

Children need others : Triggers for playfulness in pre-schoolers with multiple disabilities living within an informal settlement

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ABSTRACT

It is undisputed that play is the primary occupation of children and that playfulness is an essential element of play. If more were understood about the circumstances allowing for playfulness, it would be possible for therapists to create optimal conditions to promote it. This paper highlights the findings of an instrumental collective case study describing triggers for playfulness for pre-schoolers with multiple disabilities. The pre-schoolers were observed in a school setting, as well as at home, to determine potential triggers for playfulness. Results from the pre-school show positive and negative conditions both allowing for playful responses. Being included or excluded, experiencing adversity, and noticing others merely nearby were all conditions that saw disabled children respond playfully. Observations at the children's homes revealed only positive conditions as pre-requisites for playful behaviour. These results provide some insight into what inclusive education may offer disabled children.

Key words: Trigger, Playfulness

Introduction

Research on playfulness as observed in children with different forms of disability has proliferated within occupational therapy literature recently. Most of the studies were carried out using standardised scales, particularly the Test of Playfulness (ToP)^{2, 3, 4, 5} in western contexts. Whether playfulness manifests itself in the same way in a variety of socio-cultural, especially low-income settings is not clear. What is particularly lacking in literature is a description of conditions that allow for playfulness. The playfulness of children with disabilities in disadvantaged communities is of particular interest in the South African context as these members of society are unable generally to access educational as well as occupational therapy services⁶. This study therefore sought to explore the expression of playfulness among disabled children in a low socio-economic setting, with particular focus on what triggered their playfulness.

Context of the study

The study was conducted in an informal settlement community in the Western Cape, South Africa. The majority of the community in the settlement lives in abject poverty. The prevalence of multiple disabilities is assumed to be high due to difficulty in accessing medical services during pregnancy and childbirth for the mothers⁷, and early childhood services for the children⁶. Observation of play activity took place during free play time at school and at home after school. As is typical for informal settlement communities, there were no formal play-spaces or playgrounds in which the children could play. At the children's homes, observations took place in the small shacks or in the narrow streets between shacks. The pre-school attended by the children in this study is run by a non-governmental organisation and was originally intended only for disabled children. Due to the dire need for a conventional pre-school in the area, able-bodied children were also welcomed, ultimately dominating in number. At the time of the research the pre-school catered for approximately 35 children and of these 7 had physical and/or cognitive disabilities.

The current policy of the National Department of Education strongly promotes the inclusion of mild to moderately disabled children in mainstream schools. Historically it is this group of children who have experienced the most severe limitations concerning ac-

cess to the education system⁸. Although there is general agreement on the merits of the inclusive education policy by all stakeholders^{9,10}, translating this into reality remains a challenge^{9, 11}. Differing views on implementation⁹, and limited capacity within schools to provide staff with expertise and facilities for learners with special needs has meant that these children have continued to face exclusion from accessing educational opportunities¹⁰.

Literature review

Playfulness

Recent literature on play suggests that the way in which a child approaches play is more important in defining play than the play activity itself¹². This disposition has been referred to in literature, as playfulness^{1, 2, 3, 4, 5, 13}. Playfulness is understood as a quality of a child's play involving flexibility and spontaneity rather than the child's skill in performing specific play activities². Playfulness can be determined within any transaction by the presence of four elements, namely, intrinsic motivation, internal control, the freedom to suspend reality and framing¹³. Intrinsic motivation refers to the aspect of the activity that promotes involvement, rather than to an external reward. Internal control suggests that the individual is largely in control of their actions and to an extent, the activity's outcome. Freedom to suspend reality means that the individual chooses how close to objective reality the transaction will be and includes abandoning the usual meaning of objects. Framing refers to the child's ability to give and respond to social cues¹³. Hamm² states that if playfulness is a child's disposition to play, and play is the primary occupation of young children, then assessment of playfulness in addition to the assessment of play skills should be considered in occupational therapy with children.

Play and Playfulness in children with disabilities

It is widely accepted that any form of disability poses a significant limitation to play behaviour and that disabled children do not have the same play skills as their typically developing peers^{2, 3, 13, 14, 15, 16}. Missiuna and Pollock¹⁷ suggest that disabled children may experience so many barriers to play that play deprivation can become a secondary disability.



Barriers may be either within the child or imposed by caregivers, society, or the physical environment. Playfulness as a quality that has been associated with adaptability² may be a crucial aspect of play assessment and intervention for children with disabilities.

