) as well as in the community. One child in the BSL focus group was positive about hearing children in their school learning how to sign:

> 'I think it's nice when the children are learning to sign too. And that's nice.'

Two themes captured the '*Impact of activities with other children with sensory loss*' and the '*Impact of activities with children without sensory loss*'. A third theme captured the '*Comparison of playing with peers with and without sensory loss*'. One child in the P1-3 focus group talked about enjoying meeting other people who are deaf as you are not alone. This feeling was compared to feeling scared when you are in the dark. Another child with a visual impairment in the P1-3 group expressed the view that other children with a visual impairment can relate to the problems the child has. Children enjoyed having opportunities to play with children without a sensory loss and expressed positive views about being able to communicate e.g., if their friends can sign.

> 'Yeah, that's good. I like that and you can chat to people and you've got lots of friends who can sign. I like that. That's nice to have that communication. xx or xx, and sometimes we play football. And which is nice or could be the goalie, and there's other people there. You can have a challenge, which is good.'

Deaf awareness was another theme which underpinned having a positive experience with hearing peers. The theme of '*Deaf awareness*' captured an experience of one child in the secondary aged group where someone from the National Deaf Children's Society came to their school and did an assembly and input in their PSE class to raise awareness about different levels of hearing loss and types of deafness.

> 'Sometimes when you're with hearing people, it's it's good, but it depends on who they are. And sometimes hearing people aren't very receptive if you're deaf. Other people are very deaf aware. They're very forward thinking. So I think that just depends on who they are and how that communications then portrayed'.

One visually impaired child in the secondary aged focus group liked to meet other pupils with a visual impairment but also liked to be with friends who can see. Similarly, there was a consensus amongst children in the P4-7 group that they did not see any difference between playing with people who are deaf or have a visual impairment and those who do not.

Subsumed in the theme '*Facilitators and barriers to accessing activities*' the children and young people identified several facilitators and barriers to accessing activities. It was apparent that communication (as opposed to oral language) was a key aspect of being able to participate in activities. For deaf children and young people, having an adult present who could support communication and interaction was a facilitator. For example, one deaf child talked about her auntie being able to sign if she was at Rainbows or Brownies and how difficult it was when her auntie wasn't there.

> 'Yes. So I did go to the rainbows and brownies, and my auntie was there and she helped with the signing, but if she wasn't there or there was nobody there the communication was really difficult. And then I kinda left because it was it was. It was difficult and I couldn't access it enough so'.

However, it was interesting to note that the presence of an adult impacted on the nature of the interaction.

> 'No, absolutely. Yeah. You've hit it on the nail pretty much there. Yeah. You want to chat with people your own age without having to do that through an adult'.

One of the aspects explored in the focus group was whether children and young people tell others (family and friends) about activities they take part in with other children/young people who have

TABLE 4 Themes and sub-themes.

