THE EFFECT OF A PARENT TRAINING PROGRAM ON CHILDREN’S PLAY

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Abstract. Background. Young children learn about their world through play but some lack developmentally appropriate play skills and their learning may be compromised. Purpose. The purpose of this study was to explore the effectiveness of parents teaching play skills to their children. Methods and Results. Parents of preschoolers were taught ways to enhance their children’s pretend play and then engage in parent-child play daily for six weeks. Children in the parent training group (n=5) showed more growth in their play than the children in a comparison group (n=4). Every child in the parent training group showed an increase in pretend play, whereas in the comparison group, one child increased, two remained about the same, and one decreased. Conclusions. Implications for the delivery of early childhood services are discussed regarding the effective use of parents as implementers of play interventions. Keywords: early childhood, play, parent training.

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In early childhood, early identification and subsequent intervention allows for the building of essential skills that can prevent further problems. Recognizing the important role that parents, defined as the primary caregivers of the child, fulfill in the lives of their children, as well as the shift in educational law, early childhood intervention strategies should be family-centered (Individuals with Disabilities Education

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Improvement Act, 2004; Wehman, 1998). As the emphasis of prevention and early intervention grows, it is important to consider how to best enhance children’s development of skills in a way that supports the active involvement of the family.

Engagement in play is a central activity of early childhood and current empirical evidence supports the use of play-based assessment and intervention to identify and improve skills (Fewell & Rich, 1987; Kelly-Vance, Needelman, Troia, & Ryalls, 1999; Kelly-Vance & Ryalls, 2005; Kelly-Vance, Ryalls, & Glover, 2002; Linder, 1993; Stagnitti & Unsworth, 2004). Play interventions are family-centered, but research is limited in the involvement of parents in enhancing play (Kelly-Vance & Ryalls, 2008). This study investigated the effect of training parents on specific play teaching strategies and their children’s subsequent play.

**Importance of Play**

It is through play that children learn how to learn. Play is characterized as active engagement that is intrinsically motivated, freely chosen, pleasurable, and nonliteral and is seen as the blending of cognitive, sensorimotor, affective, and social behaviors, providing a vehicle for children to explore and manipulate their surroundings, express their feelings, and develop key relationships and roles (Bagnato, 2007). There is also a link between play and cognitive development, which is why it is important that children acquire developmentally appropriate play skills (Fewell & Rich, 1987; Kelly-Vance et al., 1999; Piaget, 1962). Engagement in play allows for the development of both problem solving skills and creativity (Bagnato, 2007; Russ, 2003; Singer & Singer, 1990).

**Play Intervention**

Support is growing for play-based interventions, that is, when identified areas in need of intervention are addressed through the context of play (Conner, Kelly-Vance, & Ryalls, in press; Kelly-Vance & Ryalls, 2008; Mallory, Kelly-Vance, & Ryalls, 2010). Malone and Langone (1999) emphasized that some children with developmental concerns are in need of direct interventions to teach them how to play in an age-appropriate way.
Strategies such as modeling, prompting, add-ons and reinforcement can all take place in the context of pretend play and have all been shown to aid in the enhancement of children’s play skills (DiCarlo & Reid, 2004; Guillaume, 1926/1971; Kelly-Vance & Ryalls, 2008; Mallory et al., 2010; Piaget, 1962; Singer, 1973; Stahmer, 1995; Thomas & Smith, 2004; Vygotsky, 1978). Modeling involves demonstrating play to a child. An adult acts out a pretend play behavior in the view of a child and then encourages the child to imitate the behavior. Prompting is when a cue is provided as to what play behavior to engage in next. Prompts can direct the play by telling the child exactly what play behavior to engage in or be less directive by asking a question to the child, which encourages the child to then engage in an appropriate play behavior. An add-on is when the child is encouraged to go one step further in his or her self-initiated play (Kelly-Vance & Ryalls, 2008). The ultimate goal is to add steps to the child’s pretend play behavior. Finally, reinforcement is used to encourage play and to praise the child for playing, especially the engagement in new play behaviors, which has been used in several studies to increase play behavior (Conner et al., in press; Eason, White, & Newsom, 1982; Mallory et al., 2010; Stahmer, 1995; Thorp, 2005).