There have been conflicting research findings regarding the playfulness of children with physical disabilities. Okimoto et al⁴ found significant differences in playfulness between young children with cerebral palsy and developmental delays and young children with no developmental disabilities. This was supported by Hamm² who found that children with developmental disabilities were less playful than their peers without developmental disabilities. Harkness and Bundy³ on the other hand, discovered in their study that children with a physical disability were no less playful than their able bodied peers but that the parents of the disabled participants tended to choose environments that were supportive of their children's play needs³. This could have created a more positive impression of their playfulness profile than was probably the case. Howard¹⁸ puts forward the view that children with physical disabilities experience less rich play than able bodied children. Children with disabilities tended to spend more time in the company of adults and had less variety in their out of home pursuits. Play environments were a point of difference and a high degree of isolation resulted from disabled children playing in their own gardens and not in the streets outside.

What triggers playfulness

Studies that specifically consider the role of the environment, both physical and social, in the expression of playfulness^{2,5,13} are limited. In her study, Hamm found that the environment possibly played a more important role in supporting playfulness for children with developmental disabilities compared to those without. What has also not been sufficiently explored is the role that different contexts play in either fostering or inhibiting playfulness^{2,5}. The authors of the Test of Playfulness (ToP) suggest that a complete picture of playfulness may be obtained by observing play in different environments. This acknowledges that the disposition to play may be expressed differently in different contexts⁵.

Inclusion of disabled children in mainstream schools

The Education White Paper^{6,19} clearly outlines the government's policy towards inclusion of mild to moderately disabled children in mainstream schools. Inclusive education involves acknowledging that all children and youths can learn and that it is the school system that often needs to adapt to accommodate the learner's needs and not the other way around. Although the white paper explains how the government is determined to create special needs education as an integrated component of the education system, many pre-schools in South Africa are still segregated. The relatively successful integration of disabled children in mainstream schools in developed countries is not without its challenges^{10,20,21,22}.

Disabled children often experience peer rejection from their able-bodied counterparts²³. This rejection has negative implications for the formation of friendships, depriving the children of one of the most meaningful social aspects of childhood¹⁴. It has been suggested that the integration of disabled children into mainstream education during the foundation phase could alleviate some of the challenges, as much of the social context at this level is play-based²⁴. Tanta et al²⁴ recommend pairing children who have lower developmental levels with children who have higher developmental levels in order to enhance the development of social participation and play in preschool children.

Researching Play and Playfulness

Researching play or aspects of it comes with numerous challenges. Some of these stem from the fact that playful behaviour is difficult to define^{1,13}, and that as a contextual behaviour, the researcher inadvertently plays a part in what will ultimately be captured²⁵. Extending from a well accepted definition of playfulness, and elements that constitute it, Metzger, McNicholas and Bundy developed the Test of Playfulness (ToP)¹³. This test has been refined and validated and has become the most cited tool for the measurement of playfulness^{2,3,5}. Although there are other measurements, what is particularly useful about the ToP is that it provides a measure of playfulness without penalties for motor skill deficits³. Also, unlike the Children's Playfulness Scale (CPS), another useful measure, the ToP does not measure cognitive spontaneity as a direct attribute to playfulness. It therefore may offer some greater potential for use with intellectually impaired individuals. A particular challenge in administering the ToP in the South African context is that, as a standardised test developed in the United States of America, it has only been normed for that particular context. A similar problem is found with other standardized tests of play developed in Western contexts, which do not take into account the forms and meaning of play in various under-resourced populations²⁵. Field observations remain the most accessible means towards beginning to have a sense of the picture of play outside of Western contexts²⁵. The ToP however can serve as a useful guide for qualitative researchers in knowing what elements of playfulness to look for.

Methodology

A descriptive qualitative study approach was selected with features of instrumental collective case study design²⁶. Purposive sampling was used to select the disabled children for the study. Only children attending the preschool who had an obvious disability, and whose parents could be accessed for consent were selected. Two girls and a boy aged between 6 and 8 were selected to participate in the study. Due to a lack of records, observations of the participants' functioning were the only means of describing impairment or disability (See *Table 1* for further detail). Written consent from the staff

Child Description	Age	Gender	Description of Physical Disability	Self-care	Other impairments
Child A	6 years old	Female	* Cerebral palsy with right hemiplegia * Increased tone in right arm through intentional use. * Mobilised independently, although slow speed and unsteady gait.	* Independent	* None other noted or observed
Child B	7 years old	Male	* Assumed cerebral palsy with spastic quadriplegia * Slow mobility with unsteady gait; tired easily. * Severe ataxia – falls a great deal.	* Largely dependent on his mother	* Intellectual impairment - not formally tested * Non-verbal, communicated using gestures and physical contact.
Child C	8 years old	Female	* Diagnosis unknown – mother contracted rubella during pregnancy * Mobilised with visual guidance from others * Associated hand gestures when walking	* Completely dependent on mother.	* Profound intellectual impairment. * Deaf * Partially sighted. * Non-verbal

Table 1: Description of children



members of the pre-school as well as from the parent/s of the children was obtained. The study was accepted by the ethics committee of Health Sciences Faculty of the University of Cape Town prior to commencement.

