Family Play: What Matters Most?

Research Report

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Rationale

Educators, health experts and policy-makers recognize the importance of play in the lives of young children, and have attempted to address the 21st century realities which threaten the quantity and quality of this valuable hallmark of childhood. Relating to a complex interplay of societal factors such as family stress, poverty, urbanization, increased ‘screen time’ and sedentary lifestyles, essential types of play are limited or even absent from daily childhood experience (Alliance for Childhood, 2004; American Academy of Pediatrics, 2006; Association for Childhood Education International, 2002; Canadian Council on Learning, 2006). The ecology of childhood has changed at an alarming rate, prompting concern for children’s health and well-being, and presenting educators and families with unique challenges.

The Ecology of Childhood: Play in the Lives of Today’s Children

With opportunities for unstructured play experiences in decline, stakeholders have aimed to protect children’s ‘right to play’ by facilitating children’s play opportunities at home, at school and in the wider community (United Nations, 1989). In Canada, national leaders in educational policy [Council of Ministers of Education, Canada; CMEC] are united in their support of play-based learning in schools: “Given the evidence, CMEC believes in the intrinsic value and importance of play and its relationship to learning…Intentional teaching involves educators being deliberate and purposeful in creating play-based learning environments – because when children are playing, children are learning” (CMEC, 2012). Similarly in Ontario, Canada’s most populated province, play-based curriculum has been recognized and legislated as the professional standard for those working within school and childcare systems Ontario Government, 2007; Ontario Ministry of Education, 2006).

In schools and child care centres, educators are responding to ‘changing childhood’ with renewed focus on play-learning, and innovative approaches to the provision of ‘classroom play’ (Bezaire, 2009; Bezaire, 2014; Dietze & Kashin, 2012; Singer, Golinkoff & Hirsh-Pasek, 2006). Significantly, 21st century childhood has meant changes for the adult in classroom-based play with adults taking on a more intentional role. As Vygotskian researchers Leong and Bodrova (2012) contend: “…many of the play skills that children learned in the past by observing and imitating their older
playmates now have to be taught directly by teachers or learned from behaviors that teachers model (p. 31). Participating as a ‘play partner’ has come to take a more central role for the educator in early education, as well as thoughtfully providing and arranging relevant play materials.

In the context of home and family life, educational and health experts advocate for family play and leisure as ‘optimal’ for promoting health and well-being. Citing busy lifestyles, ‘screen time’ and a reduction of unstructured family ‘downtime’, the American Academy of Pediatrics (2006) issued a clinical report warning pediatricians of the potential risks to the emotional and physical well-being of children and parents, alike. “Parents who have the opportunity to glimpse into their children’s world learn to communicate more effectively with their children and are given another setting to offer gentle, nurturing guidance... Quite simply, play offers parents a wonderful opportunity to engage fully with their children” (p. 183). Despite these efforts, play continues to be in decline with children’s ‘screen time’ increasing steadily during childhood. The length of ‘screen time’ Canadian children spend each day averages to 7.48 hours; in essence, Canadian children spend an adult ‘work week’ sitting in front of TV and computer screens (Statistics Canada, 2009).

For young children in particular, societal changes in family time and household routines may have significant impact on parental bonding and relationships. From infancy onward, “interpersonal”, “face-to-face” play has been found to be “common in the home, where it often occurs within the context of other more task-oriented activities” (Tamis-LeMonda, Uzgiris, & Bornstein, 2002, p. 222). Household routines have offered familiar, repetitive contexts for playful engagement where parent and child are relaxed and having fun – engaging in play behaviour which has included imitation, vocal play, social games and opportunities for children to take on increasing responsibility (Tamis-LeMonda, et al, 2002, p. 223; Wells, 1986). As family routine has become more time-pressured, children may be missing out on these optimal interpersonal playtimes.

Similarly, “object play” in the home, with ‘hands-on’ play materials are considered key to the play experience, yet examination of the children’s toy market reveals that many commercial products are overly structured and offer little actual play potential for young children (Bezaire & Cameron, 2009; Hoffman, 2008). Home play
environments have changed from previous generations, as today’s children generally have a greater volume of toys and participate as consumers in complex ways, receiving a multitude of messages and images through multiple media such as television, film, DVD, toys, and on-line games (Vickerius & Sandberg, 2004). The process of ‘being’ a child consumer is considered pedagogical, as ‘reading’ consumer ‘texts’ instruct children on a range of intersecting ideas and issues relating to identity, consumerism and social status, as well as fostering an approach to literacy that is considered very different as compared to previous generations (Carrington, 2003; Carrington, 2004). ‘Intertextuality’ and digital literacy is a key feature of 21st century child consumerism, as Carrington (2003) explains:

One of the key pedagogic features of consumer texts made for children is that they are rarely stand-alone. This is what makes them so pedagogically powerful. The seemingly harmless gendered message of one small doll is also delivered by websites, affiliated clothing ranges, advertising and by other such ‘texts.’ Consumer texts are characteristically intertextual… (p. 93)

From an educational perspective, today’s play objects are not viewed as “merely a neutral giver of pleasure to small children”, but “distinct cultural and material artifact(s), representing current themes in mass culture”, including “prevailing views about gender and childhood” (Carrington, 2003, p. 92; Sutton-Smith, 1986). Despite, or perhaps in reaction to these changing ‘out-of-school’ contexts, early childhood educators increasingly value open-ended and non-commercial classroom items (Drew & Rankin, 2004; Tarr, 2004). “Children extend and deepen their understandings through multiple, hands-on experiences with diverse materials” (Drew & Rankin, 2004, p. 3). While play-based learning and ‘classroom play’ are currently being established in Ontario’s Kindergarten, the contexts and conditions for ‘family play’ are less clear and in need of examination.

