Home made play

Jenny Bishop, Speech Pathologist, **Kevin Littler**,
Regional Senior Clinical Physiotherapist, **Sue Robinson**,
Regional Clinical Senior Occupational Therapist, The
Whyalla Hospital and Health Services Inc.

Background information

The importance of play in development

Play has long been held to be important to many aspects of children's development, such as motor control, speech and language, cognition, social interactions, and emotions. There are many theories that try to explain the role of play in child development, with two broad classification systems: those that show play as a social function and the others as an indicator of cognitive status. Perhaps the best known is Piaget's Developmental Theory of Play, which uses a cognitive model (Gething et al, 1991).

Smith (1995) reviewed a number of sources on the importance of play. He found that play is considered an essential function in normal development. It is how we learn how to handle the world and our roles in it. There seems to be a universal need for play across cultures and races, and throughout history. It has been said that mankind works for maintenance and plays for sustenance (Russel in Smith, 1995). He continues by quoting MacDonald, asserting that play is the primary context in which children interact with their environment.

Lieberman in Smith reports that there is considerable evidence between the positive link between play and a child's creativity. Barnett and Chick (in Smith, 1995) found that parents influence the impact that play has on their children's development. Parent's practices regarding play had more impact on their children's development than their attitude, showing the positive correlation between parent's interaction with their children and development.

Chiarello and Palisano (1998) explains how parent–child interaction is a sensorimotor activity as well as a social–emotional experience. Parent–child interactions have components of motor control, sensory integration, and social skills which are all important elements for development. Motor actions are used by young children to acquire the attention of their parents as well as a part of interacting and responding to requests. The opportunities to develop the skills of controlling the head and trunk, maintain positions, move in and out of positions, locomote, manipulate objects, and respond to sensory input that are gained through play are essential for children to interact with their environment.

Links between socioeconomic status (SES) and child development

Coleman (in Bradley et al, 2002) states that socioeconomic status can be seen as a construct with three elements: resource capital (wealth), human capital (eg education), and social capital (ie social connectedness). Looked at from these three components, it can be demonstrated how processes link SES to well-being.

McLellan (2002) states that the processes that explain the link between SES and development are probably two-fold:

- biological (eg poor nutrition and other lifestyle habits such as smoking during pregnancy and early infancy)
- social (eg fewer positive social interaction opportunities, less access to stimulating resources).

Victora (2003) also proposed that children of a lower SES are exposed to more risks, and have less resistance to the consequences. This leads to poorer health outcomes which affect development.

Shapiro (in McLellan, 2002) found that SES was a bigger determinant of neurocognitive development than race or geography. Farah (in McLellan, 2002) states there is also considerable evidence that growing up in poverty leads to systematic changes in brain development and cognition (especially self regulation, planning, emotional control). There is emerging evidence that the pre-frontal cortex is involved. The pre-frontal cortex has the longest postnatal development of any brain area, maturing through childhood. It is also one of the most sensitive areas to deleterious effects of stress.

Hetrzman (in Bradley et al, 2002), also proposes that the quality of the environment in early childhood will sculpt the “neurochemistry of the central nervous system in ways that will adversely affect cognitive, social, and behavioural development”.

Hunt (in McLellan, 2002) showed that out of the two broad factors that link SES with development, home environment and parent–child interaction are more important predictors of IQ development than postnatal and natal factors such as birthweight and maternal substance abuse.

Hoff (2003) showed that growth in productive vocabularies in two year old children were highly predictable by SES (in high versus medium SES), and could be completely explained by environment.

Glassy et al (2003) also demonstrated that the most educational toys were the ones where parents/guardians interacted with their children with materials that matched the development and individual needs of the child. They also showed that there was no evidence that specific toys were required for optimal learning.

Gunn et al (in Bradley, 2002) reported that the impact of SES on development becomes greater with increasing numbers of negative life events and risk conditions.

These studies show, albeit to varying degrees, that changing parent’s behaviour in relation to playing with their child in an appropriate way can have a positive influence on children’s development. However, those families at highest risk also tend to have reduced access to preventative and curative services. Victora reports that “more of the same is not enough”, but that services should be tailored to enable preventative programs to reach those most in need. In an ideal world, preventative services would have the greatest availability to those at high risk, but the reality is usually the opposite. Additionally, health services are generally equipped to serve those from wealthier families, so when families of lower SES do reach curative services the service is often not appropriate.

There had been previous attempts by this team to deliver information about early childhood development in the community. Community-based lecture-style information sessions performed following a needs-analysis at kindergartens and child care centres were unsuccessful. Despite receiving clear information from the community on what information was wanted, there was very poor attendance to the sessions (a total of nine people, with no representation from the Indigenous or disadvantaged populations).

In addition to this approach clearly not being adequate for this community, further research also made it clear that there needed to be more emphasis on the interaction between the adults and children, and that we needed to focus on play rather than development.

Hence our goals for this project were to devise materials and deliver them in ways that reached a wider cross section of the community, with a particular emphasis on reaching disadvantaged families. It was also important to convey the message that everyday materials can be used to play in appropriate ways and that the big benefit was from interacting with the children rather than having the toys as a replacement for interaction.

