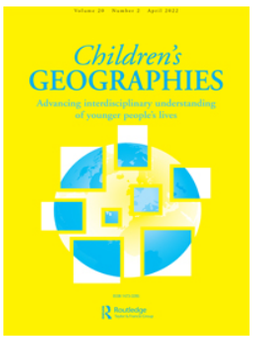
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Designing inclusive playgrounds in Switzerland: why is it so complex?

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ABSTRACT

Playgrounds designed with the intention to be inclusive are one approach to creating equal opportunities for all children, including those with disabilities, in terms of their right to play. However, when building inclusive playgrounds, the focus is often limited to the physical environment. Yet, studies investigating children's play in inclusive playgrounds have shown that other aspects of inclusion, such as social inclusion, are equally as important as the physical environment. Nevertheless, there is a lack of knowledge about how inclusion is considered in the design of inclusive playgrounds. Therefore, this study aimed to explore the design and use of inclusive playgrounds among people involved in the provision of inclusive playgrounds and advocates of children with disabilities from a Swiss context. Four focus groups were conducted with 26 participants involved in providing inclusive playgrounds or having a professional or personal relationship with children with disabilities. Results revealed no uniform understanding of inclusive playgrounds. Barriers to inclusive playground provision included negative attitudes, lack of knowledge about inclusion and the absence of policies for inclusion. Through the focus group discussions, it was proposed that a community network is needed, to bring together children with disabilities and their families with playground providers when designing inclusive playgrounds. In this context, user involvement can inform the design of playgrounds and support the understanding of the needs of people with disabilities in playgrounds, among other things. To enhance inclusion for children with disabilities on inclusive playgrounds, design approaches that consider social inclusion, like Universal Design, are proposed.

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Introduction

The right to be actively involved in community life is a fundamental right of every child, including children with disabilities (United Nations 1989). A child with a disability should have access to the 'fullest possible social integration' (United Nations 1989, 8) and enjoy 'appropriate and equal opportunities for cultural, artistic, recreational and leisure activity' compared to other children (United Nations 1989, 10). This equity of experience is also emphasized in the United Nations Convention on the Rights of

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Persons with Disabilities (UNCRPD) and the General Comment No. 17 (GC17) (United Nations 2006; 2013). One facility that makes this possible are playgrounds (e.g. in the community or in schools), 'built for children to play on' and 'broadly accessible to the public at large' (Burke 2013, 83). Playgrounds are important places, as they potentially provide opportunities for children to gain life experiences through play. For school-age children, playgrounds in the neighborhood offer opportunities to gain independence, to be physically active, and to develop social skills through play (National Playing Fields Association 2000). Playgrounds are where children can meet friends and develop risk competence while playing (National Playing Fields Association 2000). Playing at playgrounds can also contribute to children's health and well-being and feeling included in a community (Cole-Hamilton, Harrop, and Street 2002). So playing together, also described as 'joint doings', could be one way for children to experience inclusion (Whiteford and Pereira 2012).

However, even though playgrounds are intended for use by the general public, some playgrounds do not provide equity of experience for all, due to inaccessible and unusable design especially as it impacts children with disabilities (Moore and Lynch 2015; Dunn and Moore 2005; Woolley 2013; Talay, Akpinar, and Belkayali 2010). One attempt to create equal opportunities for children with and without disabilities to play in community settings is to design playgrounds that intend to be inclusive, here referred to as inclusive playgrounds.

Inclusive playgrounds aim to be accessible and usable to provide play opportunities for all children (including children with and without disabilities). According to Iwarsson and Stahl (2003), accessibility describes the physical accessibility of a facility or environment in terms of norms and guidelines and is considered to be a more objective criterion. Usability differs from accessibility as it refers to how the environment can be used by people with different abilities, informed by people's subjective experiences and the user perspective (Iwarsson and Stahl 2003). In addition to being designed for accessibility and usability, inclusive playgrounds also aim to contribute to an inclusive society by creating opportunities for social interactions, such as building friendships (Jeanes and Magee 2012; Stanton-Chapman and Schmidt 2017) and by creating meeting point areas close to each other with different levels of capacity (Preiser and Smith 2011). Thus, at inclusive playgrounds, children with different abilities and backgrounds, and people of different ages should feel welcome and have opportunities to play with each other (Casey and Harbottle 2018).