Theme	Sub-theme	Definition of sub-theme and verbatim example from raw data
Opportunities to engage in activities with children with sensory loss	Meeting up with children with sensory loss	Describe opportunities to meet up with other children with sensory loss, e.g., 'We were at the deaf group'.
	Activities with children with sensory loss	Describe activities involving other children with sensory loss, e.g., 'It's deaf football'.
	Other children with sensory loss in child's school	Describe opportunities to meet up with other children with sensory loss in their school, e.g., 'playtime and lunchtime'.
Lack of or desired provision	Limited range of activities for children with sensory loss in xx	Reference to the limited range of activities for children with sensory loss in locality, e.g., 'but for deaf people, it just seems to be very few and far between if anything'.
	More opportunities for activities with children with sensory loss	Reference to wanting more opportunities to take part in activities with other children with sensory loss, e.g., 'Yeah, it'd be nice to meet up with like deaf people again'.
	Impact of COVID	Impact of the pandemic on opportunities to be with other children with sensory loss, e.g., 'Yeah we used to have. Yeh groups of people used to get together in high school. Yeah, we need to come like once a month at the xx. But that obviously got stopped because of COVID'.
Opportunities to engage in activities with children without sensory loss	Activities with children without sensory loss	Opportunities to engage in activities with children without sensory loss, e.g., 'Well, I play for a football team that's called xx'.
Impact of activities with other children with sensory loss	Feelings about activities with other children with sensory loss	Describe feelings about taking part in activities with other children with sensory loss, e.g., 'Meet other people. And you are not alone'.
	Impact of being with children with a sensory loss	One reference to the perceived impact of being with other children with sensory loss. The child indicated that they 'did not know'.
	Feeling scared	Feelings when you are alone, e.g., 'If alone in the dark I get scared'.
Impact of activities with children without sensory loss	Feelings about activities with other children without sensory loss	Describe feelings about taking part in activities with other children without sensory loss, e.g., 'Sometimes it's funny and you get to play games and or they ask you to come and play, which is nice. So it's nice to have that time'.
	Feelings about being able to communicate with children without a sensory loss	Describe feelings about being able to communicate with other children without sensory loss, e.g., 'you have got lots of friends who can sign. I like that'.
	Feeling different from others	Describe feelings of being different when with children without a sensory loss, e.g., 'confused'.
	Speaking different language	Compares communication with children without a sensory loss to speaking a different language, e.g., 'More like Spanish'.
Comparison of playing with peers with and without sensory loss	Comparison of playing with peers with and without sensory loss	Describe feelings about being with peers with and without sensory loss, e.g., 'I would like to meet other pupils with vision impairments and I like to be with friends who can see'.
Deaf Awareness	Deaf awareness	Reference to deaf awareness in the community, e.g., 'Yeah, absolutely. I think sometimes they need to be more aware of how it is for deaf people and how to communicate more in depth. So yeah, I definitely think that is something that should happen'.
Facilitators and barriers to accessing activities	Facilitators to accessing activities	Description of factors which aided access to activities, e.g., 'Yes. So I did go to the rainbows and brownies, and my auntie was there and she helped with the signing'.
	Barriers to accessing activities	Description of factors which acted as barriers to accessing activities, e.g., 'if she wasn't there or there was nobody there the communication was really difficult'.
	Impact of adult presence on communication with other children without sensory loss	The impact of having an adult present when you are communicating with other children without sensory loss, e.g., 'No, absolutely. Yeah. You've hit it on the nail pretty much there. Yeah. You want to chat with people your own age without having to do that through an adult'.
	Adult support	Reference to individuals outwith school who have helped develop skills such as using public transport, e.g., 'xx my train trainer'.
	Hearing aids	Reference to hearing aids, e.g., 'When I put them in fabulous'.

(Continued)

TABLE 4 (Continued)

Theme	Sub-theme	Definition of sub-theme and verbatim example from raw data
Telling others what they do	Tells friends about activities they do	References to telling friends about activities they do, e.g., 'Just deaf friends Yeah'.
	Tells family about activities they do	References to telling family members about activities they do, e.g., 'I actually talk about my parents because like, sometimes we do, like fun activities and, like, I tell my parents like what I do and stuff'.
Activities with family	Activities with family	Description of activities involving family members, e.g., 'And next year, I'm going on a plane. With my cousin. Uh, and I'm going swimming big swimming pool. And then they'll be lots of slides'.
	Going to the park	Reference to going to a local park, e.g., child nods to indicate that they go to the park.
	Pets	Reference to pets, e.g., 'One of my dogs died. So I do not have the dog I have right now so. The dog who died was all black. And my grandads was a big dog'.
Opportunities for parents	Meeting other parents of children with sensory loss	Reference to parents meeting up with other parents of children with sensory loss in the context of the verbal interchange, e.g., 'There's a movie called the xx'.
Subjects in school	Subjects in school	Reference to school subjects, e.g., 'And if I do not do maths I'm happy'.

a sensory loss. This was captured in the theme *'Telling others what they do'* with the two sub-themes 'Tells friends about activities they do' and 'Tells family about activities they do'. There was a mixed response to telling friends about activities they are involved in with some saying they did, others that they did not or that it was specific, e.g., just telling their deaf friends. There was a similar mixed picture regarding telling family members. One child in the BSL group said that they sometimes tell their family, including their sister. A child in the P4-7 group indicated that they do not talk to their family about what they do with children who are deaf or have a visual impairment. A child in the secondary-aged group advised that they do tell their parents because sometimes they do fun activities.

Children and young people also commented on activities with family members. These activities included going on holiday to somewhere with a swimming pool and going to the park with their pets.

One of the children in the P1-3 group agreed with the facilitator that their parent would like to meet up with other parents of children with a sensory loss.