To be successful in this, it was also important for us to incorporate the principles of Primary Health Care, in particular: equity, collaboration and building partnerships with service providers, increasing community participation, reorienting health services, increasing self-reliance through developing personal skills, and empowering the community.

Method

Using the aforementioned information, collaboration with Child and Youth Health, Young Mother's groups, and discussion between members of the Child Health Sub-team (CHST), the idea of home made play bags was developed. A decision was made to develop 6 showbags for each of the six age groups (0–6 months, 6–12 months, 1–2 yrs, 2–3 yrs, 3–4 yrs and 4–5 yrs). To develop the bags, a grant was applied for from the Northern and Far Western Regional Health Service (NFWRHS) Primary Health Care Small Grants Program. This was accepted, and $2000 was obtained. $500 was donated by Family and Youth Services (FAYS), with the arrangement that FAYS clients would be targeted.

The aim was to put activities into the bag that could be used in different ways to develop a range of skills, for example fine and gross motor, and communication. A member of the CHST discussed the idea, and possible activities to be included in the bags with the "Kids 'r' us" group of mothers at Child and Youth health. Current literature was researched (see reference list) to obtain ideas, as well as incorporation of successful activities from therapy sessions. An information sheet was devised and included in the bags, discussing relevant play skills for the age, and giving more ideas about making home made play toys. A safety warning was placed in each bag, and toys appropriate to a child's age were chosen.

Ingredients for each bag were put onto a data base, with where they could be purchased at the lowest cost. Each bag was to cost no more than $3. Where possible, items that could be donated were included as activities, for example milk cartons for skittles. The Whyalla Hospital employees and visitors were asked to donate items via advertisements and donation boxes situated within the hospital. Members of the Child Health Sub-team all participated in assembling the bags.

The bags were designed to be a tool to facilitate play between parents and their children. The contents of the bags were to be discussed with parents, and education provided about how they can play with their child using activities that are developmentally appropriate for their child.

An aim of the project was to be culturally, geographically and financially accessible.

The Aboriginal population was accessed following collaboration with Nunyara (a community based Aboriginal well-being centre) and an information session was run at the Wyn Bring Jida Child Care Centre (that has a high enrolment of Aboriginal children).

The project was geographically accessible to members of the community because small group information sessions were run at various centres around Whyalla, including Child and Youth Health and the Galpin Street playgroup. A stall was also organised at the Whyalla Show.

The small group sessions were financially accessible because they were free of charge. Another way of accessing disadvantaged groups was to inform FAYS clients when community sessions were running.

The small group information sessions were presented by a Speech Pathologist, Occupational Therapist and Physiotherapist. Questions and discussions about play and development were encouraged, and referrals arranged if appropriate.

The Whyalla show provided an opportunity to promote the project, and engage the general population. A stall was obtained in a marquee, which allowed members of the CHST to present the bags and provided information. Parents showing interest in the stall were asked if they had a child of the relevant age, and if they had a few minutes to discuss the use of the bags. Before a bag was given out each item was discussed, with the relevance to various developmental skills.

The project was evaluated via a questionnaire completed by the parents on the day that they received a bag. Questions asked about the parent's age, income source, education, if they were of Aboriginal or Torres Straight Islander descent, and what they learnt.

Results

To determine whether the need was met using the strategies of the Home Made Play Project, the following indicators were established:

- the number of people reached compared with previous health promotion/education strategies by the CHST;
- that a representative cross section of the community was reached;
- that links had been developed between the CHST and other agencies;
- the number of community sessions conducted including the number of participants and number of bags given.
- that parents reported an increase in their ability to engage in play with their children.

Number of people reached: 92 bags were given out to parents, who shared 71 children under 5 years of age. This is in comparison to 9 people (parents who may or may not have been from the same family) that attended the last community information strategy by the CHST.

Community representation: 65% of people who received a bag completed a questionnaire, *of these*

- 23% were aged under 25 years, 63% were aged between 26 and 35 years, 14% were aged over 35 years
- 27% were on government benefits, 24% were self employed, 19% had single parent employed, 30% not stated
- 38% were educated up to year 11, 52% Year 12 or higher, 10% not specified
- Aboriginal or Torres Strait Islander: 6% yes, 82% no, 12% not stated.

Four community sessions were completed, with a total of 18 participants.

Of the 62 parents who responded to the questionnaire section *"What did you learn?"*:

- 29% stated that they learnt about low cost play ideas vs bought toys
- 24% stated that they learnt about a specific idea/activity that would assist their child to develop skills
- 13% stated that they learnt about "the importance of play"
- 11% learned specific information about a developmental question they had about their child—included (…….number of referrals)
- 3% stated that "they liked it" (unspecified).

Discussion

In terms of the number of people who received the information, the strategies employed to provide the play and development information to the community by the Home Made Play project, were far more successful than previous efforts.