Multiple studies from Europe, North America, and Australia have looked at playground experiences from the perspectives of children and their families or caregivers, educators and municipality advocates. For example, when looking at the children's perspectives, studies identified the playground to be an important place for all children, and a place to experience challenges, sensory experiences and imaginative play (Prellwitz and Skar 2007). However, studies found that children with disabilities encountered barriers in the accessibility and usability of playgrounds and related to social interactions with other children (Lynch et al. 2020). Evidence highlights that there is a need to design playgrounds for children with different needs and abilities, and people of different ages (Dunn and Moore 2005).

Various studies identify the central importance of considering the social environment when designing an inclusive play space (e.g. Jeanes and Magee 2012) and how its neglect negatively impacts the social well-being of children with disabilities and their parents (Lynch et al. 2020; Stanton-Chapman and Schmidt 2017). For example, attitudes of other people in the playgrounds are perceived as barriers for families with children with disabilities (Sterman et al. 2019). Furthermore, studies identified a lack of knowledge among playground planers regarding designing for inclusion, disability, the (play) needs of children with disabilities and their families (Sterman et al. 2019; Lynch et al. 2020). Evidence indicates consequently that different perspectives need to be considered when designing inclusive playgrounds and that it is a complex process.

However, despite this evidence of barriers relating to social issues, little has been done to date to address such problems when inclusive playgrounds are being provided and few studies have looked yet at the aspect of designing inclusive playgrounds that truly examine how inclusive design could enhance social inclusion. So, there is a need to look at these different perspectives.

To explore this knowledge gap, there is a need to progress our understanding of how inclusion is addressed in designing inclusive playgrounds. Thus, in phase one, we explored children's perspectives (Wenger et al. 2021). In phase two, we are now exploring the perspectives of playground providers and advocates of children with disabilities. Therefore, we investigated inclusion in playgrounds through exploring the perspectives of two major stakeholders: (a) playground designers, (b) advocates of children with disabilities with experience in the use or design of playgrounds. The study aimed to explore the design and use of inclusive playgrounds with a particular focus on how design supports or hinders inclusion from the perspective of people involved in designing or advocating for children with disabilities.

Methods

Design

The study applied a qualitative descriptive design as it is a recommended approach for portraying phenomena (Sandelowski 2000). This design encompasses the various steps from data collection to description of the results (Sandelowski 2000). 'Qualitative descriptive studies have as their goal a comprehensive summary of events in the everyday terms of those events' (Sandelowski 2000, 334). In this study, the phenomena of interest were the perspectives of people involved in either providing inclusive playgrounds or being advocates of children with disabilities. According to Dahlin-Ivanoff and Hultberg (2006), focus groups enable data-collection of participants' perspectives about a specific topic through group interactions. Therefore, focus groups were conducted for data collection to bring together the different perspectives of people with various backgrounds and experiences regarding inclusion in inclusive playgrounds. The ethical committee of the Canton Zurich in Switzerland issued a declaration for no objection to the study (project number 2018-00551).

Participants

A purposive sampling strategy was used to recruit a sample rich in experience to share knowledge about playground design and use in regards to the concept of inclusion (Dahlin-Ivanoff and Hultberg 2006; Sandelowski 2000). This required recruiting not just among professionals, but also among advocate groups (e.g. parents and interest groups). Inclusion criteria for participants included: being involved in the provision of inclusive playgrounds, and/or being actively advocating for children with disabilities (either as a family member or a professional), and/or having experiences of visiting playgrounds with children with disabilities.

For recruitment, participants who dealt with inclusive playgrounds due to their professional or advocacy roles were contacted directly. These persons were considered key personnel in inclusive playground provision in Switzerland due to their self-identified knowledge in the area. Participants were identified from a contact list of an interdisciplinary Swiss play conference and invited by e-mail to participate in the study. The conference list was distributed to all participants of the Swiss play conference. A further strategy was adopted in order to maximize the sample regarding experiences: participants were asked to forward the invitation of the focus groups to other key persons involved in either playground provision or advocating for its users. In this sense, a snowball sampling strategy was applied for the recruitment of the participants.

To add users' perspectives of inclusive playgrounds, parents' associations for people with disabilities were contacted by e-mail and led to the inclusion of participants who all had expertise as an advocate, and who were family members of children with disabilities. Therefore, both snowball and purposive sampling were used to maximize recruitment.

