

# Caregiver perceptions of inclusive playgrounds targeting toddlers and preschoolers with disabilities: has recent international and national policy improved overall satisfaction?

Tina L. Stanton-Chapman<sup>1</sup> and Eric L. Schmidt<sup>2</sup>

<sup>1</sup>University of Cincinnati, USA; <sup>2</sup>Playground Equipment Services, USA

**Key words:** Perceptions, caregivers, playgrounds, disabilities, early childhood.

**The purpose of the current study was to survey and interview caregivers of children with disabilities (ages 2–5 years) to obtain their input as to whether current playground equipment meets their child's needs. A total of 149 participants agreed to participate. Caregivers (i) indicated that their child with a disability could not fully participate in the playground offerings, (ii) felt that the playground was not appropriate for their child with a disability and (iii) dreamed of a fully inclusive playground that met their child's needs. The results also demonstrate that social participation barriers continue to remain for families who have children with disabilities despite the passing of international human rights standards targeting individuals with disabilities and a global focus in improving the overall well-being of children with disabilities.**

It is estimated that there are over 93 million children in the world with a diagnosed disability (UNICEF, 2016). Disability category, gender, culture, socioeconomic class and geographic location often determine the amount and form of exclusion children with disabilities face. Global organizations such as UNICEF and the World Health Organization (WHO) often consider children with disabilities the most marginalised and excluded group in society (UNICEF, 2013; World Health Organization (WHO), 2008). As a result, international policy initiatives, such as the United Nations Convention on the Rights of Persons with Disabilities (CRPD; United Nations, 2006), the Convention on the Rights of the Child (United Nations, 1989), and the World Health Report (World Health Organization (WHO), 2008), have incorporated human rights of individuals with and without disabilities standards in their documents.

## *Social participation and children with disabilities*

In addition to advocating for the rights of individuals with disabilities, the WHO promotes healthy equity

concerns among individuals with disabilities in its publication entitled 'International Classification of Functioning, Disability, and Health'. In this document, health equity is promoted through social participation and the empowerment of individuals with disabilities. Social participation is defined as involvement in life situations or sharing in an activity (World Health Organization (WHO), 2001). Social participation often comprises one's involvement in communication, mobility, self-care, and interpersonal interactions and relationships (Shikako-Thomas, Bogosian, Lach, et al., 2013). Social participation in recreational activities is often not considered (World Health Organization (WHO), 2001).

Full social participation in recreational activities is particularly important for children with disabilities to help ensure their ability to relate to others and have a successful transition to adulthood. Although children with disabilities should be given the opportunity to socially participate to the same extent as other children, several studies suggest that children with disabilities may not be able to participate to the same extent as their typical peers due to physical barriers or limited availability (World Health Organization (WHO), 2008). For example, Parkes, McCullough and Madden (2010) found that children with cerebral palsy were less likely than their typical peers to participate in community recreational activities, games and sports as they faced equipment barriers and a lack of available recreational activities for individuals with mobility disabilities. These limited activities could lead to social isolation, under-developed social skills or poor peer relationships; a significant problem identified previously by researchers studying social-emotional development in children with cerebral palsy (Yude, Goodman and McConachie, 1998; Parkes, McCullough and Madden 2010).

Given the importance and value of social participation outlined by the WHO in 2001 and subsequent discussions

of how an individual's environment may have a huge impact on the experience and extent of disability a person faces, the United Nations CRPD document (2006) is often viewed as the official paradigm shift from the medical model of disability where individuals with a disability were considered 'abnormal' to a social model of disability (People with Disability Australia, 2015). The social model of disability posits that disability is a result of the way society is organised rather than by a person's impairment (Shakespeare and Watson, 2002). For example, a playground which uses sand or wood chips for its surfacing will be inaccessible to a child who uses a wheelchair for mobility purposes. However, a playground which uses pour-in-place surfacing (rubber surfacing) will be accessible to a child who uses a wheelchair. In both examples, the child has not changed, but the surfacing at the playground has changed. In other words, the environment disabled the child and the child could not socially participate through play or exercise.

#### *The role of schools within a community*

In its document, 'The Rights of Children with Disabilities to Education: A Rights-Based Approach to Inclusive Education', the United Nations and UNICEF (2011) specifically outline the role that schools play in outdoor community play for children with disabilities. Schools should: (i) provide a connection between the school, the community and family to promote the child's healthy well-being; (ii) promote effective community partnerships to ensure that children with disabilities have positive interactions between the school and their community; and (iii) provide safe and stimulating opportunities for all children, including those with disabilities for play and recreation. In the United States, the Council for Exceptional Children (CEC)/Division for Early Childhood (DEC) (2014) developed recommended practices for teachers and families that support children with disabilities' access and social participation in the environment including outdoor play. DEC's recommended environmental practices for individuals with disabilities include: (i) the consideration of Universal Design for Learning principles when creating accessible environments; (ii) the collaboration of early childhood professionals with family members to adapt the physical, social and temporal environments to promote access to and participation in learning experiences; and (iii) the creation of environmental opportunities for movement and regular physical to improve fitness, wellness and development across domains. In essence, national law recommends that schools and communities work together to promote the social participation and well-being of young children with disabilities. Although international law is often recognised in national law (as seen in the CEC/DEC recommendations), implementation to local community law has been a slow and complex process (United Nations, 2007).