Stahmer (1995) studied a play intervention aimed at increasing symbolic play and play complexity with seven children with autism, in which the researcher utilized both modeling and reinforcement in working with each child three times a week for one hour. Results indicated that each child increased in his or her symbolic play and play complexity, with most of the children showing more creativity in their play and generalizing the symbolic play skills to novel situations. In addition, the children increased in their interactional skills by responding more positively to adults. Likewise, Thorp et al. (1995) taught direct play skills to three children with autism and focused on increasing sociodramatic play. The researchers modeled appropriate play, encouraged role plays among the children, and reinforced new or approximate play behaviors. The researchers found increased sociodramatic play and children were able to generalize these skills to new toys in different settings.

Play interventions have also been extended to typically developing children who still show specific deficits in their play. Mallory et al. (2010) implemented a play intervention aimed at increasing divergent thinking...
by encouraging discrete play behaviors in three typically developing four- and five-year-old children. These children were compared to three other children who did not receive direct teaching of divergent thinking skills. After baseline play assessments using Kelly-Vance and Ryalls’ (2008) PIECES, children in the intervention group received the divergent thinking play intervention for 20 to 30 minutes, two times a week, for six weeks. The intervention was comprised of opportunities to add on to the child’s play using prompting, modeling, and reinforcement. Post-assessment results showed that two of the three children in the intervention group increased in their levels of pretend play and two of three showed more discrete play behaviors.

Similarly, a project by Nielsen and Christie (2007) found that through modeling, 37 typically developing children between the ages of 27 and 41 months increased their pretend play behaviors. After a phase in which children were modeled pretend play behaviors, children elicited an equal number of novel pretend play behaviors as imitated pretend play behaviors. Therefore, not only were the children imitating the modeled behaviors, but also producing novel pretend play acts.

**Parental Involvement in Play**

One key component that is missing in many play interventions is the role of parents. The results from each of the previous play interventions are promising, but as Stahmer (1995) discussed, training of these skills should be extended to parents, which is consistent with the shift in early childhood service delivery. Many parents understand the value of children’s play, but that does not necessarily mean that parents know how to best play with their children (Parmar, Harkness, & Super, 2008). It has been found that children whose parents had a fair knowledge of play demonstrated more advanced cognitive competencies and independence, and that the more play knowledge parents had, the more school readiness skills acquired by the child (Parker, Boak, Griffin, Ripple, & Peay, 1999). Other studies have shown that the more knowledge mothers have about play, the more educational the play environment and the more likely the children will demonstrate higher levels of play (Damast, Tamis-LeMonda, & Bornstein, 1996).
There is growing support for the involvement of parents in their children’s play. Roggman, Boyce, Cook, Christiansen, and Jones (2004) compared children in an Early Head Start classroom where half of the children had their fathers involved in a weekly home play activities program and weekly socialization groups at the center, while the other half of the children did not have any additional parental involvement beyond what was already provided through the Head Start program. More complex social play behaviors were observed in children whose fathers were involved in the program than those in the comparison group. In addition, toddlers with more complex social play had higher scores on tests of cognition, language, and emotion-regulation at both 24 and 36 months.

Fiese (1990) compared the level of symbolic play demonstrated by toddlers when they were engaged in solitary play and when they were engaged in play with their mothers. It was found that children exhibited more complex play when they played with their mothers than when they played alone, suggesting that social interaction may influence more complex symbolic play. This finding lends support for more active parental involvement.

Beyond simply increasing the time parents engage in play with their children, parents can be provided with developmentally appropriate information about their child so they can target specific skills, such as a particular play behavior (Mahoney et al., 1999). According to the results from two large-scale surveys, when parents were asked what they want from early intervention services, their highest preference was for strategies to help their child developmentally (Mahoney & Filer, 1996; Mahoney, O’Sullivan, & Dennebaum, 1990).

