Title	The benefits of play for children with down syndrome
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Source	*Teaching and Learning, 17(2),87-92*
Published by	Institute of Education (Singapore)

The Benefits of Play for Children with Down Syndrome

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Introduction

The nature of play is complex and attempts to categorise its distinctive features have resulted from numerous observations of children engaged in play. Such analyses have depended, to a large extent, on the purpose of such observations, with many studies concerned with the developmental features associated with children's play. This has resulted in descriptions of play competencies evident in increasingly complex patterns of behaviour associated with the progressive stages in the development process.

Children's play is generally described as being spontaneous, purposeful, and involving roles and relationships, and the use of body space and force in the spatial and material environment of the home. Such descriptions enable observers to identify and explain deviations from expected patterns which may be attributable to a variety of environmental factors rather than the child's own developmental status.

Some studies have utilised play categories and their definable developmental features to make comparisons between different groups of children, and to arrive at prescriptions for intervention. In particular, the relationship between play and children's cognitive and language development has frequently involved comparisons of the play behaviour of normally developing and retarded children.

The account which follows then, in identifying the key features of the play of young children with Down Syndrome, will make a number of references to findings from studies concerned with the similarities to and differences from the play of other children. The power of play as a mechanism in the learning and development of children with severe learning difficulties will be shown to depend much on adults as facilitators.

This paper will conclude with evidence and proposals for the effective nurturing of play experiences and activities by parents and other professionals concerned with the management and education of children with Down Syndrome.

Categories of Play

In his comprehensive review of research concerned with the play of children with Down Syndrome, McConkey (1986) makes reference to the significance of different categories of play in the children's developmental progress. Such categories include: symbolic or pretend play, exploratory play, gross motor play, passive play and cognitive or social play. McConkey notes that Down children who engage in pretend play do so with siblings or mothers, whilst exploratory play is found to be solitary. Mothers also involve themselves in the passive play of their children which involves mostly viewing TV, especially for older children.

It is found that younger children have more opportunities for play with adults than older children, who have very few friends. Mothers, rather than fathers, engage in pretend play, with older fathers preferring to engage in gross motor play. Furthermore, it is noted that the nurturing role of mothers especially, is vital in extending children's play activities over into adulthood, without which there is evidence to show that an increasing number of children resort to passive or unoccupied play later in life. Finally, very few Down children were found to be involved in social or cognitive play.

These studies clearly indicate that adults and especially mothers, are the key players in extending the longer term benefits of play, their commitment and support being vital in its maintenance. What then is the significance of such findings for the developmental progress of Down Syndrome children?

Comparisons between the Play of Down Syndrome Children and Other Children

Whilst studies show that both Down children and non-Down children follow the same developmental patterns, Down children's progress is

slower but not as significant as that of other retarded children. However, such studies are to be judged with caution for few have compared Down with non-Down children adequately. This is because of the numerous variables such as age, sex, family background and educational levels which would need to be included. The only reliable method is to study large representative samples but this is difficult to organise and finance. However, a few studies have been conducted and their findings, reviewed by McConkey (1986), include comparisons between the play in Down and non-Down children.

- ***Exploratory play:*** Down children were found to be less likely to explore objects or surroundings.

- ***Pretend play:*** No differences were found for developmentally matched Down and non- Down children but when these two groups of children were compared with autistic children, the autistic children were found to engage less in pretend or imitative play. This study also showed though, that Down children made fewer choices in pretend play with objects, repeating the same pattern of imitative behaviour (Riguet and Taylor 1981).

- ***Gross-motor play:*** Whilst non-Down children preferred to scramble in and out of boxes, rock the rocking boat, and play with bricks and planks, Down children moved about less, choosing an open tunnel and a climbing frame.

- ***Social play:*** When presented with certain objects, Down children laughed at these in the same order as other children, although the response level was delayed in comparison. Tactile and auditory stimuli, in the form of games, were found to elicit smiles in Down children whilst others laughed. A slower processing ability is said to account for this difference. Such studies suggest that Down children need to be given time to respond in social play. Whilst the incidences of solitary and parallel play were found to increase with age, peer interaction was only evident in mildly retarded children.