In total, 35 potential participants were contacted directly by e-mail, through other participants or the parent's association for people with disabilities. Of the potential participants, 26 participants

agreed to participate in one of the four focus groups (15 female and 11 male, mean age 47 years, SD ± 9.6 years). Each participant was then assigned to one of the four focus groups, each of which consisted of a mix of both groups of participants.

Table 1 shows demographic information of the participants and the distribution over the focus groups. The uneven distribution of participants across the focus groups is because some participants had to cancel their participation at short notice due to personal reasons. Participants came from two main groups: (a) one group had a background in playground provision (Table 1) and were considered to be experts from a design perspective and for play provision, after this referred to as providers; (b) one group were advocates for children with disabilities due to their personal or work experiences and were considered to be experts from the user-perspective, after this referred to as advocates for children with disabilities. A diverse range of children with disabilities were represented, for example, children with cognitive or physical impairments. Each focus group was mixed for the diversity of experiences for children with different impairments. The four groups were established with an approximately even distribution of participants with a background in playground provision and participants being advocates for children with disabilities. This group composition was chosen to bring together and explore the different perspectives of the participants regarding inclusive playgrounds.

Data collection

The focus groups were conducted during May 2019 in a central city in German-speaking Switzerland in an easily accessible location. Time and location were chosen that was most suitable to the participants and each participant attended one focus group. Each focus group began with participant introductions and an introduction to the background of the project. Then a scenario was introduced to support group discussion, facilitate interactions and to explore different perspectives related to inclusive playgrounds (Breen 2006). The scenario was to design an inclusive playground together with the use of a site plan in an urban setting (see supplemental material for site plan and questions Questions addressed the understanding and purpose of inclusion and inclusive playgrounds, what makes an inclusive playground inclusive, how social aspects are considered in the design process, and how inclusive playgrounds meet the needs of children with and without

Table 1. Demographic information of participants and composition of focus groups.

	Focus group 1	Focus group 2	Focus group 3	Focus group 4
Age				
Mean age (SD), 47.4 (9.6)	49.4 (9.1)	44.6 (10)	46* (9.1)	48 (9.6)
Background relevant for the focus group				
Playground designer	5	3	4	2
Landscape architects	2	2	1	1
Architects			1	
Playground planner	1			
Playground safety managers	1		1	
Spatial planners			1	
Construction managers				1
Urban researchers	1	1		
Advocates for children with disabilities	4	2	3	3
Ethnologists				1
Social workers	2	1	1	1
Occupational therapists	1			
Psychologists	1			
Movement scientists			1	
Representative of parent's association for people with intellectual disabilities		1	1	1

Note. *One participant did not specify their age.

disabilities. The focus groups were audio-recorded and lasted between 100 and 150 min, with a mean duration of 135 min.

Data analysis

Audio recordings of the focus groups were transcribed verbatim. During transcription, the participants in the focus groups were anonymized by assigning pseudonyms to the participants. The software package ATLAS.TI was used to perform the data analysis (Scientific Software Development GmbH 2019). Data were analyzed using thematic analysis to identify patterns throughout the data set, and followed the six steps described by Braun and Clarke (2006). First, the first author read the transcripts several times to get familiar with the data. Then, initial codes were assigned to the data based on the aim of the study. Next, the codes were sorted into preliminary themes and sub-themes and discussed within the research team. Further, the identified themes and sub-themes were reviewed to determine whether a theme is consistent within itself. Then, the themes and sub-themes were further refined, and the core content of the themes and sub-themes were further developed and described. Finally, the description of the themes and sub-themes was finalized. All steps were carried out in cooperation with the entire research team. Quotations were selected to illustrate the content of the theme.

To strive for rigor in the data analysis process, the authors were involved with the data over a longer period of time, and discussed the findings at different steps in the data analysis process in the research team, where the second and third authors had the role of consultants (Ohman 2005). Triangulation was achieved by having four focus groups with different participants. In addition, the first and last author, who were involved in the data collection, had a de-briefing meeting after each focus group, which informed the following focus group. The whole process of the data collection and analysis was documented in an audit trail (Ohman 2005). Also, member-checking was done, which did not result in any additional findings.

Results

Three themes emerged from the discussions in the focus groups. The first theme describes divergent ideas about inclusive playgrounds. The second theme describes invisible barriers towards inclusive playgrounds. The third theme describes advancing inclusive playground provision. Table 2 shows an overview of the themes and sub-themes that were identified in the data.