Support for the utilization of parents in carrying out interventions for children is increasing. Parents have been used in intervention implementation in numerous areas of child development such as children’s school readiness, social and communication development, and interventions for children with Attention Deficit Hyperactivity Disorder (Johnson, Franklin, Hall, & Prieto, 2000; Landry, Smith, Swank, & Guttentag, 2008; Parker et al., 1999) but there is a need for continued exploration of the effectiveness of play interventions with the parents as the main implementers. In both of the Roggman et al. (2004) and
Fiese (1990) studies, the children were not receiving direct play skill interventions, but instead parents were merely increasing the amount of time they played with their children. Therefore, it seems probable that if, in addition to increasing the amount of time parents play with their children, parents are also provided with specific play strategies that can enhance their children’s play, additional complexity of play might be observed.

**Current Study**

This study was designed in line with the shift in early childhood intervention delivery in which intervention strategies are family-centered. It was aimed to extend the research on using parents as implementers of play interventions in order to determine the effect of a parent training program on children’s pretend play. Even with the recognized important role of parents in the lives of children, parents are underutilized in intervention implementation. With the long-term benefits of play recognized, more attention needs to be given to developing children’s play skills and a logical process to do this is by teaching parents to help their children. Therefore, this study explores the use of a parent training group to increase children’s play.

**METHOD**

**Participants**

Parents of children between the ages of 18 and 60 months were recruited by flyers for this study from a local, Midwestern Early Head Start (EHS) center and its affiliated home-based program. They were randomly assigned to either a training or a comparison (non training) group. Participants included five children ranging in age from 24 to 48 months in the parent training group and four children ranging in age from 29 to 36 months in the comparison group and a parent for each child. Table 1 describes demographic characteristics for each of the participants.
Table 1. Participant Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Parent training group</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Comparison group</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Child A</td>
<td>Child B</td>
<td>Child C</td>
<td>Child D</td>
<td>Child E</td>
<td>Child F</td>
<td>Child G</td>
<td>Child H</td>
<td>Child I</td>
</tr>
<tr>
<td>Age (months)</td>
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<td>48</td>
<td>29</td>
<td>31</td>
<td>39</td>
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<td>24</td>
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<td>30</td>
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<tr>
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<td>Female</td>
<td>Male</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Male</td>
<td>Female</td>
<td>Female</td>
<td>Female</td>
</tr>
<tr>
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<td>Caucasian</td>
<td>Caucasian</td>
<td>Caucasian</td>
<td>Caucasian</td>
<td>Caucasian</td>
<td>Native American / Caucasian</td>
<td>Hispanic / Caucasian</td>
<td>Caucasian</td>
</tr>
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<td>Identified Disabilities</td>
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<td>N/A</td>
<td>Speech / Language, Autism</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Speech / Language</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Home-based (HB) or EHS</td>
<td>HB</td>
<td>HB</td>
<td>HB</td>
<td>EHS</td>
<td>HB</td>
<td>HB</td>
<td>HB</td>
<td>HB</td>
<td>EHS</td>
</tr>
<tr>
<td>Parent participant</td>
<td>Mother, Father</td>
<td>Mother</td>
<td>Mother</td>
<td>Mother</td>
<td>Mother</td>
<td>Mother</td>
<td>Mother</td>
<td>Mother</td>
<td>Mother</td>
</tr>
<tr>
<td>Parent participant education level</td>
<td>Some college (both)</td>
<td>Associate's degree</td>
<td>Associate's degree</td>
<td>Bachelor's degree</td>
<td>Some college</td>
<td>Some college</td>
<td>N/A</td>
<td>Bachelor's degree</td>
<td></td>
</tr>
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<td>Household income</td>
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<td>30,001-40,000</td>
<td>30,001-40,000</td>
<td>30,001-20,000</td>
<td>10,001-20,000</td>
<td>0-10,000</td>
<td>60,001 or above</td>
<td>20,001-40,000</td>
<td>40,001-50,000</td>
</tr>
</tbody>
</table>
Measures