In the pre-school setting each disabled child was observed both indoors and outdoors. Observation journals were kept and each participant was also videotaped so that a detailed description of all behaviours and actions were captured. Informal unrecorded observations were initially undertaken to familiarise the participants to the researchers and the researchers to the setting. Formal observation time at the pre-school consisted of three sessions of thirty minutes. In the home setting video recordings seemed too intrusive and participants were only observed in two sessions of forty five minutes.

In this study, playfulness was defined in terms of the exhibition of the four elements of playfulness as described by Bundy^{1,13}. These were intrinsic motivation, internal control, the freedom to suspend reality and framing. Nineteen items that the researchers felt were observable were isolated from version 3 of the ToP's list of 24. The following indicators were selected :

- * active engagement,
- * self directed,
- * display of exuberance/manifest joy,
- * persistence to overcome barriers,
- * engages in mischief,
- * repetition used,
- * pretends,
- * incorporates objects in an unconventional way,
- * engages in challenges,
- * plays with others,
- * plays interactively with others,
- * adopts a leadership role,
- * joins a group already engaged in an activity,
- * initiates play,
- * clowns,
- * shares play things/equipment,
- * responds to/gives appropriate cues,
- * negotiates.

The literal definitions of the indicators from the ToP were adopted as criteria to be used to establish a display of playfulness. The amount of time spent engaged in playful behaviour was not considered in determining playfulness.

The analytic process first involved identifying all triggers of playfulness, which became the codes. The triggers were all circumstances/behaviours that preceded the predetermined indicators of playfulness. The playfulness of the three participants was coded separately by all researchers from their field notes and videotapes. Second level coding included identifying and representing similar codes present for all three children. Codes with similar meanings were then grouped into categories that related to varying triggers of playfulness.

Credibility was attained by prolonged engagement in the research settings, in order for recurrent patterns and valid themes to be noted and stated²⁷. Confirmability included reflectivity - a reflective process whereby the researchers wrote 'additions' to field notes after each observation session. This reflection consisted of personal thoughts and feelings, problems and questions, frustrations and assumptions, in order to make the researchers aware of their own biases and how these could impact on the study. Dependability was ensured by an outside qualitative researcher who carried out an audit trail focusing on the process of data analysis and progression of events. Investigator triangulation was used through collaboration and agreement of all researchers on the interpretation of the data²⁵.

Results

Four themes of playfulness emerged from the categories in the pre-school context. They were: 'being included', 'being excluded', 'experiencing adversity' and 'noticing others merely near by'. Two

themes emerged from the home setting: 'acceptance, sharing and a helping hand' and 'being successful' (see *Table 2* for tabular representation of findings)

At pre-school:

Tabular representation of results: school		
Categories	Sub-themes	Themes
- Someone teased him - Being part of the fun - Someone smiles at him - Others reaching out - Someone calls his name	} Being Included	1. Being Included - Being Excluded
- Others turn their backs - Others drift away	} Being Excluded	
- Unkind acts from others - A difficult task - An obstacle in his game	}	2. Experiencing Adversity
- Girls twirling around nearby - Others sitting nearby	}	3. Noticing others merely nearby
Tabular representation of results: home		
Categories		Themes
- Mother showing affection - Sharing a toy - led into the game - A helping hand - Giggling with others	}	1. Acceptance, sharing & a helping hand
- Winning the race - Accomplishment in spite of disability	}	2. Being successful

Table II: Representation of results

Being included, being excluded

In the school setting it was found that inclusion was an all-important foundation for playful interactions. It emerged that when others included a child in any way, a playful response usually followed directly afterwards. An example to illustrate inclusion as a trigger of playfulness: "...after lying alone on the grass for some time, the group of girls ran up and threw themselves onto the ground around him gazing at him affectionately. He then broke into a fit of giggles, rolled onto his back and teasingly grabbed one girl's hat..."