Divergent ideas about inclusive playgrounds

In this theme, sub-themes were identified relating to the diverse perceptions of inclusive playgrounds: participants perceived them as places that require special equipment for people with

Table 2. Overview of themes and subthemes.

Themes	Sub-themes
Divergent ideas about inclusive playgrounds	Inclusive playground as a place with special equipment for people with disabilities
	Inclusive playground as a place for people of different ages and abilities
	Inclusive playground as a place of belonging
Invisible barriers towards inclusive playgrounds	Conflicting policies
	The challenge of understanding inclusion as it relates to barrier-free design
	Community attitudes towards children with disabilities
Advancing inclusive playground provision	Listening to the voices of people with disabilities
	Advancing knowledge and awareness for inclusive playground design
	Advancing provision: Establishing community networks to design inclusive playgrounds

disabilities, or places for people of different ages and abilities, and/or places of belonging. The discussions revealed similarities and differences among the participants in relation to these subthemes.

Inclusive playground as a place with special equipment for people with disabilities

A discussion occurred when participants with a background in playground provision discussed their experiences and knowledge of inclusive playgrounds. Some perceived the inclusive playground as a playground specifically for children with disabilities that needs to include special playground equipment. For example, a landscape architect shared the opinion that an inclusive playground is explicitly for children with disabilities and characterized by special playground equipment that is adapted to the abilities of children with disabilities. Similarly, some participants shared the opinions of other playground providers they know, who had expressed that a playground is inclusive only if play equipment for children with disabilities is available:

> Some think that if you put playground equipment for children with disabilities, then the playground is suitable for children with disabilities. (playground provider)

So, a commonly shared perspective among most providers was that an inclusive playground is a playground with some special equipment.

Inclusive playground as a place for people of different ages and abilities

However, other participants considered inclusive playgrounds as sites that should be usable for children of all abilities. This was, for example, illustrated by some participants talking about carrousels and climbing constructions that can be used by children using wheelchairs and children without mobility impairments. Likewise, the participants agreed that an inclusive playground is also a playground that offers people of different ages and abilities, such as caregivers with disabilities, the possibility to accompany their children to the playground. A playground provider expressed it like this:

> That is, they [the playgrounds] should also be for adults of different groups and families - these playgrounds would have to have something attractive even for parents! So that you can sit well, consume something, go there with a walker.

So, an inclusive playground should provide play opportunities for children with different abilities and be usable by people of all abilities and ages.

Inclusive playground as a place of belonging

One mother of a child with a disability was of the opinion that an inclusive playground could be any playground as long as children with disabilities were welcome there.

> If parents have the perception that other children with disabilities are visiting the playground too, then they also go to the playground with their child with a disability.

For this parent, the presence of other children with disabilities was important and gave a feeling of belonging.

Overall, the discussions revealed that there are different opinions about inclusive playgrounds and who they are for.

Invisible barriers towards inclusive playgrounds

In this theme, sub-themes were identified in relation to invisible barriers to inclusive playground provision. This included issues relating to policies, the challenge of understanding inclusive design and community attitudes towards children with disabilities.

Conflicting policies

A barrier that emerged from the focus group discussions was related to policies. Participants described a lack of support from politicians and a lack of policies resulting in challenges for inclusion when designing inclusive playgrounds, as, for example, a lack of state support in the form of subsidies for inclusion. This is in contrast to state support for other issues like ecological constructions or energy efficiency. A provider expressed it like this:

> Energy efficiency and everything else is more interesting. Energy efficiency is also subsidized, of course.

Participants found that this lack of support leads to the situation that inclusion is often not considered a priority when designing playgrounds.

Another issue raised by most of the participants was located within the existing policy for inclusion. For example, participants identified the lack of focus on inclusion in Swiss policy: that the existing anti-discrimination policy for people with disabilities in Switzerland under the Disability Discrimination Act focuses on aspects of accessibility (e.g. the norms for the width of the entrance gate), but not on aspects of inclusion.

> In the residential building policy (standard) it's very clear that you have to keep the SIA 500 [a standard with the aim to make buildings accessible] and then we're in the house inside and then the rest will come at some point. (playground provider)

The provider describes the situation of how accessibility standards are often applied only to access to the building, but are not thought of more broadly, for example, in terms of how people with disabilities will use the building, nor how it relates to the use of playgrounds. Furthermore, providers also identified different approaches to applying the standards when designing. For example, a provider described their experiences of working with architects:

> I can argue with architects for hours about a staircase. That it must somehow have another access possibility for the wheelchair, a staircase should be designed so that it can be used by older people, by younger people, by children with disabilities. It must have a handrail. I think that's a problem - they have a different understanding.