Play in Early Childhood Evaluation System (PIECES). The PIECES (Kelly-Vance & Ryalls, 2008) was utilized in order to assess the cognitive development of the children through play. Play-based assessment takes place in a natural setting, is flexible, motivating, parent friendly, can be used with every child, and produces optimal performance leading to interventions with a means to monitor progress (Kelly-Vance & Ryalls, 2008). The PIECES was developed through research and theory on play across the developmental stages of children (Kelly-Vance & Ryalls, 2005). It has been shown to have high psychometric properties with an interrater reliability of 90% for typically developing children and 100% for children with exceptionalities and moderate test-retest correlations for each population, r=.48 and r=. 58, respectively (Kelly-Vance & Ryalls, 2005).

Procedure

The training for the parents was carried out using the components of successful parent trainings, including direct instruction, modeling, rehearsal, feedback, and ongoing consultation (Miltenberger, 2001, Rush & Shelden, 2006; Shriver & Allen, 2008). Assessments were conducted pre and posttest to measure changes in children’s play.

Children’s level of exploratory and pretend play was assessed using the PIECES. These assessments took place in a natural environment, which was the child’s home for seven of the children and the childcare facility for the other two children who attended the center. In each location, the assessment took place in an open area, free from other toys. The same set of toys was brought to each location and set up in a circle. The toys included a kitchen set with play food, eating utensils, plates, and pots, a phone, a baby doll with a bottle and pacifier, a camera, a tool set, blocks, a farm set with animals, a truck, a cash register with money, and a doctor’s kit. The toys were selected based on their potential to elicit exploratory or pretend play behaviors.

The child was encouraged to play with the toys but no direction was given for what toys to play with or what play behaviors to engage in. The parents were asked to not interact in the child’s play and the researcher did not interact either. However, parents were able to respond to the
child’s play, such as taking a plate of food from the child. The child’s play behaviors were recorded for 30 minutes, with the researcher recording the child’s play behaviors in a narrative format on a computer. The play behaviors were recorded exactly how they were observed, providing enough detail to capture the child’s play. The child was assessed for the total number of exploratory, simple pretend, and complex pretend play acts, as well as specific pretend play behaviors, including other-directed, substitutive, and agentive play, as well as the number of steps in each sequence. During the play assessments, parents completed a demographic survey but were available to the child.

After the play assessments, children’s names were randomly drawn for their placement in either the parent training group or the comparison group. Parents were provided with a detailed description regarding the procedures for the study for either the parent training group or the comparison group.

The following week, the parents from the training group attended an evening session, where dinner and childcare were provided. A general presentation followed that included an overview of play development and the importance of play. Parents were then taught four specific play strategies including modeling, prompting, add-ons, and reinforcement, which could be used to encourage more complex play behaviors. The evaluation aspect of the PIECES allowed for the identification of specific target play behaviors for the parents to focus on while engaging in parent-child play using the four play strategies. Each child had a primary target, but some children had additional targets.

Following the demonstration of how to use the play strategies to focus on the target play behaviors, parents practiced each of the strategies with their child while the researcher provided feedback. The researcher used this time to model additional examples of each of the four teaching strategies with the child. Due to the group format, parents were provided with information on how to develop each of the target play behaviors, even if it was not a target for their child.

Parents were provided with a manual that described the study in detail, had handouts on the importance of play, the development of play, and a description and examples of each of the four play strategies. Individual tips were provided concerning the target play behaviors the parents were focusing on. During this session, parents were provided
with a ten-dollar gift card, as well as developmentally appropriate children's toys that were selected because of their potential to elicit pretend play behaviors. The researcher modeled the four play strategies with the specific play targets using the toys provided.