**Research Partnership: George Brown School of Early Childhood and Peekapak Inc.**

Peekapak Inc. is a Toronto-based small/medium enterprise (SME) that offers “a creativity-focused activity pack for children ages 3 - 8 which emphasizes active, collaborative play and learning while providing busy parents with a convenient way to connect with their child. Delivered to a family's home each month, each activity pack covers a new topic within an interactive storybook and three educator-designed
activities” (Peekapak Inc., 2014). Aiming to further develop their educational approach and innovate their product, Peekapak Inc. approached George Brown College’s Office of Research and Innovation (ORI) to explore the possibility of a partnership for product testing and development. With Dan Reilly acting as Senior Project Manager, Peekapak Inc. connected with George Brown College’s School of Early Childhood faculty, Dr. Kimberly Bezaire who specializes in ‘play-literacy’ and researching ‘optimal conditions for play’.

The partnership began by offering input and critique on product design and developing a research agenda. The product was designed to include 1) an original storybook featuring the Peekapak characters, with plots designed to engage the family in creative problem-solving; 2) construction play materials for three (3) creative arts experiences, designed to connect to elements of the story and invite construction play and/or pretend play; 3) a Parent Guide card designed to offer helpful suggestions on how adults could support and participate in the play, as well as insights on what children may likely learn throughout. Through the course of the partnership, the Peekapak materials evolved in significant ways informed by the partnership as well as Peekapak Inc.’s independent research and development. For example, the play materials were increasingly designed to optimize sensory engagement for the child and aimed to provide more durable play props for ongoing play potential. As well, the Parent Guide became more detailed, and increasingly focused on social and emotional developmental indicators. Within the scope of this study, the majority of study participants (71%) were provided with early iterations of the Peekapak materials, and so the ‘evolution’ of the product is not considered to have made a significant impact on the study results; though the partnership and the research process can be considered to have had significant influence on Peekapak Inc. product design.

The ORI supported the project in securing an Applied Research and Development Grant with the College and Community Innovation Program from the Natural Sciences and Engineering Research Council of Canada (NSERC). ORI aims to ‘integrate applied research and scholarship tightly within College curricula’ and provide students with ‘real-world problem-solving experiences’. Student Researchers - Haniya Mohamed, Brooke Gouweleeuw, Shauna McQuay and Erika Douglas – contributed significantly to the
project, offering feedback on product design and contributing to the literature review as well as research design and analysis.

The research questions that were addressed include:

a. What conditions did families experience as optimal for play?
   i. What did families value about the Peekapak play context?

b. In the context of the Peekapak experience, how do play materials impact the quality of family play? To what extent did the family engage in literacy-play?

c. In the context of the Peekapak experience, how are adult-child interactions experienced?
   i. Based on child behavior indicators reported by the adults, how satisfying was the experience for the child?
   ii. Based on self-reports, how satisfying was the experience for the adult play partners?

**Literature Review**

The research team conducted a preliminary search using Google Scholar, and subsequent systematic searches of various academic electronic databases (i.e. ERIC, PsychInfo, JSTOR, EBSCO, ProQuest). The team reviewed various academic Handbooks, including:

- *Handbook of Early Childhood Education* (edited by Robert C. Pianta)
- *Handbook of Research on the Education of Young Children* (Edited by Bernard Spodek & Olivia N. Saracho)
- *Handbook of Parenting* (edited by Marc H. Bornstein)
The search revealed a lack of studies conceptualizing family play as a context for relationship, relations and recreation/relaxation. Rather, family play has most often been studied as a ‘means to an end’ for interests outside of the home – as a form of intervention for children with Special Needs (Childress, 2010; Lifter, Mason & Barton, 2011) or as a potential way to further academic achievement/school learning agendas (Barbarin & Aikens, 2009; Evangelou & Wild, 2014; Landry & Smith, 2006; Roskos & Christie, 2001). Family context is viewed as influential for a range of outcomes including “emerging literacy skills, child behavioral regulation, and the child’s ability to make the transition from home to school settings” with value placed on “rich verbal environments”, “warm, and responsive interactions” and “one-to-one conversations” that occur “through the natural stream of family activities” (Fiese, Eckert & Spagnola, 2006, p. 401). Researchers have less often examined the value that play holds for families, from their perspective.

In their study of over 50 European families, Vickerius & Sandberg (2006) found that families themselves value play for the pleasure, fun and joy it provides, as well as the opportunities for children and adults to learn from and about each other. Through interviews with families, this study concluded that play was most valued because it offered a social context “to appreciate and learn from each other, a way to be together and gain insight into how the other thinks… it is good for children to know what their parents think and how they react, and parents to get [to] know their children and can help them when problems arise” (p. 213). Play was found to be a platform for learning, but more valued for the opportunities to learn about each other and be together.

The social-emotional benefits of family play were more recently examined in a study of 98 two-parent American families with school-aged children (aged 7-13 years). With a mixed-methods design, Coyl-Shepherd and Hanlon (2013) conducted multiple surveys and interviews, examining the relationship between family leisure time and the well-being of both children and adults. Common family play experiences included Outdoor Activities and Sports, Leisure Activities (i.e., watching television together, playing board games, reading, crafts and cooking), and Secure Exploration/Roughhousing (more so for fathers). In contexts where families are challenged to balance work and parent-child involvement, family play was found to be
associated with high well-being for children and for parent-child relationships. The study also found family play to be associated with feelings of security and cohesion within the adult partnerships/couple-relationship, with family play benefiting the family system in complex ways.