This shows that despite having a national anti-discrimination policy and standards, a lack of focus on inclusion within the policy results in buildings/ spaces that are accessible but not usable and different professionals interpret them differently.

The challenge of understanding inclusion as it relates to barrier-free design

Another barrier towards inclusion that was identified by providers was related to knowledge. The providers animatedly discussed the challenge of understanding inclusion and barrier-free design and that this is still difficult for playground providers in Switzerland. They agreed that few resources are invested in providing for inclusive playgrounds due to their limited knowledge about what inclusion means and due to the lack of guidelines.

This was further compounded by a lack of knowledge about what playground users needed. Playground providers from all focus groups also had different perceptions about the need for inclusive playgrounds. While most participants shared the opinion that there should be no distinction between inclusive and other playgrounds but that every playground should be an inclusive playground, other participants questioned the need for inclusive playgrounds at all. A provider said:

> I hardly ever experience children with disabilities in playgrounds. Or, when I walk around in public spaces, I hardly ever see children with disabilities in these places. And I have the feeling that then measures such as providing inclusive playgrounds are exaggerated. Because no child with a disability is coming anyway.

So, while most participants shared the opinion that there should be no distinction between inclusive and other playgrounds but that every playground should be an inclusive playground, other participants questioned the need for inclusive playgrounds at all. Overall, participants had conflicting opinions about whether it is worthwhile spending money for inclusive playgrounds.

Community attitudes towards children with disabilities

Most participants shared the perspective that communities' attitudes were a more significant barrier to the social inclusion of children with disabilities. Participants discussed that people's tendency to separate children with and without disabilities creates barriers in people's minds. An advocate for children with disabilities described it like this:

> So it's a social problem! We think in categories!

The advocate was referring to her experience that people distinguish between children with and without disabilities.

Another example was the widespread special school provision system in Switzerland, which participants felt reinforced this distinction between children with and without disabilities and, in turn, creates a barrier to inclusion. Participants agreed that segregation through the school system contributed to the tendency to categorize children and considered this contributing to children's difficulties playing together. For example, an advocate for children with disabilities said:

> The other point is how do children get into public space. Just as I myself used to work at a special education school, I know that children with disabilities have a strict schedule by being picked up in the morning by taxi and coming home very late because they are in after-school care. So, they are always in segregated rooms. This is a big challenging question for me now. How do you bring these children into public space?

The quote illustrates that due to the all-day absence, children with disabilities do not have the time or opportunity to play with children from their neighborhood in the playground. Since even the school system segregates children with disabilities and children without disabilities, participants agreed that this separation gives parents of children with disabilities the feeling that their children are not welcome in public spaces. Furthermore, it also creates a barrier towards inclusion because it separates children with disabilities from children without disabilities.

Participants with backgrounds in playground provision shared examples of how they experienced attitudes of people in the community towards children with disabilities as a hindrance for inclusion when designing inclusive playgrounds. They described projects of inclusive playgrounds where they experienced negative reactions from the neighborhood; that children with disabilities were not welcome on the playground. A provider described his experience in the following way:

> We had a project that was already finished. Afterward, we experienced rejection against the project from the neighbourhood. Finally, someone said, "We don't want all the disabled people of the town on this site".

This quote shows that there are also negative attitudes among people in the community towards children with disabilities and inclusive playgrounds.

Participants also discussed the impact of segregation practices whereby many parents of children with disabilities withdrew from public places. Parents of children with disabilities described experiences of people's attitudes in the community by constantly being exposed to the judgment of the parents of children without disabilities when visiting a playground with their children. A mother of a child with a disability said:

> Maybe if he (child with a disability) did something funny, then the parents started whispering and watching. It was never the children. The children were never the problem. It was more the parents, who then looked closely, what can he do and what is she doing there with him now. Oh, she scolds him, but he is disabled. She shouldn't scold him because he is disabled. So those things were more like that. One is just then exposed to social issues. Especially if there is only one child with a disability on the playground.

In this quote, the mother describes her experience of visiting a playground with her child with disabilities and how she feels exposed to judgments by other parents. In another example, one mother of a child with a disability described how such attitudes impacted her. She reported constantly feeling rejected in public playgrounds and that it required a high degree of self-confidence to distance herself from other parents' comments.