#### *Social participation barriers for toddlers and preschoolers with disabilities*

Despite some progress in international and national litigation for the rights of individuals with disabilities in the past decade, social barriers continue to exist for young children with disabilities. There is growing evidence that recreational activities and playgrounds targeting the late toddler and preschool population are not a direct result of the children's disability, but rather are a result of the challenges this group of children with disabilities face when accessing community recreational activities and playground equipment. For example, Stanton-Chapman and Schmidt (2016), when interviewing special education professionals about their perceptions towards school and community playgrounds, reported: (i) many schools do not provide a separate playground for the 2- to 5-year population; (ii) if the school does offer a separate playground for 2- to 5-year olds, the playground is considerably smaller and less interesting than the playground provided to the school's older children; and (iii) many schools expect preschoolers to play on grassy areas with balls and jump ropes if playground equipment is not available. A clearer understanding of the availability of playgrounds for the 2- to 5-year-old population is necessary to develop fully inclusive recreational activities and playground equipment that is appropriate for children of all abilities and meets international, national, and local standards and best practices. The purpose of the current study was to survey and interview caregivers of children with disabilities (ages 2–5 years) to obtain their input as to whether current recreational activities and playground equipment meet the needs of their toddler or preschooler with a disability. In the past 10 years, international (i.e., CRPD, 2006; WHO Report, 2008) and national (i.e., CEC/DEC Recommendations, 2014) outlined basic human rights for individuals with disabilities and provided guidelines for improving the overall environment to meet this population's needs. The current study examines whether or not caregivers are satisfied with inclusive playgrounds appropriate for children of ages 2–5 years given the inception of the new global policies. The following research questions guide the study: (i) Are caregivers satisfied with current accessible playgrounds targeting the toddler and preschool population?; (ii) What are the reasons caregivers give for their child with a disability not being able to fully participate on a playground?; (iii) Do caregivers report that their closest community playground offers a separate play area for children ages 2–5 years?; (iv) What does a dream inclusive playground look like in the eyes of caregivers who have a child with a disability?; (v) According to caregivers, what are the types of experiences children with disabilities have on a playground?; and (vi) According to caregivers, what are their experiences when they visit a playground with their child with a disability?

## Method

An anonymous survey was used to obtain data from a sample of caregivers who have children with disabilities of ages 2–5 years. To protect survey participants' anonymity, all responses were collapsed into a 'Results Report' by question at the conclusion of the survey.

### Background

The [Blinded] Department of Education, the [Blinded] Head Start Association, and the [Blinded] Infant and Toddler Connection were approached to request contact information for all directors of early intervention and special education programmes in both private and public agencies. In total, 304 early intervention, Head Start, and special education programme directors were consulted. Directors were asked if they would be willing to provide information about the anonymous survey to the families they serve in their programmes. Two hundred and seventy-three (90%) agreed to assist with the survey. The first author also contacted caregiver support groups for families who have children with disabilities to determine their willingness to include a link to the anonymous survey in their newsletter or on their website. Forty-one out of 53 caregiver groups (77%) agreed to assist. Paper surveys, with stamped addressed envelopes, were sent to those programmes whose directors believed their families had limited Internet access. Paper surveys were not distributed to caregiver support groups as many did not directly meet with families.

### Participants

Survey participants included mothers, fathers, grandparents and foster parents who volunteered to complete an anonymous survey of their perceptions of recreational activities and community playgrounds. To be included in the survey, individuals had to have a child with a disability of ages 2–5 years (i.e., child was receiving special education services under an Individualised Family Service Plan or an Individualised Education Plan) living in their current household. This age group was selected as toddler/preschool playground equipment, whether appropriate for children with or without disabilities, is the target age selected by playground manufacturers for equipment purposes. Only one family member per household was permitted to complete the online survey. We were unable to control how many paper surveys were completed by family members in each household as we did not distribute them directly to families. We also are unable to determine which directors distributed the emails to families as our Institutional Review Board did not allow us to collect this information to protect anonymity. A total of 149 participants agreed to participate and completed the whole survey. The 149 survey participants varied in terms of role: 106 (71%) described themselves as mothers, 25 (17%) as fathers, 15 (10%) as a grandparent and the remaining 3 (2%) as a foster parent. The group was primarily female (83%) and Caucasian (53%) with 35% being African-American, 3% being Hispanic and 9% being bi-racial.

Most participants (88, 59%) were middle-aged between 35 and 55 years old. Participants reported having additional children in the household besides the child with a disability: 61 (41%) had a total of 2 children and 49 (33%) had a total of 3 or more children in the household.