The strategies employed by the Home Made Play Project also successfully accessed the community in general. The results show that a cross section of the community were reached, including young parents, parents who identified as Aboriginal or Torres Strait Islander (ABTSI), lower educational level and a significant number of parents from a low socioeconomic strata.

The participants included 6% who identified as ABTSI, which is pleasing, since the population level of ABTSI people in Whyalla is only 3%. The provisions that were made to ensure that disadvantaged groups accessed the information, as well as the section of the population that were most likely to be motivated to access the information (that is, those from more advantaged educational and economic backgrounds) were successful.

In particular, the Whyalla Show provided an excellent means to reach a greater number of people, while the targeted community sessions reached a greater proportion of parents from disadvantaged backgrounds.

The CHST established or reinforced links with three particular agencies: the relatively new Nunyara Wellbeing Centre (centre for Aboriginal Health Services); the Child Care Centre "Wyn Bring Jida" (which has a high enrolment of children from an ABTSI background); and existing links with the local Child and Youth Health service were reinforced.

As a result of the project, The Child and Youth Health Young Mothers Group is in the process of developing the idea further, using the same, or different strategies and will be applying for their own grant.

The community based sessions reached a lesser number of people, but enabled access to the information for people who did not attend the Whyalla Show. Whilst a similar method of imparting information was used, compared with previous health promotion sessions, the community settings were a success due to the locations chosen and the informal and interactive mode of presentation.

In terms of impact, there was no long term follow up and the project team has had to rely on the information obtained through the surveys. Of the 62 parents who responded to the questionnaire question “What did you learn?”, the feedback was grouped into themes that ranged from learning about low cost play ideas versus bought toys/learning about a specific idea/activity that would assist their child to develop skills/learning about “the importance of play”. The feedback indicates that a majority of respondents did take home the intended message.

Limitations

A long term impact follow up has not been conducted, as all participants were anonymous. In future a follow up phone review to a random group may be a strategy to capture long term changes in behaviour associated with the information presented.

Advertising of the community sessions was limited to local flyers and use of FAYS workers to promote to their clients. Wider advertising such as through both written and visual media would no doubt have improved the number of people reached.

In terms of community ownership, the project was limited in that the CHST therapists established the strategies, with moderate community input. It is envisaged that the project will evolve into a community owned strategy, that uses a peer education model, and strategies that the community chooses to utilise.

Conclusion

The literature clearly illustrates the importance of play to the normal development of children. There is also a growing body of evidence that demonstrates that play in itself is not enough to reap the benefits it offers, but the interaction that play fosters between parent and child is required. These social interactions have been shown to be partly responsible for the differential in development between children from high SES families and disadvantaged children.

The evaluation of the Home Made Play project demonstrated that this model was an effective way to reach families from all types of background, with a high proportion of participants having low SES backgrounds. Feedback showed that the participants felt the materials and information was appropriate and most believed that they learnt something from the sessions.

Long term impact evaluation and greater community ownership are recommended for the future implementation of the Home Made Play Project.

References

Bradley RH, Corwyn RF. (2002) Socioeconomic status and child development. Annual Review of Psychology. Palo Alto: Vol. 53 pg. 371.

Chiarello L, Palisano R (1998) Investigation of the effects of a model of physical therapy on mother–child interactions and the motor behaviours of children with motor delay. Physical Therapy. 78:2, 180–194.

Diamant R (1992)Positioning for Play: Home Activities for Parents of Young Children. Therapy SkillBuilders.

Dollaghan CA, Campbell TF, Paradise JL, Feldman HM (1999) Journal of Speech, Language, and Hearing Research. 42:6, 1432–1443.

Foord K, O'Connell. Priceless Play Ideas: Low Cost Toys for 0–4 year olds.

Gething L, Hatchard D, Papalia DE, Olds SW (1991) Life Span Development. McGraw-Hill Book Company.

Glassy D, Romano J (2003) Selecting Appropriate Toys for Young Children: The Pediatrician's Role. Pediatrics, 111:4, pg 911–913.

Hodges D (2002) 365 TV-Free Activities for Toddlers (0–4 years). Hinkler Books Pty Ltd.

Keller MJ, Hudson SD (1991) Creating Play Environments for Therapeutic Recreation Experiences.

McLellan F (2002) Countering poverty's hindrance of neurodevelopment. The Lancet 359, 9302, pg 236.

Parks S (1988) HELP At Home Activity Sheets, part of the "Hawaii Early Learning Program". VORT Corporation.

Sher B (1992) Extraordinary Play with Ordinary Things Barbara. Therapy SkillBuilders.

Smith D (1995) How Play Influences Children's Development at home and school. Journal of Physical Education, Recreation and Dance. 66:8, pg 19–23.

Victora CG, Wagstaff A, Schellenberg JA, Gwatkin D, Claeson M, Habicht J (2003) Applying an equity lens to child health and mortality: More of the same is not enough. The Lancet. 362: 9379, pg233–241.

This homemade playdough is simple, natural, and perfect for entertaining children. They enjoy helping make it almost as much as they enjoy playing with it! And this recipe delivers soft playdough they can play with for hours.