The theme 'subjects in school' was peripheral to the main topic of the focus group discussion. It captured one child in the P1-3 group who advised that they disliked maths.

Discussion

For the purposes of this discussion, the first two objectives of the study have been combined. In relation to opportunities to engage in out of school activities with other children/young people (with and without a sensory loss), there were three pertinent themes: '*Opportunities to engage in activities with children without sensory loss*', '*Opportunities to engage in activities with children with sensory loss*' and '*Lack of or desired provision.*' The children and young people reported a range of opportunities to participate in leisure activities in school and in the community. However, there was a clear expression of a need for more opportunities. In particular, the participants indicated that there was a limited range of activities for children with a sensory loss in the locality. This finding is consistent with other studies involving children with disabilities. For example, Bedell et al. (2013) found that children and young people with a range of disabilities (including visual impairment and hearing impairment) had fewer opportunities to meet with peers out of school. It also aligns with research which has found that children with a sensory loss participate in fewer activities out of school, and less frequently, than peers without a sensory loss, and are more likely to be involved in activities at home (Engel-Yeger and Hamed-Daher, 2013). Similarly, Woodmansee et al. (2016) found that children with disabilities (including a sensory disability) were less likely to participate in some of the physical recreation activities, their preferred activities and were more likely to play games at home.

Perceived facilitators and barriers to participation in leisure activities were captured in the theme '*Facilitators and barriers to accessing activities*'. Communication was viewed by the children as a key factor in their participation in social activities. Deaf children and young people highlighted the importance of having an adult present who could support communication and social interaction with adults and peers. However, the children acknowledged that the presence of an adult could have a negative impact on their interaction with other children. Thus, there were perceived advantages and disadvantages to having adults offering communication support in leisure-time activities. A related theme was that of '*Deaf awareness*' which underpinned having a positive experience with hearing peers. For example, one deaf child expressed positive views about their friends being able to sign.

Extant literature on the participation of children with disabilities in leisure-time activities has highlighted the importance of offering an accessible and supportive environment (Bedell et al., 2013; Vänskä et al., 2020) although these studies do not specifically highlight communication as a factor. Communication was identified as an important aspect in a study investigating the participation of children with deafblindness in leisure-time physical activities (Štěrbová and Kudláček's, 2014) albeit from the perspectives of parents. One of the perceived challenges was assistants having the knowledge and skill set to communicate with the children. However, no literature was sourced which investigated the perspectives of children or young people with a sensory loss.

When considering findings pertaining to facilitators and barriers to taking part in leisure-time activities, the researcher utilised the theoretical framework of the social model of disability and the renewed version proposed by feminist disability scholars such as Crow (2010). She highlights some of the external barriers in society such as 'prejudice, discrimination, inaccessible environments and inadequate support' which are disabling (Crow, 2010, p.2). Issues such as communication, highlighted by participants as both a facilitator and barrier to participation, relate to 'inaccessible environments' and 'inadequate support'. The importance of raising awareness of disability in society is enshrined in Article 8 of the United Nations Convention on the Rights of Persons with Disabilities (United Nations, 2006) which was ratified by the United Kingdom in 2009.

The third and fourth objectives aimed to explore the participants' perspectives on being with other children/young people who have a sensory loss and their perspectives on taking part in activities with other children/young people who have a sensory loss. In relation to the latter, an emerging theme was the '*Impact of activities with other children with sensory loss*'. Feelings associated with activities involving peers with a sensory loss included not being alone and understanding the problems they were experiencing. The theme '*Impact of activities with children without sensory loss*', reflected children's enjoying having opportunities to play with children without a sensory loss.

There was a mixed picture regarding whether participants shared experiences with friends and family about activities involving peers with a sensory loss. This was captured in the theme '*Telling others what they do*' with the two sub-themes 'Tells friends about activities they do' and 'Tells family about activities they do'. Some children told their friends whereas others did not. Similarly, some children told family members whereas others did not. The researcher was unable to locate any literature investigating the views of children and young people with a sensory loss about their participation in leisure time activities.

Participants also commented and compared the experiences of being with peers with a sensory loss and those without a sensory loss. This was captured in the theme *'Comparison of playing with peers with and without sensory loss'*. For example, one visually impaired child in the secondary aged group enjoyed meeting peers with and without a sensory loss and did not express a preference. Similar views were expressed by children in the P4-7 group.