### Survey measure

The Family Recreational Facility and Activity Perception Survey (Stanton-Chapman and Schmidt, 2014) was designed to gather information on family members' perceptions of their current recreational activities, available community facilities, and their perceptions regarding playground equipment for toddlers and preschoolers with disabilities (ages 2–5 years). The survey was anonymous and contained open- and close-ended questions. To strengthen external validity, an initial version of the survey was reviewed by five parents who have children with a disability (ages 2–5 years) but did not participate in the current study, a nationally certified playground inspector with knowledge of ADA laws, and three early childhood special education (ECSE) professors with expertise in child development, inclusion and playground equipment. The survey questions were revised based on their input (e.g., revisions in the wording of the questions, deleted 'leading' questions, added more answer choices to reflect the low incidence population). Twenty families with a child with a disability (ages 2–5 years) who did not participate in the current study piloted the revised survey. Final revisions were made to the survey based on the input provided from pilot families (e.g., minor changes in the wording of the questions).

The final survey consisted of 21 questions. Sixteen of the questions were close-ended and focused on demographics and preferences (see Appendix S1). These questions asked participants to select the most appropriate answer from a list of choices. Five of the questions were open-ended where the respondents provided a written response. The current study reports data on five close-ended questions (e.g., satisfaction with current playgrounds for children of ages 2–5 years; categories of disability represented by the families; types of recreational facilities or activities or activities frequented by survey respondents; reasons why participants' child with a disability could not fully participate in a playground's offerings; whether or not their closest community playground offered a separate play area for children of ages 2–5 years). The current study reports data on three open-ended questions: (i) 'If you could design a fully inclusive playground for children with disabilities, what would it look like (i.e., your dream playground)?'; (ii) 'Based on your personal experience, describe the types of experiences your child with a disability has had on a playground'; and (iii) 'Based on your personal experience, describe the types of experiences YOU have had when you visited a playground with your child with a disability'.

### Data collection

Data were collected during a 2-month period. Programme directors who agreed to help with family recruitment were

emailed a link to the anonymous, online survey and were provided with paper surveys and stamped envelopes addressed to the first author's university address. Email reminders containing a link to the survey were available upon request and were sent to programme directors every 2 weeks until the end of the data collection period.

To be included in the study, caregivers had to have a child with a disability (ages 2–5 years) living in their immediate household. Caregivers who chose to complete the online survey clicked on the emailed link and were taken to an electronic consent letter. The survey appeared after the caregiver agreed to participate. Caregivers were permitted to complete the online survey one time. It was not possible to control how many paper-based surveys each caregiver completed as programme directors distributed these surveys. The survey took 15–20 min to complete. Caregivers were not compensated for their participation. Of the 149 participants, 146 (98%) completed a web-based survey and 3 (2%) completed the paper-based survey.

#### *Data analysis*

Data from the online and paper-based surveys were entered into an Excel spreadsheet. Excel's summation function conducted a frequency count of responses. A chi-squared analysis revealed there were no demographic differences between caregivers who completed an online or paper-based survey.

Open-ended responses were also entered into an Excel spreadsheet. The responses were coded by two research staff with Master's degrees in ECSE and more than 5 years of classroom experience. A qualitative methodology expert provided feedback on methodological issues during the analysis. Using a content analysis procedure, caregiver responses were coded at the word or phrase level to capture the perspective that caregivers were describing. It was possible that one response contained multiple key ideas. For example, a response to the question about a dream playground (e.g., having a place where my child with autism can possibly meet new friends and satisfy his sensory needs) was coded in two different categories (friendship building, sensory).

To develop initial categories, one research staff member randomly selected and reviewed 25% of caregiver answers (37 responses) for each open-ended question and noted key ideas that were represented in each of the responses. The same two research staff members then reviewed remaining caregiver responses looking for similarities across caregivers to develop initial themes. Once themes were identified, research staff defined the themes using exemplars from caregiver answers. Responses that represented discrete units of thought and answered the question were categorised by the theme they exemplified. Incomplete answers that did not answer the question posed were sorted into a

miscellaneous category that were analysed after initial themes were developed.

After developing initial themes, research staff members reviewed an additional set of 37 responses (25%) to examine the extent to which the initial themes were evident in this additional sample. They independently coded the caregiver responses using the previously identified categories. Additional categories were developed, while others were combined based on a review of the miscellaneous categories. These revised categories were then used to code all of the responses using NVivo; a qualitative software program (QSR International Inc, 2007). Twenty per cent ( $n = 30$ ) of the surveys were double-coded through random selection for reliability purposes, yielding an interrater reliability of 87%. Disagreements were resolved through discussion to achieve mutual consensus among the coders.

#### **Results**

A total of 149 surveys were completed. Table 1 reports the categories of disability represented by the children discussed by caregivers who answered the survey. The most frequent disabilities were as follows: (i) specific language impairment ( $n = 94$ , 63%); (ii) developmental delay ( $n = 75$ , 50%); and (iii) autism ( $n = 71$ , 48%). None of the caregivers reported having children with deaf/blindness or visual impairments.

#### *Responses to close-ended questions*

The type of recreational facilities or activities frequented by participants is reported in Table 2. For this question, caregivers were asked to indicate if *any* family member went to the recreational facility in question or participated in the given recreational activity. The caregiver's child with a disability did not have to be in attendance for an

**Table 1: Categories of disability represented by the families (N = 149)**

Disability categories	Number of participants	Percentage of participants
Specific language impairment	94	63
Developmental delay	75	50
Autism	71	48
Orthopaedic impairment	48	32
Intellectual disability	43	29
Other health impairment	22	15
Behaviour disorder	5	3
Hearing impairment	3	2
Learning disability	1	1
Deaf/blindness	0	0
Visual impairment	0	0

*Note.* Participants could respond to multiple categories so percentages do not equal 100%.