While initial research indicates that play is valuable and worthwhile for families, further research is needed to discern what conditions, materials and contexts best support family play. Since Peekapak Inc. aims to develop a product that facilitate play and learning in a ‘holistic’ method, we review the research of play as a means of learning, to inform our view of ‘family play’.

**Characteristics of Play Research**

**Defining Play**

The subject of play is a topic of study for an array of disciplines, ranging from education to communication studies, biology to philosophy, with many different perspectives on its aspects and importance (Goncu & Perone, 2005; Mayfield, 2001). In the field of curriculum studies, play is considered an intricate, multidimensional phenomenon which is easy to recognize – a casual observer can easily identify when children are ‘at play’ – yet, when planning educational research designs, the phenomenon of ‘play’ can be difficult to circumscribe in an operational definition (Fein, 1981; Pellegrini & Smith, 1998; Turnbull & Jenvey, 2006). Lack of consensus and less considered textured definitions of play have proven problematic in the quest for continuous lines of inquiry and rigorous research results. Reviews of research on literacy-related play, in particular, reveal that play is generally defined “very loosely” to include “any activity that occurs in a ‘play’ center or in the presence of play materials”, though experience with children in classroom play settings commonly contradict this assumption (Roskos & Christie, 2001, p. 79; Saracho & Spodek, 2006).

In attempts to address this difficulty, researchers have developed observational criteria that characterize play behaviour. Though still a contentious issue within and among various fields of study, commonly accepted characteristics include:

1) nonliteral behaviour;
2) “means over ends disposition”;
3) positive affect;
4) flexible;
5) voluntary, and;
6) having internal control. (Association for Childhood Education International, 2002; Christie, 1991; Mayfield, 2001; Pellegrini & Smith, 1998, p. 51; Ruben, Fein, & Vandenberg, 1983) Certainly, the third criteria – “positive affect”, or fun, pleasure, enjoyment – is easily identifiable through child behavioural indicators, and has also been found to be rated highly when children, themselves, are asked for their perspectives on play (Einarsdottir, 2014, p. 323). A sense of control and “choice” over “where, how, and what” they play is also strongly indicated in studies of children’s viewpoints (Bezaire, 2009; King, 1979; Lehrer & Petrakos, 2008; Rogers and Evans, 2006 as cited by Einarsdottir, 2014, p. 324). We consider the question of control – internal and external – as key criteria in our study project. In the context of a Peekapak experience, adults are mediating key aspects of the play episode, with adults (i.e. Peekapak designers) choosing the play materials and focus, while parents initiate the event. ‘Family play’ presents adults with a dilemma of how to be involved, and simultaneously sustain the context of ‘play’ from the child’s perspective.

‘Non-literal’ behaviour, also characterized as pretense, symbolism, and/or representation, are key in conceptualizing play as a means of learning and ‘higher order’ thinking. Kendrick (2005), in examining play narrative and the language children use when engaged in pretend play, observed “…in composing their play narratives, children reflect on, and consciously choose symbols and modes of representation that help them organize and articulate their inner thoughts” (p. 9). Research highlights the complex “social-cognitive demands… that involve an understanding of mutuality and reciprocity” when children are engaged in the negotiation, role-playing, turn-taking and character portrayal which characterize pretend play (Kavanaugh, 2006, p. 273). Indeed, the foundation of early childhood education is based on “the primacy of representation abilities – planning, reflection, self-regulation, and representing meaning” which “undergrid literacy and the other discipline knowledge that children acquire in school” (Bodrova & Leong, 2003; Edwards, Gandini & Forman, 1998; Epstein, 2003; Hohmann & Weikart, 2002; Malaguzzi, 1998 as cited by Copple, 2003, p. 764). These
characteristics and constructs are important to consider as we examine the nature of ‘family play’.

Conditions of Play and Learning: Environment and Materials

Context is identified and studied as an important feature in the phenomenon of ‘play’, with a growing body of research examining how ‘classroom play’ and ‘play-based curriculum’ may be leveraged to provide optimal conditions for children’s learning. Pretend play, particularly, is viewed as an “important venue in which children practice and learn using representational media” (Pellegrini & Galda, 1993, p. 165). Researchers have observed how children’s pretend play increases overall and becomes more social and complex when children are in environments “where pretend play is valued and encouraged” (Kavanaugh, 2006, p. 271).

Specifically in relation to literacy-play, ethnographic study of children’s classroom play behaviour first documented children’s “literacy-like” activity (i.e., pretending to ‘read’ and ‘write’ while role-playing), prompting a consideration of the significance of literacy-play opportunities within early learning environments (Jacobs, 1984; Roskos & Neuman, 2001). Further research study found that visual organization and “easy access to richly varied and sufficiently abundant materials” affected the quality and frequency of children’s active interaction with objects, and thus their opportunities for learning (Roskos & Neuman, 2001, p. 284).

Increasingly over the past decade, Canadian educators have been influenced by the model schools and philosophy of Reggio Emilia, which is considered exceptional in offering creative classroom designs supportive of children’s exploratory and creative play; this creative approach to classroom design is characterized by conceptualizing the classroom as “the third teacher” (Callaghan, 2013; Danko-McGhee, & Slutsky, 2003; Tarr, 2004). For example, using natural, recyclable, and purchased materials, Reggio teachers display and organize the classroom to bring about interest, activity, and thought – objects and organization are considered communicative. Likewise, literacy skills in language and print awareness are considered to be enhanced when objects are “clustered together to create a schema - or meaning network”; play, discussion, and associated print resources “provide a semantic network of connected, well-organized, and in-depth
information, which facilitates and supports literacy learning (Roskos & Neuman, 2001, p. 284).