Playfulness was often triggered by a teasing act from another child. This may have been a teasing look, a child taking his/her toys away as part of a game, and another child chasing him/her jokingly. Inclusion in the games of others also evoked a playful response in the child such as when he/she was part of the group that was laughing, giggling, teasing each other or 'rough and tumbling'. Subtle efforts made by others to include the child led to playfulness such as when other children smiled at him/her, or gave an affectionate look. Obvious signs of inclusion from others also elicited playfulness, for example, being called to join in by a teacher, or beckoned by others to join a game.

When others excluded a child through deliberately leaving him/her out of a group, a playful response was also evoked. When the child was included, examples of playful behaviour were manifest joy, joining a group and teasing behaviour. Alternatively, when the child was excluded, the playful response was mostly self-direction, active engagement and negotiating or giving cues. Clowning was the main means of giving cues.

Experiencing adversity

Experiencing adversity was another prominent finding in the school setting that led to playful behaviour. The structure and contents of the school e.g. toys and jungle gym, presented several challenges to the disabled children. These adverse circumstances resulted in



playful behaviours of persistence and repetition. An example: "She was trying to tie a doll onto her back with a blanket. As the tone in her arm was increasing, she found it more and more difficult to tie a knot. The other children were already engaged in their game of pretending to be grown ups. Eventually she backed herself against a table so that she could secure the doll and use one hand to fasten it on."

Often, when another child performed a cruel or destructive act towards one of the participants, playfulness followed. Illustrations include another child laughing at him/her cruelly, children snatching his/her toys away violently, children purposefully hiding toys from him/her and children destroying his/her game. These unkind acts unexpectedly all triggered a playful response, such as giving cues to others, becoming self-directed and showing persistence. For example: "...after spending much time constructing his sandcastle, he sat back to admire his work. Another child came up and deliberately kicked his castle before jumping on it. He responded with what appeared to be determination, and persisted to build his castle again"

Noticing others merely close by

The theme 'merely noticing others' emerged strongly for two of the three children. It was found that when he/she noticed others nearby involved in an activity he/she was often playful. Even though the child was not directly engaged in another's game, they showed playful behaviour such as manifest joy or entering a group.

At home:

Acceptance, sharing and a helping hand

An entirely different array of behaviours seemed to occur in the home setting and the resulting themes reflected this. Participants were included and accepted in a way that was unique to the setting of their home environments. The first theme that developed strongly for all three participants was acceptance, sharing and a helping hand. Often a deliberate act of showing affection or active inclusion towards him/her was initiated and elicited a playful response. An example of this was: "His mother affectionately teased him by splashing him with water from the bucket and he responded with a fit of giggles".

Where at school the participants battled adversity at times, in their home setting, significant others tended to provide help in situations where their disabilities would have otherwise precluded them from participation. For example: "the other boy patiently held the ball while she took aim and when she was finally able to kick it, the joy and satisfaction was evident"

Being successful

The second theme that emerged in the home setting was 'Being successful' and it emerged for all three children. It appeared that success was often readily achieved at home and that the environment was conducive to the participants' success. An example of this was a participant winning a running race because other competitors allowed him to and this resulted in a joyful dance. In the home setting, the participants tended to attempt more risky behaviour in keeping up with their peers as their success rate was high.

Discussion

For all the participants, a significant number of playful displays in both settings were the result of interaction with other children. Missuina and Pollock¹⁷ suggest that disabled children do not interact well socially. This is due to the limited opportunities for interaction with peers which subsequently impacts negatively on their social skill development. This study found that playfulness was triggered by the child's attempts at interaction and other's efforts of inclusion as well as exclusion at times. Social skills were not crucial for a child's ability to be playful. Roberts et al²³ said that disabled children tended to experience peer rejection from able-bodied children. This was confirmed in the study. However rejection was not always detrimental, as it was often followed by playfulness. The common

perception of what constitutes playful behaviour is happiness and laughter. However it seems that the concept of playfulness can be broadened to include what previously might have been thought of as negative or unpleasant experiences. Negative triggers such as cruelty or rejection often inspired elements of playfulness that are just as important to overall development as laughing and being happy.