**Table 2: The type of recreational facilities or activities frequented by survey respondents (N = 149)**

Recreational facility or activity	Number of participants	Percentage of participants
Playgrounds*	113	76
Community swimming pool*	97	65
Walking, hiking, biking*	87	58
Picnic shelter*	52	35
Soccer fields*	52	35
Softball or baseball fields*	45	30
Basketball courts*	43	29
None*	16	11
Public golf course	9	6
Track	2	1
Spray grounds*	2	1

Notes. Participants could respond to multiple categories so percentages do not equal 100%. A \* next to the recreational facility or activity indicates the child with a disability participated.

affirmative response. The purpose of this question was to ascertain whether or not the participant or his/her family members were interested in any recreational facility or activity. For this reason, answer choices included options other than playgrounds (i.e., swimming pools, hiking trails). Non-interest in any of the options may mean the participants are less likely to take their children to a playground. Playgrounds were the most frequented recreational facility ( $n = 113$ , 76%). Other common responses included a community swimming pool ( $n = 97$ , 65%), walking/hiking/biking ( $n = 87$ , 58%), and picnic shelters ( $n = 52$ ; 35%). Children with disabilities were reported at all recreational facility and activity options with the exception of track ( $n = 2$ , 1%) and public golf course ( $n = 9$ , 6%).

Caregivers were asked to comment on their overall satisfaction with current playgrounds targeting toddlers and preschoolers with disabilities. Overall, caregivers were not satisfied with current playgrounds ( $N = 141$ ; 95%). Participants were also asked to consider reasons why they thought their child with a disability was not able to fully participate in the activities offered by a playground (see Table 3). Most caregivers ( $N = 97$ , 65%) believed that the playground was not appropriate for their child with a disability. Other concerns included: their child was not interested in the playground ( $N = 82$ , 55%), worries about the child's safety ( $N = 52$ , 35%), and not feeling comfortable bringing their child to a playground due to possible bullying or teasing ( $N = 37$ , 25%).

Caregivers were asked whether or not their closest community playground offered a separate play area for children of ages 2–5 years. The majority of caregivers ( $N = 111$ , 74%) reported that their closest community playground did not offer a separate play area for children

**Table 3: Reasons why participants' child with disabilities could not fully participate in a playground's offerings (N = 149)**

Reasons given	Number of participants	Percentage of participants
Facility not appropriate (e.g., no adaptations made)	97	65
Doesn't offer activities child likes	82	55
Worried about child's safety	52	35
Not comfortable bringing child (e.g., social stigma, teasing)	37	25
Not interested	16	11
No other kids with disabilities present	9	6
Rules are too restrictive	3	2
Couldn't afford to use it	2	1
Child's disability prevents it (e.g., significant health concerns)	2	1

Note. Participants could respond to multiple categories so percentages do not equal 100%.

under 5 years. Thirty-eight caregivers (26%) answered yes to the question.

#### *Responses to open-ended questions*

When asked to design a dream playground, four themes emerged: (i) the need for an inclusive playground for young children only; (ii) a playground that would allow a child with a disability to develop friendships; (iii) a playground that would provide a peer support network for caregivers who have a child with a disability; and (iv) a need for a playground to meet the needs of young children with sensorimotor concerns. The first theme centred on a need for an inclusive playground facility for the toddler and preschool population (ages 2–5 years). This was defined as a playground facility where all toddlers and preschoolers, including those with disabilities, can come and play together. A caregiver noted, 'Inclusive playgrounds are built for older kids. While the [playground facility] signs say the playground is for kids age 2 and older, my child is too little to reach anything'. Another caregiver mentioned the lack of a separate play area for children younger than 5 years: 'My neighborhood has an inclusive playground, but there are too many big kids there for my child to play safely. They need to build a new play area for the young kids or fence off an area of the current playground so the little ones can play'. A third caregiver discussed a safety concern with the neighbourhood playground which has two tall towers with poles and slides: 'The platform is about 10 feet tall with open sides. My child could easily fall while trying to sit down on the slide'. Falls from playground equipment and other safety concerns expressed by caregivers (e.g., older children who are larger than toddlers and preschoolers) greatly limit what caregivers allow their young children to do while playing on a playground.

A second theme revolved around the need for a playground to assist in friendship building in young children with disabilities. This theme was defined as a playground that brought children with and without disabilities to socially interact with one another. One caregiver commented, 'My daughter has Down Syndrome. I enrolled her in a preschool ballet class, but I was asked to withdraw her because she couldn't keep up. It's hard for her to develop friendships if she can't be around other kids due to her disability'. Another caregiver added, 'It would be nice if the YMCA would do team building activities to encourage [typical] children to play with children with disabilities. Team building activities teach children skills that are needed in friendship building'.