Such Reggio-inspired approaches have been increasingly valued and incorporated into Canadian approaches to classroom design for early childhood settings, as evidenced by Ontario’s new curricular resource, *How Does Learning Happen?: Ontario’s Pedagogy for the Early Years* (2014), which prompts adults to consider: “Children thrive in indoor and outdoor spaces that invite them to investigate, imagine, think, create, solve problems, and make meaning from their experiences – especially when the spaces contain interesting and complex open-ended materials that children can use in many ways” (p. 20). Significantly, flexibility, choice and symbolic representation – key characteristics of play – are also key and valuable in the early learning processes of young children. These contexts and criteria were foundational in the design of this study’s focus and methods.

**Methodology**

**Participants**

Initially, the project was designed to survey Peekapak Inc. subscribers during the summer months of 2014. During the months of July and August, 2014, an Information Letter (see Appendix A) was delivered via purchased play packs to 239 subscribers, inviting these families to participate in an online survey. A follow-up/reminder email invitation, with an electronic link to the online survey was sent to subscribers during the summer months. However, by September 2014 only 17 responses had been collected with a response rate of 7%. This number was considered inadequate for a data analysis process.

Consulting with George Brown College’s labschool facility (Rose Avenue Child Care Centre), the research team prepared an alternate research plan to distribute play packs and invite child care families to participate in the study. The amended research proposal received approval from the George Brown College Research Ethics Board in November 2014, and in late-December 84 packs were distributed to eligible families (those with children aged 3-8 years), including an Information Letter (see Appendix B) inviting families to participate in the study. During the months of January and February 2015, a reminder notice was posted in the child care centre and centre computers were made available for interested families to complete the online survey. By February 2014,
41 responses had been collected providing a response rate of 49%, which is considered adequate for survey research (Creswell, 2012, p. 407).

Consequently, the study offered a more complex sampling of families than initially planned in this proposed research. The first sampling of families involved solely Peekapak subscribers, who may have been considered limited in some ways. For example, subscribers may exhibit a “response bias” toward a consumer product which they have thoughtfully chosen to purchase (Creswell, 2012, p. 391). The George Brown Child Care families, conversely, were not previously acquainted with the Peekapak product. They also may represent a demographic viewpoint different from Peekapak’s typical consumer, as this child care centre serves an inner-city school district “drawn from the 22 apartment towers, housing over 27,000 people in one of the most densely populated and multicultural communities in North America…more than 85% of the students have English as their second language, representing about 50 language groups” (Toronto District School Board, 2014). In the end, this study’s sampling may not offer as relevant a picture of ‘consumer feedback’—but, the more diverse sampling can be considered to offer a richer, more complex account of the ‘play value’ offered by the Peekapak experience overall.

**Survey Instrument**

The research team examined and discussed the Peekapaks on multiple occasions, and played with the packs with various aged children (i.e., the team members’ children and acquaintances). Having reflective discussions on the quality and characteristics of these experiences, and having done an initial literature review on the defining characteristics of play, the team explored ways to evaluate the Peekapak family play experience. Using a “cross-sectional survey design”, the team designed a 16-question Web-based questionnaire to collect families’ descriptions of their play behaviours, and their feelings/opinions soon after having engaged in a Peekapak play experience (Creswell, 2012, p. 377). The survey questions were vetted by students enrolled in George Brown Early Childhood education ‘research methods’ classes, for “common problems in item construction in survey designs”, such as mismatch, negative wording, or jargon (pp. 388-389). Titled “Family Play: What matters most?” (see Appendix C) the survey addressed the study’s primary research questions, including the following:
1. Consumer feedback regarding the story-play product
2. Descriptive/demographic information regarding participants (i.e., age of the child, relationship to the child)
3. Descriptive quantitative data regarding the quality and characteristics of the ‘play experience’, overall (i.e., duration of play experience, repetition of play, use of play materials)
4. Descriptive data of the child’s experience, with behavioural indicators recorded by the adult
5. Descriptive data of the adult’s experience, as self-reported by the adult
6. Descriptive data of the ‘shared experience’, as reported by the adult
7. Open-ended, qualitative data with adults invited to offer narratives and descriptions of the ‘play experience’.

Analysis

The research team initially separated the data between the Peekapak subscribers and the child care family respondents, checking for response bias. Upon examination, we found that the overall trends were similar between the 2 groups, and so opted to analyze and report on the data set with the 2 groups compiled as a whole. Quantitative survey responses (i.e., multiple choice question format) were compiled and examined through a recursive process, from various perspectives including:

1. Overall total data
2. By age group
3. By relationship to the child
4. By play time duration
5. And examining those families who played multiple times.

Trends and patterns were noted, and implications explored. Qualitative survey data (i.e., open-ended question format) from Peekapak subscribers was found to be more detailed and lengthy, as compared to those responses gathered from child care families. One explanation for this difference may be the linguistic-diversity of this sample population, with English being an Additional Language for many families. Additionally, many families did not have access to a home computer, and so relied on the child care
centre’s computers – this may have led to truncated responses. As a whole, the open-ended responses were examined and categorized according to content themes including:

1. Fun/Pleasure
2. Shared Play/Togetherness
3. Story-Craft Connection
4. Constructing the Craft
5. Frustration

Data Results

Who participated in the survey?