A six-week period followed during which the parents were asked to play with their child each day. They were provided with a daily procedural checklist to record the play strategies they used during each play session. There was no length of parent-child play required but it was suggested that the parents try to use the play strategies for at least 15 minutes a day with their child, concentrating on the specific target play behaviors. Parents were encouraged to use all four throughout the daily parent-child play interactions.

Weekly, the researcher met with each parent in the child's home or in the EHS center. For two weeks during the six-week period, home visits were unable to be scheduled so phone conversations took place instead. During these home visits or phone calls, the parents discussed how the project was going and what questions they had. The researcher provided suggestions and modeled play behaviors when necessary.

At the end of the six weeks, children in both groups were assessed once again for their level of exploratory and pretend play using the PIECES. A final evening session was held for the parents in the parent training group to answer any remaining questions and to complete the follow-up survey.

For 22% of the play assessments, play was recorded and coded by other trained researchers. These researchers were previously trained in coding using the PIECES, but did not take part in training the parents. The interrater reliability for the assessments reached between 90% to 99% agreement.

RESULTS AND DISCUSSION

To compare play assessment results, children in the parent training group and comparison group were assessed for their total number of exploratory and pretend play acts. Table 2 compares the overall number of exploratory and simple pretend play acts and complex play sequences between the parent training group and comparison group. The last
column in Table 4 also shows all five children in the parent training group improved on pretend play acts while only one child in the comparison group improved. A non-parametric Fisher Exact test indicated that this difference was significant at the .05 level, p = .048.

Table 2. Total Number of Exploratory vs. Pretend Play Acts at Pre- and Post-Assessments

<table>
<thead>
<tr>
<th></th>
<th>Exploratory play acts</th>
<th>Pretend play acts</th>
<th>Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Parent training group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child A</td>
<td>38</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>Child B</td>
<td>10</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Child C</td>
<td>17</td>
<td>7</td>
<td>28</td>
</tr>
<tr>
<td>Child D</td>
<td>21</td>
<td>36</td>
<td>23</td>
</tr>
<tr>
<td>Child E</td>
<td>14</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>Comparison group</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child F</td>
<td>28</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Child G</td>
<td>42</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Child H</td>
<td>50</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Child I</td>
<td>34</td>
<td>32</td>
<td>6</td>
</tr>
</tbody>
</table>

Note. Child H was considered no improvement in pretend play acts because the difference between pre and post was only one point.

Each exploratory and pretend play act was further coded using the PIECES based on the particular type of exploratory or pretend play act and the number of steps, other-directed acts, substitutive acts, and agentive acts, which are all aspects of pretend play, are presented. To more specifically gauge the change in pretend play for each individual child, the child's growth between the pre-assessment and the post-assessment in total play sequences, number of steps, and other-directed, substitutive, and agentive acts were calculated for both groups, as shown in Table 3. The total number of days that parents engaged in parent-child play and the average length of the play each day was reported, which is shown in Table 4. Below are the results of each individual child.
Table 3. Growth in Scores on the PIECES between Pre- and Post-Assessments

<table>
<thead>
<tr>
<th>Play behavior</th>
<th>Parent training group</th>
<th>Comparison group</th>
<th>Group mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Child A</td>
<td>Child B</td>
<td>Child C</td>
</tr>
<tr>
<td>Three plus step acts</td>
<td>12a</td>
<td>7a</td>
<td>1</td>
</tr>
<tr>
<td>Highest no. of steps</td>
<td>-2b</td>
<td>2</td>
<td>12a</td>
</tr>
<tr>
<td>Other-directed acts</td>
<td>-1b</td>
<td>0</td>
<td>-1b</td>
</tr>
<tr>
<td>Substitutive acts</td>
<td>17</td>
<td>0</td>
<td>-1b</td>
</tr>
</tbody>
</table>

Note. aPrimary target. bAdditional target.