The third theme focused on a playground that could help develop a peer support network for caregivers who have a child with a disability. This theme was defined as a group or network that linked caregivers who have a child with a disability to other caregivers who have a child with a disability to enhance caregiver self-esteem and social functioning. A caregiver noted, 'I feel isolated from my friends. My friends' children have preschoolers who are potty-trained, but my 4-year-old still wears diapers. It would be nice to have a place for my child to play where all of the other kids are like mine [have a disability]'. A second caregiver added, 'I can't find an activity that my child with a disability can do that could give me a group of parents to talk to'. Within this theme, participants expressed that caregivers who had older children with disabilities had social support networks as part of their child's recreational activity. As one caregiver indicated, 'I tried to enroll my son in Miracle League Baseball [an organized baseball league for children with disabilities], but he is only four. When he turns five, I can enroll him and be around other parents who have kids with disabilities'.

The fourth theme was the need for a playground to meet the needs of children who have sensorimotor concerns. One caregiver reflected, 'My child enjoys music. Very few playgrounds have musical equipment. If they do, the equipment is typically broken'. A second caregiver discussed the need for more sandboxes: 'It is hard to find a playground that has a sandbox anymore. I know doctors say sandboxes are not healthy, but my child loves to play in the sand. He likes how it feels'.

When asked to describe the types of experiences their child with a disability had on a playground, two themes emerged. The first theme revolved around the segregation that takes place on the playground between children with disabilities and children who are typically developing. One caregiver noted, 'My child has a motor impairment and cannot physically keep up with her peers. They run from one area to another and she is always left behind because she is slower'. The second theme focused on the lack of accessible equipment for children with physical

disabilities. A caregiver mentioned: 'My child uses a wheelchair. When she visits playgrounds, the majority of the activities available to her are at the ground level. The ground-level activities are not as fun as being on the [playground] equipment'.

The last open-ended question posed to caregivers was to describe the types of experiences that they have had when they have taken their child with a disability to a playground. One theme emerged from the answers—frustration and embarrassment. One caregiver reflected, 'My child has a severe language impairment. He hits and bites other children when he cannot express what he wants. I try to be next to my child as much as possible, but sometimes I am not as quick to get where he is at. If he bites another child, the child's parent is usually mad at me for not controlling my child and I get embarrassed or frustrated depending on the parent's reaction to the bite mark'. Another caregiver discussed the need for parents to educate their children on accepting children with disabilities: 'My preschoolers and I were walking on a playground when we encountered two children running. One child said, 'watch for the retard.' I was immediately angry, but I know it is not as much the child's fault but his parents' fault for not teaching him to be accepting of all children'.

## Discussion

The results of the current study demonstrate that social participation barriers continue to remain for families who have young children with disabilities (ages 2–5 years) despite the passing of international human rights standards targeting individuals with disabilities and a global focus in improving the overall well-being of children with disabilities. One hundred and thirty-three caregivers (89%) indicated that a family member went to the recreational facility in question or participated in the given recreational activity in the past year. The most popular responses were playgrounds, community swimming pools, walking, hiking or biking, or visiting a picnic shelter. In fact, children with disabilities were reported at all recreational facility and activity options with the exception of track ( $n = 2$ , 1%) and public golf course ( $n = 9$ , 6%). A similar finding was reported by Mactavish and Schleien (2000) with swimming, walking and riding bikes the most popular family activities. The authors characterised these activities as physical endeavours that occurred in community settings regardless of family composition (e.g., single caregiver, married caregivers) or employment status (e.g., dual income families, single income families). Overall, data from the current study demonstrate that caregivers overwhelmingly pursue social participation recreational activities for their toddler or preschool child with disabilities.

One hundred and thirteen caregivers (76%) reported that they visited a community playground in the past year. The majority of caregivers (95%) expressed their

disappointment with current playgrounds available to toddlers and preschoolers (ages 2–5 years). Of the caregivers who visited a community playground, 111 (74%) answered that their closest community playground did not offer a separate play area for children under 5 years. This is alarming as children 5 years and younger have different developmental needs than older children. For example, the United States Consumer Product Safety Commission (2015) provides a list of age appropriate equipment for ages 2–5 years: (i) crawl areas close to the ground, (ii) low platforms such as ramps and ladders, (iii) ramps with attachments for grasping, (iv) low tables for sand, water and manipulative materials, (v) tricycle paths with various textures, (vi) sand areas with covers, and (vii) short slides no taller than four feet. Age appropriate equipment for children 5 years and older include rope or chain climbers on an angle, climbing pieces, slides and sliding poles, and horizontal bars. If toddler and preschool children play on a playground that is inappropriate for their developmental abilities, their risk for injury is quite high. Caregivers are expected to know what playground equipment is appropriate and what is inappropriate for their child's developmental needs. In general, caregivers are not able to categorise age appropriate playground equipment by age (O'Brien, 2009).