Participants agreed that these reactions gave the feeling that neither the parents nor their children with disabilities are welcomed on the playground.

Overall, the discussions showed that participants perceived several barriers that impact inclusion on inclusive playgrounds.

Advancing inclusive playground provision

For this theme, sub-themes were identified that could enable the provision of inclusive playgrounds, such as listening to the voices of people with disabilities, advancing knowledge, and resource enhancement for the design of inclusive playgrounds at the national level. Furthermore, the value of a community network where various stakeholders, such as parents and users of playgrounds and providers are represented, was recognized.

Listening to the voices of people with disabilities

Providers and advocates for children with disabilities shared the opinion that participatory approaches that include neighborhood residents are a widely used practice to include the perspectives of playground users. However, playground providers described the challenge of involving parents and their children with disabilities or neighborhood residents with disabilities in the design processes of inclusive playgrounds. A provider expressed his experiences like this:

> What we have not been able to do, despite various requests and phone calls, is to involve children or parents of children with disabilities. We have not succeeded in this.

This quote describes the difficulties a provider experienced in reaching children with disabilities and their families and not knowing strategies for how to best involve them in participatory processes when designing a playground. These difficulties were also represented during the focus group discussions. For example, when the providers and advocates were asked to discuss the scenario of designing an inclusive playground together, there was no joint problem solving. The providers had not consulted with the advocates during the focus groups, and the advocates were unsure how to be consulted.

Advancing knowledge and awareness for inclusive playground design

The providers and advocates identified a general lack of knowledge as a major obstacle to the design of inclusive playgrounds. An advocate expressed her experiences like this:

> And we have already seen that the desire for training goes hand in hand with financing. You really have to help people reach their goal and not just give them money.

Participants reported that besides financial support, knowledge transfer is also a need for planners and local authorities. The providers and advocates also shared the perspective that combining different points of view can support the understanding of the needs of children with disabilities and for including social aspects in the design of inclusive playgrounds. An advocate for children with disabilities said:

> But I think it has a lot to do with awareness. If you're not confronted with it (the needs of children with disabilities), you wouldn't come up with the idea; why should I even think about this point. That's why we need these different groups sitting around the table and negotiating with each other.

Some participants described how they themselves experienced what it could mean to have a disability in everyday life situations through either social interaction with close family members having a disability or through opportunities for self-awareness, for example, through the own use of a wheelchair on a playground.

Advancing provision: establishing community networks to design inclusive playgrounds

During the discussions, the providers and advocates for children with disabilities developed the perspective that focus groups are one opportunity to come together and exchange ideas in a networking group. Participants pointed out that inclusive playground design requires special knowledge from different fields. One provider expressed it like this:

> It is about health; it is about children, it is about pedagogy, it is about open space. There are so many topics, and the combination of all points of views makes a good project. That you try to invite different people and, for example, the social worker that will facilitate playing on the playground afterward.

This quote illustrates that designing an inclusive playground is complex and requires combining the perspectives of professional experts and user experts to come together. It highlights the challenges around designing inclusive playgrounds, including that it requires more than just designing for accessibility. In addition, the design of an inclusive playground does not end with the construction of the playground. Still, providers and advocates suggested that there should be playground workers who facilitate playing on a playground after its construction.

Through this discussion, the topic of a community network for inclusive playground design came up. The providers and advocates agreed that a community network could lead to design solutions addressing the needs of children with and without disabilities. They discussed that such a community network should already be started in the training of providers and other professions, and address topics such as playground design, barrier-free design, self-experiences with the use of assistive devices and the exchange with users with disabilities.

During the discussions, the topic of the establishment of a national specialized body functioning as a contact point for inclusive playgrounds arouse. Participants agreed that this contact point should also focus on inclusion and provide free services for providers and local authorities. To strengthen the political impact of such a contact point, an advocate for children with disabilities proposed that inclusive playgrounds should be included in policies, as is the case in other countries.

Overall, results showed that providers are not often in contact with children with disabilities and their advocates when designing inclusive playgrounds. This might be due to a lack of knowledge or lacking strategies on how to include children with disabilities in participatory approaches. To advance inclusive playground provision, solutions such as combining the knowledge of professional and user experts in a community network and integrating inclusive playgrounds at the policy level were proposed.