Parent Training Group

Child A. Over the six weeks, Child A increased her total number of pretend play steps within a sequence, as well as the complexity of the play behaviors she engaged in. Child A progressed from showing several four- and five-step play sequences, to consistently showing six or more step play sequences, which was age-appropriate play. In the post-assessment, Child A showed fewer total play sequences, but the increased complexity within the sequences logically accounts for this decrease. Child A’s other-directed and substitutive play acts both decreased over the course of the study, but there was a large increase in agentive acts, which is a higher level of play than the other two areas. This is especially noteworthy because increasing agentive play was not a primary focus, but her parents did report that they encouraged this behavior after learning of it during the parent training.

Child A’s parents were highly involved in this study and reported using the play strategies on almost a daily basis, only missing three days. Child A was one of the two children who made the most consistent
gains throughout the course of the study, which may have been related in part to her parents reporting the highest average minutes of daily parent-child play, which may have allowed her the most opportunity for exposure to the four play strategies used to encourage the development of her play skills.

**Child B.** For Child B, the main focus was increasing the number of play steps. Child B progressed from showing only simple pretend play to showing complex pretend play with several sequences and multiple steps within each sequence. There was also a small increase observed in other-directed acts.

The changes that were observed with Child B were particularly noteworthy with his verification of autism. As past research has shown, children with autism often have difficulty showing pretend play behaviors (Stahmer, 1995; Thomas & Smith, 2004; Thorp et al., 1995). At the beginning of the study, Child B only demonstrated exploratory and simple pretend play, but by the end of the six weeks he was engaging in complex pretend play, tying together multiple steps in multiple sequences with different toys. This improvement in play is particularly notable because Child B’s mother was only able to participate in parent-child play about one-third of the available days because of an illness, her work schedule, and time spent with relatives.

Child B’s mother reported that over the course of the study, Child B began to engage in cooperative play with his younger brother and even initiated the play on several occurrences. In addition, it was reported that he was more willing to engage in new play behaviors and in activities that he did not choose for himself.

**Child C.** Child C increased other-directed play acts from 1 to 13 over the course of the study, which was his main focus. At the pre-assessment, Child C showed age-appropriate sequencing of steps; however, he still increased in this area as well. In addition, Child C showed an increase in substitutive acts.

Child C was the sibling of Child B and their mother was able to participate in parent-child play for three additional days with Child C than with Child B. However, the parent-child play only occurred on about half of the available days, which makes the growth in Child C’s play even more substantial.
**Child D.** The main target for Child D was to add more other-directed play acts and she increased from 6 at the pre-assessment to 16 at the post-assessment. There were no increases observed in substitutive acts, but there was an increase from zero to two to five between the three assessments in agentive acts, which is a higher level of play than substitution. Child D showed age-appropriate steps and sequences in her play at the pre-assessment, but she showed gains in this area as well across the assessments, demonstrating that she continued to develop higher complexity of play.

Child D was one of the two children who showed the most consistent gains throughout the course of this study and her mother reported the second highest average length of parent-child play each day, which could be hypothesized as a contributing factor to the play growth.

**Child E results.** For Child E the primary target was increasing the number of play steps. Although the number of steps did not increase for this child, he did have more instances of sequenced play in the post-assessment. This is to be expected when a child is first learning to play with more complexity. At the beginning of the study, he was playing at a much lower level than what would be expected for his age, so he had more gains to make in the lower levels of complexity within play behaviors, starting with increasing pretend play acts. This child nearly doubled his total number of pretend play acts from the pre-assessment to the post-assessment, which is a promising finding. Although he was still not tying the play acts together in steps to the degree that would be expected for his age, he was overall showing more pretend play and had the greatest gain of all children in terms of the number of pretend play acts.

Child E’s mother was also encouraged to try to increase both substitutive and agentive play with him, but he did not increase in these areas. An area of strength for Child E at the pre-assessment was the total number of other-directed acts, but these acts were often performed in isolation and not tied to other pretend play acts. Throughout the course of the study, the number of other-directed acts continued at a similar level, but still occurred in isolation.