#### *Playgrounds and inclusion*

Caregivers overwhelmingly indicated that their child with a disability could not fully participate on a playground. Reasons for non-participation include inappropriate facilities for their child with a disability, a lack of interest in the playground by the child with a disability, worries about the child's safety, and not feeling comfortable bringing their child to a playground due to possible bullying or teasing. While this result is not surprising, the finding highlights that there are 'holes' in existing policy which discriminates some or all children with disabilities. The current study's findings mirror studies which have investigated reasons for a lack of participation in recreational activities for adults and school-age children with disabilities (e.g., Rimmer, 2005; Rimmer, Riley, Wang, et al., 2004; Solish, Perry and Minnes, 2010). For example, Rimmer (2005) and Rimmer, Riley, Wang, et al. (2004) reported that many adults with disabilities do not participate in recreational activities due to architectural barriers (e.g., lack of accessible bathrooms along trails, limited number of handicap parking spaces), organisational policies and procedures (e.g., lack of accessible equipment, employees not trained to work with individuals with disabilities), discrimination (e.g., trainers or coaches not willing to assist individuals with disabilities) and social attitudes (e.g., false assumptions about individuals with disabilities). Thus, despite the great strides towards expanding the rights of individuals with disabilities at the international and national levels, many obstacles still stand in the way at local levels preventing those with disabilities from participating fully on the community playground.

#### *Dream playgrounds and activities*

The data from caregivers of children with disabilities expand our understanding of caregivers' dream playground for their toddler or preschool child. These findings indicate that caregivers desire a playground that is more appropriate for their children's age range (ages 2–5 years) and sensorimotor needs. Sixteen states have passed legislation or regulations addressing playground safety for playgrounds targeting children with disabilities under the age of 5 years and the need for separate play areas for the 2- to 5-year population (U.S. Consumer Product Safety Commission, 2015). Legislation in nine of the 16 states apply to child care programmes who serve children with disabilities; not public playgrounds. The remaining seven states have safety laws which apply to child care programmes and public playgrounds targeting toddlers and preschoolers with disabilities, but the laws vary (United States Consumer Product Safety Commission, 2015). California, New Jersey, Oregon, and Rhode Island laws apply to all public playgrounds and address ADA standards for children with disabilities. In Texas and Michigan, the playground safety standards for children with disabilities apply only to newly built playgrounds. Connecticut allows communities to voluntarily apply the safety guidelines for young children with disabilities. The 34 states which do not have playground safety laws for young children with disabilities and do not outline the need for separate play areas for toddlers and preschoolers wrongfully assume playground developers and communities adhere to international and national standards regarding the rights of young children with disabilities (ages 2–5 years) when developing community playgrounds. Based on what caregivers say they desire in a dream playground for their child with a disability, it is apparent that recent international and national standards and recommendations on the rights of individuals with disabilities have had little effect on the development of playgrounds and activities for the 2- to 5-year population. It is worth noting that the standards coming from organisations such as UNICEF, the WHO, and CEC/DEC have no specific legal authority and are in no way legally binding for countries, but the standards are well researched and are based on expert opinion. Limitations of civil rights policies, poor enforcement of international and national policies at the community level, limited funding and societal prejudices keep many young children with disabilities from being included on the community playground.

These results also emphasise the value of providing playgrounds that meet the unique needs and play behaviours of children without ambulatory disabilities. For example, children with sensory processing disorders tend to engage in solitary play that is relatively immature for their chronological age and do not include the use of the available playground equipment (Cosbey, Johnston, Dunn, et al., 2012). Indeed, caregivers who had children with autism, in the current study, consistently mentioned how their child plays alone on a typical playground and often does not use the equipment provided. Fowler (2007) discussed

the need to provide more structured sensory experiences to the physical environment for children with sensory needs. More structured sensory experiences allow the child with a sensory need to maximise their participation on a community playground. Kodjebacheva, Sabo, Brennan, et al. (2015) recommended adding sensory gardens, Braille play elements, musical instruments and other noise making elements to meet the needs of children with sensory needs.

Results of the present study concur with previous findings that children with disabilities face segregation on a playground (e.g., Stanton-Chapman and Schmidt, 2016; Stephens, Scott, Aslam, et al., 2015; Ytterhus, 2012), encounter a lack of accessible playground equipment (e.g., Kodjebacheva, Sabo, Brennan, et al., 2015; Stanton-Chapman and Schmidt, 2016; Stephens, Scott, Aslam, et al., 2015); and have caregivers who experience frustration and embarrassment when taking their child to an inclusive playground (e.g., Bjorgvinsdottir and Halldorsdottir, 2014; Faw and Leustek, 2015; Yang, Bryne and Chiu, 2016). The findings are important for early childhood policy-makers because current accessible playgrounds have not had a major impact on the health and the social-emotional well-being of young children with disabilities (ages 2–5 years) and caregiver stress levels despite international and national policies on social participation for individuals with disabilities. Reducing the stress associated with caring for a child with a disability and improving the likelihood of optimal social-emotional and health outcomes for the child with a disability will require addressing factors on a system-wide level such as community-level support groups, stress relief strategies and exercise (Findler, Jacoby and Gabis, 2016).

### *Limitations*

This study had several limitations. First, this study involved heterogeneous groups of participants including mothers, fathers, grandparents and foster parents. It is likely that caregivers who responded to the survey tended to be those individuals who were more invested in the topic. Second, the sample only represents perspectives of caregivers in a specific geographic region of the United States. It is possible that results may vary in other countries or in different geographic locations in the United States. Third, one of the challenges with survey responses is the accuracy of respondent reporting and whether their given responses reflect actual experiences and beliefs or socially desirable answers. The use of multisource and multimethod strategies for needs assessment including interviews and observation is recommended in order to provide a more reliable data set to guide the development of fully inclusive recreational facilities.