Whist such comparisons make interesting reading, few prescriptions for the power of play in the development of Down children emerge. More encouraging information arises when studies concerned with influencing or facilitating play are considered.

INFLUENCING AND FACILITATING PLAY

Clearly the types of play children engage in and the influences on this process, change as their development progress. Furthermore, there is a relationship between their developmental progress and their levels of play, which is attributable to the progressive acquisition of new skills and abilities. It has been observed that retarded children, in general, follow the same developmental sequences as other children though for Down children, self-pretend play develops later and occurs less often. However, a relationship between pretend play and measures of expressive language has been noted for Down children, with an even stronger relationship noted between pretend play and verbal comprehension scores. The role of adult facilitators in this process would, therefore, seem to be crucial.

In this regard, it was noted that Down infants displayed a higher level of pretend play when mothers joined in their play, and that any modelling of roles by the mothers in such play had an immediate effect on their children's imitative play, although the children were unable to repeat the newly learned imitation behaviour with related pretend play activities.

Not all mothers, however, are found to be so eager in their facilitation of play. One study which interviewed mothers revealed that whilst acknowledging the importance of their roles in play, they complained that their children's play was repetitive and that the children were more playful when left alone, or that their children soon became bored. However, these mothers said that they felt that play with their children was positive and enjoyable. Another study looked at measures of development and the home environment. Here, it was found that declines in development scores were related to the home environment in terms of poor organisation of time and space, fewer play materials and infrequent maternal involvement.

The quality of such involvement was investigated by one study where face-to-face interactions were observed. Here, mothers of Down children aged 3 months plus were reported to talk to their children more often, resulting in fewer child responses. This kind of maternal response was attributed to the mothers' anxieties for immediate responses. Similar results were obtained with mothers of 4 year-old-Down children, who assumed the role of manager or teacher, whereas mothers of other children focused more on their child's choice of toy, activity or friend. However, when the mothers of Down children were observed playing

with them structured toys such as stacking rings, the mothers became more activity-focused in comparison, and as the children became competent, the mothers withdrew.

Such involvement in children's play was the focus of one study, with mothers modelling the required role or pattern of play which resulted in their children developing higher levels of pretend play. Furthermore, imitation of their children's behaviour resulted in increased vocalisations and smiling. However, the most potent effect on children's expressive language was found to be daily experiences of pretend play with an attentive adult, rather than modelling. It is claimed that such exposure provides practice in forming relationships between familiar objects and roles.

Other influences on play behaviour have been found to be the kinds of toys or objects played with. For example, light and sound toys engage children longer; the effects of such spectacles sustaining the engagement. Realistic objects are found to elicit more pretend activity than highly structured toys intended for pretend play. Furthermore, the provision of toys which are graded according to complexity are found to bring success and enjoyment more easily.

THE POWER OF PLAY IN THE DEVELOPMENT OF SOME CHILDREN

The predominant theme emerging from the review of research described above appears to be the importance of pretend play for language development especially when this is facilitated by adults who model or regularly join children in their daily play experiences. In emphasising the importance of pretend play, Leister et al. (1995) describe how such learning may be exploited to enhance both the language and social skills development of children with severe learning difficulties. They propose that the adult as a partner in play could engage children in a number of ways :

- Describe the child's activity whilst it is in progress – "look at the tall house".

- Join in the pretense – eat the pretend cake, help him or her to select a pretend cake or comment: "your baby looks hungry".

- Indirect reinforcement of learning the required skills – as the child puts on his or her shoes, the adult comments on the follow up: "we're off to the market now".

- Provide real life materials/props.
- Provide opportunities for choices, turn-taking and sharing.
- Read or relate and act out stories with interactive books and/or puppets.

Given such commonsense suggestions, adults only need to make a start, and to put into practice what they have always known and believed about the power of play. With some children though, they have to play a little harder to help other children begin. Adults just have to get more involved, and to give their children time and trust to respond independently.

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