Although Child E’s mother participated almost every day of the study’s duration, she reported that she did not have as much time as she wanted to engage in parent-child play. Child E had the most gains to
make because he demonstrated the lowest play skills at the beginning
of the study in comparison to the rest of the parent training group so it
was expected that his growth would be less substantial.

**Comparison Group**

The parents of the children in the comparison group were not
taught strategies to increase play. Therefore, one way to compare the
change in play between the children in the parent training group and
those in the comparison group is to look at the total number of acts of
exploratory versus pretend play (both simple and complex) between
the two groups across the assessment periods, as shown in Table 4.
There are two noteworthy findings from this comparison. First, all of
the children in the parent training group had more pretend play acts
than exploratory acts in the post-assessment. In contrast, all four in the
comparison group showed a higher number of exploratory acts than
pretend play acts in the post-assessment. Therefore, at the end of the
study for children in the parent training group, the majority of their
play was categorized as pretend play, whereas the play for those in the
comparison group consisted mainly of exploratory acts. The second
finding was that all children in the parent training group increased their
overall number of pretend play acts in the post-assessment compared
to the pre-assessment. For the comparison group, from the pre- to the
post-assessment, two of the children elicited roughly the same number
of pretend play acts, one increased, and one decreased.

**Table 4.** Total Days of Parent-Child Play, Average Daily Length
of Parent-Child Play, and Number of Instances of Play Strategies Used
Reported by Parents in the Training Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Child A</th>
<th>Child B</th>
<th>Child C</th>
<th>Child D</th>
<th>Child E</th>
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<tr>
<td>Days participated (42 possible)</td>
<td>39</td>
<td>16</td>
<td>19</td>
<td>39</td>
<td>38</td>
</tr>
<tr>
<td>Average length (in minutes) per day</td>
<td>182</td>
<td>86</td>
<td>98</td>
<td>117</td>
<td>9</td>
</tr>
<tr>
<td>Total Instances of Modeling</td>
<td>36</td>
<td>14</td>
<td>17</td>
<td>9</td>
<td>16</td>
</tr>
<tr>
<td>Total Instances of Prompting</td>
<td>29</td>
<td>13</td>
<td>18</td>
<td>6</td>
<td>21</td>
</tr>
<tr>
<td>Total Instances of Add-Ons</td>
<td>31</td>
<td>11</td>
<td>15</td>
<td>23</td>
<td>19</td>
</tr>
<tr>
<td>Total Instances of Reinforcement</td>
<td>27</td>
<td>15</td>
<td>18</td>
<td>23</td>
<td>38</td>
</tr>
</tbody>
</table>
General Summary

All children in both the parent training group and the comparison group made gains in at least one area of play throughout the course of this study. Those in the parent training group showed even more play growth than the comparison group, providing support that the observed growth was beyond what would be expected due to general child development. Given the short span of this study, the results provide evidence in support of the effectiveness of play interventions with parents at the forefront. In four of the five children in the training group, there was evidence of play growth at the post-assessment in comparison to the pre-assessment in the target areas. Further, these four children showed added complexity to their play.

The parent training was conducted in a way that is consistent with past research support for effective parent training, including the components of direct instruction, modeling, rehearsal, feedback, and ongoing consultation (Miltenberger, 2001; Rush & Shelden, 2006; Shriver & Allen, 2008). This helped to ensure that the parents fully understood how to most effectively carry out the play teaching strategies. In addition, as part of the direct instruction component, a discussion was held on the importance of play, which may have influenced parents’ play interactions with their child. There are several possible factors that may have contributed to the growth in play of those in the parent training group including the increased amount of parent-child play, the use of the four teaching strategies, and the toys provided to the children. It is likely that a combination of these factors contributed to the effectiveness of this study.