Discussion

The study aimed to explore the design and use of inclusive playgrounds with a particular focus on how design supports or hinders inclusion from the perspective of people involved in designing or advocating for children with disabilities. Results indicate that there are different understandings of what an inclusive playground is or should fulfill among providers and advocates for children with disabilities. Furthermore, results point to invisible barriers towards inclusive playgrounds due to negative attitudes towards children with disabilities, the lack of focus on inclusion in policy and the poor understanding of designing for inclusion.

As the results show, people did not understand inclusion in playgrounds in the same way, with some only viewing inclusive playgrounds as being places for children with disabilities, while others saw them as places for everyone. This was contrasted with the experience that inclusion seems to have an important impact on the sense of belonging for families with a child with a disability when visiting a playground. From the perspectives of children Spencer-Cavaliere and Jane Watkinson (2010) found that children with disabilities feel included when they are invited to play by other children and are treated equally during play. These findings are confirmed for children with and without disabilities by Edwards et al. (2021), who found that having the same opportunities as other children to join play activities and to experience the feeling of belonging contributes to

inclusion. It is evident from these studies that social aspects are central for children to feel included. This is in line with one of the main aims of inclusive playgrounds, which is to create opportunities for social interactions (Casey and Harbottle 2018). From the perspectives of parents and caregivers of children with physical disabilities, a recent study determined, in addition to the physical requirements, the social aspects and an inclusive society are considered the most important points in terms of inclusion and outdoor play (Van Engelen et al. 2021). To summarize the perspectives of the children and caregivers, social inclusion needs to be prioritized as much as access. Thus, playground design therefore needs to focus on design for social inclusion alongside physical access.

Negative attitudes towards children with disabilities formed another invisible barrier to inclusion. This corresponds to previous research from Jeanes and Magee (2012, 202), who described how 'attitudinal discrimination' is perceived as an 'exclusionary practice' leading to the exclusion of children with disabilities from play spaces. Furthermore, research shows that societal attitudes towards children with disabilities impact caregivers' decisions about whether to use outdoor play spaces or not (Sterman et al. 2016). As other research shows, community settings that aim to be fully inclusive should be designed with inclusion in mind from the outset, providing equal opportunities, a welcoming atmosphere, and a sense of inclusion for all children (Edwards et al. 2021). Furthermore, studies also found that involving perspectives of people with disabilities in planning (e.g. children) positively impacts the attitudes of children with disabilities on playgrounds (Jeanes and Magee 2012; Woolley 2013). Still, people with disabilities are often absent from these processes. Results suggest that creating awareness for people with disabilities, for example, through personal experiences or encounters with persons with disabilities, might be key element and one way to create awareness.

From the perspective of the playground providers in the study, another invisible barrier was identified in relation to policy implementation for inclusion, which is not so clear in Switzerland. In Switzerland, a first step in the direction of inclusive policies was taken with the Disability Discrimination Act, introduced in 2004 (Federal Department of Home Affairs 2004). However, the Swiss Disability Discrimination Act does not specify inclusion more precisely, and mainly focuses on issues of accessibility (Federal Department of Home Affairs 2004). Furthermore, despite the existence of the Disability Discrimination Act in Switzerland and the UNCRPD (United Nations 2006), participants in this study discussed the diverse interpretation of such policies and the need for stronger policy and guideline development. Participants also discussed the issue of special schooling for children with disabilities and how this system restricts opportunities for children with disabilities to play alongside children without disabilities. Yet, the right of all children, including children with disabilities, to be included in recreational activities, such as play, is stated in Article 23 of the United Nations Convention on the Rights of the Child (United Nations 1989). To implement this right, policies for inclusion are needed. However, many countries lack a play policy (Lynch, Moore, and Prellwitz 2018b). Yet, some of these countries do have other important policies, such as anti-discrimination policies, which partly cover aspects of accessible play spaces for children but not for inclusion.

Another invisible barrier towards inclusion and inclusive playgrounds was identified in the poor understanding and lack of knowledge of designing for inclusion. This is consistent with other countries, where a lack of knowledge in relation to the needs of children with disabilities was also described for playground providers (Lynch et al. 2020) and local governments (Sterman et al. 2019). In such studies, local governments seem to attribute more importance to the physical accessibility of a playground and not so much on the social aspects (Sterman et al. 2019). Such lack of knowledge highlights a need for training in designing inclusive playspaces that can be used by everyone, which was also identified by Lynch et al. (2020). Similarly to these findings, Woolley (2013) proposed training for landscape architects to use existing knowledge regarding design for inclusion and collaborate with children with disabilities during the design process.