The survey was launched in July 2014. Between the survey’s launch and its close in February 2015, a total of 59 families participated in the research project. Peekapak subscribers comprised 31% of respondents, with 18 subscriber families completing the survey between July and November, while the remaining 69% of participants (41 non-subscriber families) were from the GBC Rose Avenue Child Care Centre, completing the survey between December and February.

Most participants were Mothers (73%), with a proportion of Fathers (22%), as well as 2 Aunt/Uncle respondents and 1 Other (i.e., Sister). The participants’ children represented the broad range of age groups with 3-4-year olds (43%), 5-6-year olds (34%) and 7-8 year olds (22%).

How were the packs used?

Duration of Play

The majority of participants spent 15-30 minutes with the packs (48%), with 27% spending 30-60 minutes, and 19% spending more than 60 minutes. Only 7% of families spent less than 15 minutes playing with the packs, and in these instances it was solely families with 3-year olds. These children exhibited less positive play behavior (seldom or somewhat in all categories), and also appear to have been less interested in the storybook (75%) and craft materials (50%), and frequently hard to motivate (50%). As one mother explained, “It was ok. For me it was a little hard to do story and activity with her.” Interestingly, however, the majority of 3-year olds (80%) played with the packs on multiple occasions, though the parents found the process to be frustrating. “My child
played with the crafts quite a bit after we made them. However, I thought the crafts were too hard for his age. Consequently, it was hard for him to have the attention span to compete them.”

The 4-year olds were most likely to play with the pack for 15-30 minutes (80%), with 67% of these children playing on multiple occasions. While there were variations in time spent playing within the 5- and 6-year old groups, the data indicates that they spent the most time overall playing with 50% of 5-year olds and 80% of 6-year olds spending 30 minutes or more engaged with the packs – these age groups were also the most likely to spend over 60 minutes playing. Interestingly, though, 7- and 8-year olds did spend significant playtime with the packs – with 60% of 7-year olds and 50% of 8-year olds spending 30 minutes or more playing with the packs.

Gender of the parent may be a contributor to the length of time spent with the pack. Of the play episodes that lasted more than 60 minutes (19%), all were led by a mother. The majority of fathers (62%) spent 15-30 minutes engaged in play. Mothers and fathers were equally likely to play with the Peekapak on multiple occasions, at a 3:1 ratio (Repeat Play Episodes: Single Play Episode).

When comparing the various groups of ‘time spent’ with the packs, the majority of all groups played on multiple occasions with a ratio of 3:1. The exception to this trend was shown in families who played for more than 60 minutes; 90% of these families played with the packs on multiple occasions. Thus, lengthy time spent playing does not seem to be an inhibiting factor of the pack’s play value or success.
Additionally, short play duration did seem to have a role in the value/success of the play episode. For those parents who played for the shortest time duration (15 minutes or less), they describe themselves as only somewhat interested (75%), and most often lead the play (75%). These parents experienced boredom (75%), were somewhat anxious (50%), and all reported doing too much, as well as experiencing perfectionism (75%). These parents indicated that their children were not engaged during the experience, and that they alone gave directions, took turns, and made connection to the story. These families were also more likely to indicate that play interactions were absent or not applicable. The families indicated that the Peekapak stories and materials were somewhat supportive for quality family play.

**Figure: Play on multiple occasions, as compared by length of time spent playing**
Figure: Value families placed on the Peekapak as compared to time spent playing

Repeated Play Episodes

A great majority of all age groups played with the packs on multiple occasions, with over 75% of all participants playing repeatedly. Within the group of families who played repeatedly with the pack, 70% completed the crafts over multiple occasions, 61% read and re-read the book, 66% played with the crafts as play props, while 27% used the box or craft materials for other purposes.
**Figure: Use of the pack components, when played with on multiple occasions**

*Children’s Use of Materials*

All age groups appear to have experienced success with the pack materials, though data indicate some differences between age groups.

With the short playtime duration for 3-year olds, we wondered if these children experienced success with the materials. Overall, 27% of 3-year olds did not or seldom engaged in hands-on play. However, of the 80% of 3-year olds who played with the packs on multiple occasions, the data indicates that the majority of these 3-year olds used the materials appropriately, with 67% completing the crafts over multiple occasions, 58% reading and re-reading the book, and 67% playing with the crafts as play props. So, while many 3-year olds experienced success with the packs, the experience did not seem developmentally appropriate for all children in this youngest age group. Likewise, the scissors presented difficulty and frustration for some families with young children, as evidenced by comments: “…a lot of the projects require a great deal of precise cutting
with scissors that is not quite age appropriate for my 4 year old daughter who will be 5 in January… My daughter is often frustrated that there is no way for her to participate in certain parts of each project.”

The 5-6 year old group seemed to play most distinctively and successfully with 90% of 5 year-olds playing repeatedly with the packs, and 70% of 6-year olds playing repeatedly. Examining these groups of ‘repeat players’, 5-year olds (80%) most often read and re-read the storybooks, while the 5- and 6-year olds most often played with the play props (80%, 86%). As a mother of a 5-year old commented about their play experience, “He really enjoyed the characters on sticks to use as puppets.” Another mother observed, “My son really connected with the crafts because the story brought them to life more.” The packs seemed most successful, as a literacy-play experience for this age group.

Interestingly, the older age group also showed interest in the packs with 69% of 7-8 year olds playing repeatedly. Within this age group of ‘repeat players’, all children completed the crafts over multiple occasions, indicating a high level of hands-on engagement for school-agers.