It may be that simply increasing the amount of time spent in parent-child play led to the increased play behaviors. This is consistent with past research, which has shown that the more parent-child play, the more pretend play behaviors observed (Roggman et al., 2004; Fiese, 1990). Based on the results from this study, it appeared that the children whose parents engaged most frequently in parent-child play had the greatest play gains. Yet even the children who had less daily parent-child play, showed play increases, providing support that any increase in parent-child play may have beneficial effects on children’s pretend play behavior. The increased frequency and duration of parent-child play may have
been a result of the increased parental knowledge and perceptions of play or simply may have been due to the study component asking the parents to engage in daily parent-child play.

However, beyond merely increasing the amount of parent-child play, parents were taught four teaching strategies, including modeling, prompting, add-ons, and reinforcement, which all have empirical support as effective ways to increase play (DiCarlo & Reid, 2004; Guillaume, 1926/1971; Kelly-Vance & Ryalls, 2008; Piaget, 1962; Singer, 1973; Smilansky, 1968, Vygotsky, 1978). Therefore, not only were the parents engaging in increased durations of parent-child play, but it could also be argued that the parent-child play interactions were more purposeful and allowed for opportunities for the child to practice new play behaviors. Parents had knowledge of specific strategies to use to encourage particular play behaviors while engaging in parent-child play. Each of the parents in the training group reported the use of at least one teaching strategy during every parent-child play interaction.

The children were also provided with developmentally appropriate toys that could be used to elicit pretend play behaviors. All of the children had toys at home before the study, but additional toys were provided that they did not already have and that allowed for the elicitation of pretend play. The inclusion of new toys alone might have increased pretend play behaviors or the combination of the new toys with the increased parent-child play and the use of the teaching strategies by the parents with the toys provided could have led to the increased pretend play.

**Limitations and Future Research**

The results from this study are promising, especially given the short amount of time over which the study was carried out. However, due to the exploratory nature of this study, several limitations exist that could be improved upon in future research. One limitation was the reliance on self-report methods for the parental participation in parent-child play and use of the play strategies. Although the daily procedural checklist was a means to gather data on treatment integrity, without specific observations by the researcher, it cannot be definitively determined if the reports were accurate. Future research could utilize a direct observation component during the weekly check-ins to determine the change of
the parents’ interactions with their child and use of the play strategies to encourage play. In addition, future research could also explore the relationship between the amount of parent-child play and the play growth observed in the child.

There are also factors outside of the study that should be considered. For example, the language used in the home with the children, the presence of siblings and peers, and exposure to other settings, such as a childcare facility, may have influenced the results. These all may have contributed to the increased pretend play behaviors observed.

**Implications and Conclusion**

In accordance with past research, this study demonstrated that play interventions carried out by parents after a training session are an effective means to enhance children’s play skills (Johnson et al., 2000; Landry et al., 2008; Parker et al., 1999). Given that play is linked with success in many areas of development (Bagnato, 2007; Fewell & Rich, 1987; Kelly-Vance et al., 1999; Piaget, 1962; Singer & Singer, 1990; Russ, 2003), teaching parents to intervene early is critical. The play strategies taught in this study are behaviors that many parents already engage in, but helping parents to be more conscious of those behaviors can lead to enhanced children’s play.

It is believed that parents should be more involved in early intervention strategies because of the number of hours parents spend with their children, because parents have interactions with their children across multiple settings, because they know their children in more ways than do the researchers, and because the relationship between the parents and the child is usually the most significant relationship in a child’s life (Brink, 2002; Guerney, 2000). This study’s model of using the researcher as a consultant is consistent with the shift in early childhood service delivery, using family-centered intervention strategies (Individuals with Disabilities Education Improvement Act, 2004; Wehman, 1998). The results lend support for early childhood practitioners working closely with parents helping them to recognize the importance of play and how they can further their child’s play skills. Through the use of modeling, prompting, add-ons, and reinforcement, parents can help children to play with meaning and show more age-appropriate play skills.
References


TĖVŲ MOKYMO PROGRAMOS EFEKTYVUMAS UGDANT VAIKŲ ŽAIDIMO GEBĖJIMUS

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Pagrindiniai žodžiai: ankstyvoji vaikystė, žaidimas, tėvų mokymas.

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