Legal documents, such as the GC17 (United Nations 2013), the UNCRPD (United Nations 2006) and the European Standard on accessibility and usability of the built environment (EN 17210)

(European Standards 2021), recommend to build playgrounds based on Universal Design (UD). UD is an approach that addresses social inclusion and exceeds minimum accessibility standards, with the overarching purpose to create products and environments that are socially inclusive (Steinfeld and Maisel 2012). Furthermore, UD intends to design environments that address the needs of all people without the need for special adaptations and is based on seven principles (Connell et al. 1997). For playgrounds this means creating design solutions that are also suitable for children with disabilities and which do not need to result in special equipment or more costs, especially if UD is considered from the very beginning of the design process (Lynch et al. 2020). This would also reduce or avoid the need for costly retrofits in the future. However, despite this international endorsement for UD in the aforementioned documents (UNCRPD, GC17, EN17210) UD has yet to be foregrounded in national policies.

Building on the underlying idea of social inclusion and designing for all Burke (2013) and others (Moore and Lynch 2015) support the adoption of UD, and describe the potential of UD for inclusive playground design compared to conventional design approaches. As a possible implementation, Lynch et al. (2018a) tailored the seven principles of UD to playgrounds. Furthermore, there are other examples of how UD could be applied in playgrounds (PlayCore 2015; Stanton-Chapman et al. 2020). However, a recent scoping review shows that the application of UD to playgrounds has not yet been evaluated scientifically (Moore, Lynch, and Boyle 2020), confirming that a lot more needs to be done to advance the UD application (Casey 2017) specially in addressing social inclusion.

The results of the present study point to the need for a network among playground providers and users to combine different viewpoints and experiences among persons from different backgrounds, such as landscape architects, health professionals and advocates for children with and without disabilities. A community network for inclusive playground design could be one way to translate and share knowledge among different groups involved in the design and use of inclusive playgrounds.

Methodological considerations

The study explored the perspectives of people involved in the provision of inclusive playgrounds and advocates of children with disabilities through a qualitative descriptive design using focus group methods for data collection. The recruitment strategy resulted in groups being heterogeneous in terms of their background regarding their knowledge and experiences of inclusive playgrounds. This might have resulted in the difficulty of separating the perspectives of the playground providers from the advocates of children with disabilities. Furthermore, it might also have resulted in power relations. Grouping people in homogenous groups for the focus group discussions might have resulted in different outcomes and be beneficial in terms of building trust among each other and thus resulting in fewer power relations. However, as the results show, inclusive playground design involves people with different backgrounds. Thus, the heterogeneous focus groups might represent inclusive playground design to some extent and thus capture different valuable perspectives.

This study aimed to gain the perspectives from playground providers and advocates for children with disabilities to gain a broader understanding of the design and use of inclusive playgrounds. A limitation may be that the focus of the study was only on children with disabilities, whereby an inclusive playground should be for everyone.

However, the conduction of these focus groups resulted in – to our knowledge – the first bringing together of persons with different backgrounds in inclusive playground design in a Swiss context. Through the large interest of providers and advocates for children with disabilities and the few dropouts during the data collection period, we assume, based on our results, a need to continue fostering opportunities for exchange and collaboration within a community network in inclusive playground design. However, there might be a need to proactively involve people with disabilities in the community network.

Conclusion

This study adds insights into the manifold ways inclusion is understood among playground providers and advocates of children with disabilities.

The different understanding of inclusion and its importance attributed by providers does not always support the need for families with children with disabilities to feel that they belong in a playground. Also, invisible barriers that exist due to people's attitudes, lack of knowledge and policies regarding inclusion contribute to families of children with disabilities not feeling welcome in inclusive playgrounds. One way to address this imbalance and to give more weight to the voices of children with disabilities and their families in playground design was discussed in the focus groups in terms of a community network for joint designing of inclusive playgrounds. Along with a community network, design approaches that enhance social inclusion, such as UD, could also be supportive.

Further research on social inclusion is needed, that looks beyond the physical aspects of access on inclusive playgrounds and investigates how inclusion on inclusive playgrounds could be enhanced through design. Furthermore, research should examine how children with disabilities and their advocates could participate more in the design processes of inclusive playgrounds. Finally, if UD is considered the way forward, further investigation is needed to examine how UD can be part of an inclusive playground design process from the beginning.

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