The Children’s Play Experience

Overall, the majority of children were described as frequently happy (66%), and engaged/interested (60%). Many children frequently engaged in constructive/hands-on play (46%). Children were somewhat less frequently engaged in problem-solving with 50% described as ‘somewhat’ trying new ideas or trial and error while 21% frequently problem-solved. Similarly, 55% somewhat exhibited pretend, imaginary role-playing while 29% frequently pretended.
The majority of children did not exhibit challenging behaviour, and those who did were characterized as “too young” in families’ comments. Behaviour that can still be characterized as ‘play’, though may not be recognized as such by families, included onlooker behaviour (21% of children engaged ‘somewhat’ as onlookers) and 28% ‘somewhat’ used the materials for other purposes. Onlookers were most likely to be 3-4 year olds, while 7-8 year olds were most likely to use the materials for other purposes. Nearly 25% of children were described as somewhat or frequently uninterested in the storybook, while 17% were described as uninterested in the craft materials; these were most often families with children in the 3-4 year old age categories.
The Adults’ Play Experience

Overall, the adults reported feeling positive and engaged during the play experience with 37% feeling somewhat engaged and 60% feeling so frequently. The adults took the role of leader and facilitator (somewhat 49%; frequently 44%), while also watching and following the child (somewhat 51%; frequently 18%). Adults most often described themselves as tolerant of mess (somewhat 60%; frequently 28%) and tolerant of noise (somewhat 56%; frequently 28%).

Figure: Key characteristics of adult as ‘play partner’

Some gender differences were noted in these levels of tolerance. Mothers reported being most tolerant of noise (somewhat 55%; frequently 33%) and mess (somewhat 55%; frequently 33%), while fathers did not describe themselves as very
tolerant. Fathers did not describe themselves as ‘intolerant’, though, and most often reported being ‘somewhat’ tolerant of noise (67%) and mess (75%).

Overall, the adults did not need to manage difficult emotions or behaviour, though perfectionism and managing with younger children did seem to cause some challenges. The majority of adults (58%) did not at all feel bored or disengaged, with 19% feeling somewhat bored during the play experience. Likewise, most parents (60%) did not feel anxious or overwhelmed, though 18% reported feeling somewhat anxious. A majority of parents (74%) seldom/not at all felt they were doing too much, though 26% reported feeling that they were somewhat or frequently doing too much within the play experience. These adults were most often playing with the youngest age range, 3-4 year olds.

The adults found the experience with the play materials and children to be manageable. In relation to the materials, 79% were seldom or never frustrated with the materials, with 21% experiencing some frustration. 11% of adults reported feeling somewhat frustrated with the child’s behaviour, but most adults reported feeling seldom frustrated (18%) or not at all frustrated (70%). While 36% of adults experienced no feelings of perfectionism, 28% somewhat felt this pressure and 7% frequently experienced perfectionism.

**The Shared Play Experience**

The families reported a very positive social-emotional atmosphere, with much ‘give and take’ during the play experience. Adults (83%) and children (53%) offered each other directions and instructions. The play experience was characterized by turn-taking with 88% of children and 76% of adults taking turns. Likewise, 83% of children shared ideas during the play, while 71% of adults shared ideas. As described by the mother of a 6-year old, “My son enjoyed creating the plane with me and flew it around the house for hours! We also liked reading the story together ... taking turns with each page.”

The literacy-play behaviours were most often exhibited by children, rather than adults, and were to some extent were absent from play episodes. The majority of children (66%) made personal connections to the story, while some adults (44%) did so; 24% of families reported this aspect as ‘not applicable’ to their play experience. The
story was used as inspiration for pretend play for 74% of children, while 23% of adults reported doing so; 16% of families reported this aspect at ‘not applicable’. A majority of children (85%) used the craft product as a prop for pretend play, while only 19% of adults did so; 12% reported this aspect as ‘not applicable’. Similarly, children (72%) most often had questions for further inquiry and learning, with only 21% of adults doing so, and 19% of families reporting no further inquiry or learning. These results would indicate that while families experienced the packs as a positive, sociable play experience, they may not be fully leveraging the learning opportunities for which the packs were designed.

Overall, the families rated the stories and materials as providing support for quality family play, with 51% most positive and 47% as ‘somewhat’. By age group, parents with older children indicated very strongly that the packs supported quality family play, with 80% of parents of 5-year olds, 50% of parents with 6-year olds, 100% of parents with 7-year olds and 75% of parents with 8-year olds giving the packs the highest rating. Parents of 3- and 4-year olds were less enthusiastic, rating the packs as somewhat supportive of quality family play (73%, 80%).
When considering which aspects of the packs best supported play and fun, all aspects of the pack were highly rated, with the storybook and craft material (doing the craft) equally rated as very supportive (62%), while the parent instruction card was rated highly supportive by 58% and the craft material (playing with it afterward) was rated highly supportive by 43%. Families with school-age children (ages 5-8) most highly rated the craft materials as supportive of play and fun.

Figure: Value families placed on the Peekapak compared by age group
**Study Limitations**

The study results are limited in a number of ways, which should be considered when interpreting and considering possible implications. Firstly, the study used a cross-sectional design, surveying families after a single Peekapak play experience, and so offers a view limited to a single moment in time. Since the play experiences were ‘one-off’ occasions, we question how subsequent packs may or may not sustain and/or enrich family play. Is the Peekapak play value indicated in these results somewhat based on novelty, which might lessen with subsequent packs? Or, conversely, might repeated Peekapak play experiences contribute to family play routines, and possibly build family play capacities? Further, longitudinal research would be helpful in examining the context of family play over extended and repeated time frames (Creswell, 2012, p. 407).