### *Implications*

Caregivers of children with disabilities often report challenges in locating playgrounds that accommodate the range of ages, skills and interests of *all* of their children

(Jeanes and Magee, 2012) and find that play equipment designed to foster creative play in typically developing children is not sufficient to support such play in their child with a disability. Existing literature suggests that young children with disabilities are often marginalised within typical play spaces especially if such children have sensory needs (Yantzi, Young and McKeever, 2010). Since the release of the ADA Accessibility Guidelines for Play Areas (2000) and the ADA Standards for Accessible Design (2010), play space developers have replaced their quest for building play spaces that have social value to building play spaces that comply with the minimum accessibility standards as set forth under ADA. Devine and Parr (2008) advocate that playgrounds should allow all children to attain goals, be active participants in play, and have autonomy and choice over their play experiences. For children with disabilities, it is important that communities go beyond what is minimally required by law when building playgrounds for children of ages 2–5 years and include the Principles of Universal Design in the overall design (Ripat and Becker, 2012). This means that all children are able to play together on the playground, they can play with the available equipment in a way that works best for them, the playground is safe for all children, and the playground requires low physical effort to access.

Although international standards that promote the rights of individuals with disabilities are recognised by the international community, legislation at the national and local levels are fundamental in facilitating social change to improve playgrounds for the 2- to 5-year-old population. Caregivers, advocacy organisations and special education professionals must serve as the ‘voice’ in public discourse to make change happen. Successful legislation is often achieved when the rights of individuals with disabilities is framed within the larger context of civil rights (TASH, 2016). Social justice principles for toddlers and preschoolers with disabilities should (i) assume all children are competent; (ii) are welcomed as valued members of the community, (iii) can fully participate and play alongside their same-age peers on a community playground, and (iv) have developmental needs that vary from children older than 5 years.

---

### *Address for correspondence*

Tina L. Stanton-Chapman, PhD,  
Early Childhood Education and Human Development,  
College of Teacher Education, Criminal Justice, and  
Human Services,  
University of Cincinnati,  
One Edwards Center,  
Cincinnati,  
OH 45221  
USA.  
Email: tina.stanton-chapman@uc.edu.

---

## References

- ADA Accessibility Guidelines for Play Areas (2000) <<http://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/background/ada-accessibility-guidelines-for-play-areas>> (accessed 12 February 2015).
- ADA Standards for Accessible Design (2010) <[http://www.ada.gov/2010ADASTandards\\_index.htm](http://www.ada.gov/2010ADASTandards_index.htm)> (accessed 12 February 2015).
- Bjorgvinsdottir, K. & Halldorsdottir, S. (2014) 'Silent, invisible, and unacknowledged: experiences of young caregivers of single parents diagnosed with multiple sclerosis.' *Scandinavian Journal of Caring Sciences*, 28 (1), pp. 38–48.
- Cosbey, J., Johnston, S. S., Dunn, M. L. & Bauman, M. (2012) 'Playground behaviors of children with and without sensory processing disorders.' *Occupation, Participation, and Health*, 32 (2), pp. 39–47. doi:10.3928/15394492-20110930-01.
- Council for Exceptional Children (CEC)/Division for Early Childhood (DEC) (2014) 'DEC recommended practices in early intervention/early childhood special education 2014.' <<http://www.dec-sped.org/recommendedpractices>> (accessed 15 November 2015).
- Devine, M. A. & Parr, M. G. (2008) "'Come on in but not too far:' Social capital in an inclusive leisure setting.' *Leisure Sciences*, 30, pp. 391–408.
- Faw, M. H. & Leustek, J. (2015) 'Sharing the load: an exploratory analysis of the challenges experienced by parent caregivers of children with disabilities.' *Southern Communication Journal*, 80 (5), pp. 404–15.
- Findler, L., Jacoby, A. K. & Gabis, L. (2016) 'Subjective happiness among mothers of children with disabilities: the role of stress, attachment, guilt, and social support.' *Research in Developmental Disabilities*, 55, pp. 44–54.
- Fowler, S. (2007) *Sensory Stimulation: Sensory Focused Activities for People with Physical and Multiple Disabilities*. London: Jessica Kingsley Publishers.
- Jeanes, R. & Magee, J. (2012) 'Can we play on the swings and roundabouts?: Creating inclusive play spaces for disabled young people and their families.' *Leisure Studies*, 31 (2), pp. 193–210.
- Kodjebacheva, G., Sabo, T., Brennan, M. & Suzuki, R. (2015) 'Public playgrounds for children living with physical and sensory impairments in poor and affluent areas in Southeast Michigan: safety, accessibility, and availability of sensory elements.' *Children, Youth and Environments*, 25, pp. 132–46.
- Mactavish, J. B. & Schleien, S. J. (2000) 'Exploring family recreation activities in families that include children with developmental disabilities.' *Therapeutic Recreation Journal*, 2, pp. 132–53.
- O'Brien, C. (2009) *Injuries and Investigated Deaths Associated with Playground Equipment, 2001–2008*. Washington, DC: United States Consumer Product Safety Commission.
- Parkes, J., McCullough, N. & Madden, A. (2010) To what extent do children with cerebral palsy participate in everyday life situations? *Health and Social Care in the Community*, 18, 304–315. doi:10.1111/j.1365-2524.2009.00908.x
- People with Disability Australia (2015) *The Social Model of Disability*. <<http://www.pwd.org.au/social-model-disability>> (accessed 3 March 2016).
- QSR International Inc. (2007) NVivo (Version 7). [Qualitative Analysis Software]. <[http://www.qsrinternational.com/products\\_nvivo.aspx](http://www.qsrinternational.com/products_nvivo.aspx)> (accessed October 15, 2014).
- Rimmer, J. H. (2005) 'The conspicuous absence of people with disabilities in public fitness and recreation facilities: lack of interest or lack of access?' *American Journal of Health Promotion*, 19 (5), pp. 327–9.
- Rimmer, J. H., Riley, B., Wang, E., Rauworth, A. & Jurkowski, J. (2004) 'Physical activity participation among persons with disabilities: barriers and facilitators.' *American Journal of Preventative Medicine*, 26 (5), pp. 419–25.
- Ripat, J. & Becker, P. (2012) 'Playground usability: what do playground users say?' *Occupational Therapy International*, 19 (3), pp. 144–53. doi:10.1002/oti.1331.
- Shakespeare, T. & Watson, N. (2002) 'The social model of disability.' *Research in Social Science and Disability*, 2, pp. 9–28.
- Shikako-Thomas, K., Bogossian, A., Lach, L., Shevell, M. & Majnemer, A. (2013) 'Parents' perspectives of the quality of life of adolescents with disabilities: trajectory, choices and hope.' *Disability and Rehabilitation*, 35 (25), pp. 2113–22.
- Solish, A., Perry, A. & Minnes, P. (2010) 'Participation of children with and without disabilities in social, recreational, and leisure activities.' *Journal of Applied Research in Intellectual Disabilities*, 23 (3), pp. 226–36.
- Stanton-Chapman, T.L. & Schmidt, E. L. (2014) *Family Recreational Facility and Activity Perception Survey*. University of Virginia: Unpublished survey instrument.
- Stanton-Chapman, T. L. & Schmidt, E. L. (2016) Special education professionals perceptions toward accessible playgrounds. *Research and Practice for Persons with Severe Disabilities*, 41 (2), 79–89.
- Stephens, L., Scott, H., Aslam, H., Yantzi, N., Young, N. L., Ruddick, S., & McKeever, P. (2015) The accessibility of elementary schools in Ontario, Canada: Not making the grade. *Children, Youth, and Environments*, 25 (2), 153–175.
- TASH (2016) *Inclusive Education*. <<http://tash.org/advocacy-issues/inclusive-education/>> (accessed 18 May 2016).
- UNICEF (2011) *The Right of Children with Disabilities to Education: A Rights Based Approach to Inclusive Education*. New York: UNICEF.
- UNICEF (2013) *Children and Young People with Disabilities Fact Sheet*. <<http://www.unicef.org/disab>