Deliberate exclusion by others tended to prompt the child to give cues to other children and to become mischievous and to clown. In their study on playfulness with disabled children, Harkness and Bundy³ found that disabled children scored highly for the extent to which they clowned or joked. This was explained by the suggestion that physically disabled children may learn to joke and clown as a means of compensating for their disability and as a way of gaining "positive attention". Another possibility is that the children who have physical disabilities learn to joke and clown to make the rejection they experience from their able-bodied peers less painful. Instances where the child was left alone tended to trigger a display of self-directed play, active engagement and repetition. The researchers propose that for these disabled children in the school setting, exclusion was a frequent experience, and that when left in a position of solitude, they have learnt that self-amusement is another viable option. Their physical disability seemed to pose no limitation to their ability to initiate a game in solitary play. Therefore, exclusion should not be seen as only a negative occurrence, but also as something that could improve a child's adaptability and resourcefulness. The view that exclusion is not an entirely negative experience reinforces the proposition of a mind-shift to accept that playfulness is not always 'happiness'.

It was interesting to note that even merely being aware of the presence of others at pre-school often triggered playfulness. A non-verbal child was often left out of a game, but was still playful as a result of being aware of others. It was something of a revelation that when a disabled child was simply around others and not necessarily interacting with them, that this enabled him/her to be somewhat playful.

Several barriers at the pre-school contributed to the child striving in pursuit of mastery. The literature states that structured activities tend to limit playfulness, especially for the disabled child, as he or she is less able to have a sense of affecting his or her own environment²⁸. In contrast this study found that physical, cognitive and social challenges presented by the structure of the activity or deliberate unkind acts from others served as a trigger for a playful response. Hamm explained that when a child is being playful a degree of internal control is present. This suggests that the child is largely in control of his or her actions and an aspect of the activity's outcome. This enables the child to reach beyond himself/herself to meet a challenge². Promoting playfulness can therefore improve the disabled child's ability to overcome obstacles and barriers in their environment.

The overwhelming differences in the home setting were highlighted by themes of acceptance and success. In this study, the supportive environment of the home setting was created by parents and peers. This finding is similar to Hamm's² and Howard's¹⁸ research where the familiar environment of disabled children's homes was thought to promote playfulness as it was made more supportive to them. Hamm suggested that the supportiveness of the environment for children's playfulness is more important for children with developmental disabilities than those without.

The findings in the home setting showed the unique opportunities that were created for disabled children of pre-school age to be playful. It was also found that disabled children who had little or no indoor play space were playful in the outside area surrounding their shacks, especially when assisted to participate and succeed. Howard's¹⁸ research found that disabled children were often isolated within their homes and experienced limitations to playing outside. This study showed that the disabled participants did not experience isolation at their homes. Whether this has to do with



the attitudes of that particular community towards disabled children, or a general communal approach to raising children is worth exploring.

Limitations of the study

The study's primary limitation was the fact that circumstances only allowed for a largely subjective understanding of the participants' disabilities. It is, however, a common occurrence in the South African context to have no access to formal accurate medical records when researching in a setting such as an informal settlement. A future study would benefit from classifying disabled participants using a standardised assessment tool.

Defining playfulness, by the mere nature of the concept, is controversial. Therefore, key elements that defined playfulness were sought and taken from the ToPI 3. The researchers confined their concept of playfulness to these rigid indicators and only these specific exhibits of playfulness were recorded.

Conclusions

The pre-school and home settings were essential for the different circumstances they allowed for the expression of playfulness. When faced with adversity or exclusion at pre-school, a common response was a playful act and when included at both home and the pre-school, a playful response was also seen. These children can therefore be seen as accessing opportunities that encourage their motor and cognitive development, and increase their autonomy and sense of control to influence their environment. Interaction with other children also provides the foundation for advances in social skills, a fundamental aspect of any child's development. These children were afforded opportunities for challenges in the mainstream setting and the flexibility they showed in their playfulness could be beneficial in adapting to their disability. The home setting on the other hand, provided the participants with acceptance and inclusion where they were assisted to overcome barriers posed by the physical environment. Opportunities for success provided for many displays of playfulness and accomplishments despite disability. Neither the pre-school nor the home was observed to be more enhancing of playfulness than the other. The environments simply posed opportunities for different and possibly complementary exhibitions of playful responses.

Recommendations

Triggers of playfulness in disabled pre-schoolers were highlighted in this study. The most frequent trigger being interactions with other children. This information should continue to support the developing policies of inclusion of disabled children into mainstream schools. A study to contrast the contributing factors of playfulness for able bodied and disabled children in the same context would inform a comprehensive model of the triggers of playfulness. Occupational therapists who work with children should already be aware of the importance and necessity of play in their growth and development. Being able to enhance playfulness in a variety of ways may further promote disabled children in their overall functioning in life.

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