While the study provided a preliminary view of trends, the sample size of the study is small, particularly when comparing age groups. Further research, with larger samples sizes, could provide more reliable results. Additionally, qualitative study methods – such as in-home observation and interviews – could add in-depth perspective to future research. Additionally, this study relied on adult-reported data rather than firsthand accounts from the children’s perspective. Research methods designed to examine children’s perspectives on play present ethical and practical challenges, but may very well provide insight into optimal conditions for ‘family play’.

Further, this study is limited to examining family play in the context of the Peekapak experience, rather than the full range of family play experiences. This study did not survey families’ value of Peekapak *in comparison* to other forms of outdoor and indoor recreational play, and so the results are limited to offering a simple, initial view of families engaging in the Peekapak experience.

**Discussion**

*Play Value: What did families value about the Peekapak play context?*

Based on duration and repeated play sessions, the Peekapak materials can be considered to have high play value. The largest proportion of children played with the packs for 15-30 minutes (48%), which could be considered a low- to mid-range playtime – but based on developmentally appropriate expectations, longer does not simply mean
better. When considering that most children played with the packs on multiple occasions (75%), and that families reported that their children were actively engaged with the materials, the packs could be viewed as providing a successful, engaging play experience. Results indicate that children commonly continued ongoing construction play on repeated occasions (70%), and repeatedly used the crafts as play props (66%). Families’ open-ended responses highlighted craft construction as fun and pleasurable, characterized by the following response: “It was a good experience...where children can use their imagination and also build things. It was a good family play.”

Significant proportions of families played with the packs for longer durations, spending 30-60 minutes (27%) and some more than 60 minutes (19%). Interestingly, of the latter group 90% played on multiple occasions, indicating a very high play value experienced by these families. Further research could provide an in-depth examination of why and how these particular participants experienced such success with the packs, and how the packs could be designed to leverage that play value.

All aspects of the packs were valuable to families, with repeated play occurring with each - the craft construction materials, the re-reading of the storybook, and the playing with crafts products as play props. Families’ open-ended responses often indicated positive comments regarding the construction play materials (i.e. “was an awesome activity”), but also indicated some “frustration” with the craft activities sometimes being difficult and sometimes not offering a durable play prop (i.e. “the crafts didn’t work/last very well”). While families valued the craft materials as play props, they were not as highly rated as the other aspects of the pack – possibly indicating that more durable, ready-to-play items would be welcome additions to the packs.

**Developmental Implications**

While the data suggests that the play packs contained elements that were developmentally appropriate for children in each age category, differences between ages were observed. Findings would suggest that the packs were most developmentally appropriate for the 5-6 year-old age range, as these children engaged in the most play and the most significant levels of literacy-play. Older children, ages 7-8 did play with the packs for significant time periods and on multiple occasions, while the youngest children
demonstrated play behaviour but also experienced the lowest levels of engagement with the packs.

Considering the youngest players, the play packs are somewhat appropriate for most 3-year old children, as the main focus of their time with the packs was to complete the crafts over multiple occasions and to play with the crafts as play props (67% respectively). Although the majority of 3-year olds spent 15 minutes or less using the play packs, they did return to their play on multiple occasions. Play episodes that are shorter in length may be considered common to children of this age, and so the children’s continued interest may provide an indicator that the materials were age-appropriate. However, the levels of frustration reported by the parents of 3-year olds would indicate that the packs did not provide an optimal ‘family play’ experience for this age group. As a parent explained, “My child played with the crafts quite a bit after we made them. However, I thought the crafts were too hard for his age. Consequently, it was hard for him to have the attention span to complete them.” The storybook seemed to be of interest to this youngest age category, with 58% of 3-year olds re-reading the books. Subsequent research, such as in-home observation of Peekapak play, could offer more insight into why families with 3-year olds experienced frustration during their experiences, and what sort of play materials might offer a more optimal experience.

Children within the 5- and 6-year old age categories spent the longest time using the packs in some form, with 50% of 5-year olds and 80% of 6-year olds spending 30 minutes or more engaged with the packs. The construction crafts were highly appropriate for the 5-year olds as many were completed on one occasion with the 5-year old instead spending equal amounts of time reading and re-reading the books and playing with the crafts as play props (80% respectively). The implications for language and literacy development in these actions are noteworthy, as reading and re-reading the book then playing with the props afterwards is appropriate for this age group, demonstrating significant play-literacy connections. Further, new iterations of the Peekapak play kits include scenery ‘backdrops’ which may further lend themselves toward storytelling/retelling and dramatic play – hallmarks in emergent literacy development.
Interestingly, the 6-year olds shifted in some of the ways the pack was used. The craft was completed over multiple occasions equally as much as the crafts were played with as props, perhaps indicating that the child was truly enjoying the crafting process, therefore deciding to engage in this process multiple times. Unlike 5-year olds, 6-year olds spent less time reading and re-reading the book. As well, 6-year olds used the box or the craft materials for other purposes, a category that is not present with the 5-year old children. Using the box or materials for other purposes could indicate that the 6-year olds used the materials in other forms of dramatic play or in more sophisticated representation, with both of these being higher-thinking skills.

Children in the 7- and 8-year old age groups represent only 22% of the population of children whose families participated in the project, yet there are interesting findings for these groups. There is a spike in the number of children who completed the crafts on multiple occasions (100% of 7 and 8-year olds) from the 6-year old group (86%), perhaps reflecting older children’s focus on the detail and accuracy of arts projects. Fine motor skills such as tool use tends to be more sophisticated in older children, providing the skills to complete the crafts as they were meant to be constructed. Children of this ‘school age’ category possess stronger skills in regulating emotions and behavior, which may lead to higher persistence in tasks and play.