Previous research has highlighted the social benefits of participation in leisure time activities but there appears to be limited research exploring psychosocial benefits from the child's perspective. Štěrbová and Kudláček (2014) highlight the social isolation that children with deafblindness experience and the importance of social support in the community for the whole family. In one of the case studies, the authors highlight that the provision of leisure time physical activity provided the family (mother and son) with the opportunity for social interaction with what is described as their 'interest group'. It is not clear whether this interest group included other children with deafblindness. Furthermore, this was the view of the mother and not her son. Perkins et al. (2013) report that the participation of children with a visual impairment in recreational physical activities developed their social skills. However, the paper does not articulate whether other children taking part in the activities had a visual impairment and the focus is on the parents' views rather than those of the children.

The participatory framework of Shier (2001) was used as a lens to assess the role and involvement of children and young people in the research. The five levels are: '1. Children are listened to; 2. Children are supported in expressing their views; 3. Children's views are taken into account; 4. Children are involved in decision making processes; and 5. Children share power and responsibility for decision-making' (p. 110). Children and young people involved in the four focus groups were given the opportunity and offered support to express their views about participating in leisure-time activities. Their views were taken seriously by the researcher and informed the content of the draft and final versions of the research report which were shared with the Reference group and the third sector organisation which commissioned the project. Thus, it is argued that the design of the project enabled level 3 to be achieved. This is important as it aligns with Article 12 of the UNCRC (UNICEF, 1990).

Limitations

Whilst it is argued that this study adds to the limited research with a sensory loss which has investigated the participation of children and young people in leisure activities from the children's perspective, it is acknowledged that there are several limitations. Firstly, this study had a small sample size. Sixteen participants took part in the four focus groups. That being said, it was not intended to generalise the findings to a wider population but to gain an understanding of the participants' perspectives based on their individual experiences. Secondly, in terms of representation of children with a sensory loss, most of the participants were deaf and only three children/young people had a visual impairment. Thus, it could be argued that there is a bias towards the perspectives of deaf children/young people. Thirdly, although the researcher considered the presence of known adults in the focus groups to be a positive factor, it is acknowledged that the power imbalance could have had a negative impact on the participants' contributions. Fourthly, conducting the focus groups remotely using Microsoft Teams could have affected the researcher's ability to pick up on non-verbal cues, and her ability to be alert to signals such as the participants' willingness to continue with the interview. This was mitigated by the presence of adults in the room with the children. Finally, this study was conducted in only one locality in Scotland so the findings could not be considered representative of other localities.

Conclusion

This study has offered original insights into the views of children and young people with a sensory loss about opportunities to engage in out of school activities with other children/young people with and without a sensory loss. There is limited recent research in this area with only a few studies gathering data from children and young people. The findings from this study have emphasised the lack of opportunities in the locality as well as perceived barriers and facilitators to taking part in leisure-time activities. Aspects highlighted are the need to increase societal awareness of the needs of individuals with a sensory loss and to provide opportunities to engage in leisure activities in accessible environments. These findings have implications for policy makers, funding bodies and service providers.

The study also explored children and young people's perspectives on being with and taking part in activities with other children/young people who have a sensory loss. Psychosocial benefits included feelings of not being alone and of being understood. The importance of being with other children who have a sensory loss appears to reflect the psychological need for relatedness (Ryan and Deci, 2020) as well as the importance for children with a disability of developing a sense of identity (Forber-Pratt et al., 2017).

This study has highlighted the clear need for further research exploring the perspectives of children and young people with a sensory loss about their participation in leisure time activities and the related benefits. It is recommended that future research should investigate the psychosocial benefits of being with children in out-of-school activities as well as the specific benefits of socialising with other children with a sensory loss.

Data availability statement

The datasets presented in this article are not available as the required permissions were not sought from those providing informed consent. Queries regarding the data should be directed to the author.

Ethics statement

The studies involving humans were approved by School of Education and Social Work, University of Dundee. The studies were conducted in accordance with the local legislation and institutional requirements. Written informed consent for participation in this study was provided by the participants' legal guardians/next of kin.

Author contributions

The author confirms being the sole contributor of this work. EH was involved in the conception and design of the study, data collection, data analysis, writing the manuscript, and approving it for publication.

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Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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