- ilities/files/factsheet\_AS\_Web\_NEW.pdf> (accessed 11 March 2016).
- UNICEF (2016) *For Every Child, a Fair Chance: The Promise of Equity*. New York: UNICEF.
- United Nations (1989) *Convention on the Rights of the Child*, G.A. Res.44/25, U.N., GAOR, 44thSess., Supp. No.49, U.N.A/44/49\_(Nov.20). <<http://www.unicef.org/crc?>> (accessed 11 March 2016).
- United Nations (2006) *Convention on the Rights of Person with Disabilities*. New York: United Nations.
- United Nations (2007) *Disability at a Glance*. New York: United Nations.
- United States Consumer Product Safety Commission (2015) *Public Safety Handbook*. Bethesda, MD: United States Consumer Product Safety Commission.
- World Health Organization (WHO) (2001) *International Classification of Functioning, Disability, and Health (ICF)*. Geneva: World Health Organization (WHO). <<http://apps.who.int/classifications/icfbrowser/>> (accessed 1 January 2016).
- World Health Organization (WHO) (2008) *Primary Health Care: Now More Than Ever (ICF)*. Geneva: World Health Organization (WHO). <<http://www.who.int/whr/2008/en/>> (accessed 1 January 2016).
- Yang, X., Bryne, V. & Chiu, L. (2016) 'Caregiving experience for children with intellectual disabilities among parents in a developing area of China.' *Journal of Applied Research in Intellectual Disabilities*, 29 (1), pp. 46–57.
- Yantzi, N., Young, N. & McKeever, P. (2010) 'The suitability of school playgrounds for physically disabled children.' *Children's Geographies*, 8, pp. 65–78.
- Ytterhus, B. (2012) 'Everyday segregation amongst disabled children and their peers: a qualitative longitudinal study in Norway.' *Children & Society*, 26 (3), pp. 203–13.
- Yude, C., Goodman, R. & McConachie, H. (1998) 'Peer problems of children with hemiplegia in mainstream primary schools.' *Journal Child Psychiatry*, 39 (4), pp. 533–41.

### Supporting Information

Additional Supporting Information may be found online in the supporting information tab for this article:

**Appendix S1** Family Recreational Facility and Activity Perception Survey.