Each age category found elements of the play pack to be engaging and helpful in their play and exploration of the ideas they encountered in the Peekapak experience. The data suggests that the packs had the most impact on 5- and 6-year olds, with these children most likely to use the packs in play and literacy exploration.

**Supporting Relationships and Learning**

In the context of family play, the Peekapak experience was most successful in the social-emotional domain, as families indicated high levels of positive emotional feelings and social interaction. Both parents and children indicated high levels of engagement and enjoyment, a key characteristic of play behaviour and one most valued by families in previous ‘family play’ research. Similarly, adults reported that children were often given control and choice, as adults aimed to follow the child’s lead and take turns with their child – another key characteristic of play, particularly valued in children’s perspectives.
on play. Additionally, adults seemed to maintain a social environment conducive to play and creativity, showing tolerance for mess, noise and incorporating children’s ideas during the play.

The results indicate success as a literacy-play experience, as demonstrated by children’s engagement. However, as a ‘family play’ experience, the adults did not seem to fully leverage their potential as ‘play partners’ in this domain. Children most often took the lead in these play behaviours, while adults were less likely to make personal connections to the text, use the story as inspiration for pretend play, or use the craft product as props for play. Most telling, significant numbers of families (12%-24%) indicated that these literacy-play behaviours were ‘not applicable’ to their family play experience, indicating that adults did not model these behaviours for children. Further research, such as interviews with parents, could reveal whether adults either choose not to engage, are unsure as to how to enter this aspect of the play, or perhaps do not fully appreciate their potential role in sustaining and enriching pretend play.

Likewise, only 21% of adults engaged their children in questions for further inquiry and learning based on the Peekapak experience. The majority of children (72%) had further questions and lines of inquiry, but adults may not recognize this as an opportunity to sustain and enrich this intellectual aspect of play or may be unsure of how to engage in playful inquiry. Alternately, in their efforts to maintain a positive play context, by respecting children’s choices and leadership, adults may hesitate to ‘join in’ or ‘take the lead’ on the aspects of play that seem more ‘natural’ for children – pretend play and inquiry. Learning about each other, and showing mutual respect may be an important, as one mother described this aspect of the play with her 6-year old: “I have been impressed by my daughter's creativity and problem-solving - together we have been finding a balance between following the instructions and making the craft ‘her own.”’ Building identity - as a ‘player’, ‘teacher’, ‘learner’, ‘builder’, ‘reader’, ‘creator’, ‘problem-solver’ – and building family relationships can be considered the most significant and valuable aspects of the Peekapak experience.
References


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Appendix A
Invitation to Participate
Family Play: What matters most?

Dear Peekapak subscriber,

We are a research team from George Brown College School of Early Childhood, working with Peekapak to examine the value and nature of family play time. You are invited to participate in this study with a 15-minute on-line survey.

The objectives of the study are:
   a) To examine the play potential of the Peekapak story and play materials
   b) To examine the play behaviours of children while playing with the Peekapak
   c) To examine the characteristics of adult-child interactions while playing with the Peekapak
   d) To gather your feedback on the quality of the Peekapak materials and experience

Involvement in this research study will not pose any risks for you. Participation is voluntary, and the survey is anonymous. No one other than the researchers will have access to the raw data. You have the right to refuse to participate without having to give a reason and without any adverse consequence. Please note that you can contact George Brown College’s Office of Research Ethics at researchethics@georgebrown.ca if you have any questions about your rights as participant.

We will use the data from this study to inform the Peekapak product development, and to write educational materials (i.e., reports, articles, presentations) for the Early Childhood Education sector on the importance and characteristics of family play.

We would like to invite you to participate in this research with the on-line survey at:
https://www.surveymonkey.com/s/familyplay

If you have any questions, contact Kimberly Bezaire 416-415-5000 ext. 4668, kbezaire@georgebrown.ca

Sincerely,

Dr. Kimberly Bezaire
Professor-Researcher
School of Early Childhood
George Brown College
Appendix B
Invitation to Participate
Family Play: What matters most?

Dear Rose Avenue Child Care Families,

We are a research team from George Brown College School of Early Childhood studying the value and nature of family play time. The kit you have received has been provided in partnership with Peekapak, makers of children’s story-adventure kits (http://www.peekapak.com). Peekapak have partnered with the School of Early Childhood through the George Brown Office of Research and Innovation. You are free to keep and enjoy this kit, free of charge, and are in no way obligated to participate in this research study.

If you are interested, we invite you to participate in a 15-minute on-line survey: https://www.surveymonkey.com/s/familyplay

Participation is voluntary. You have the right to refuse to participate without having to give a reason and without any adverse consequence.

Involvement in this research study will not pose any risks for you or your family. The survey is anonymous, and no one other than George Brown College researchers will have access to the raw data. Please note that you can contact George Brown College’s Office of Research Ethics at researchethics@georgebrown.ca if you have any questions about your rights as participant.

We will use the data from this study to write educational materials (i.e., reports, articles, presentations) for the Early Childhood Education sector on the importance and characteristics of family play; study results will also be provided to Peekapak to inform product development, innovation and promotion. Study conclusions will be shared with in a Final Report with the Rose Avenue Child Care Centre.

If you have any questions, contact Kimberly Bezaire 416-415-5000 ext. 4668, kbezaire@georgebrown.ca

Sincerely,

Dr. Kimberly Bezaire
Professor-Researcher
School of Early Childhood
George Brown College