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Pretend play and parents’ view of social competence: The construct validity of the Child-Initiated Pretend Play Assessment

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Background and Aims: Play is the primary means through which children develop skills and socially interact with other children. The aim of this study was to investigate the relationship between pretend play and social competence in 4–5-year-old typically developing children, thereby adding further knowledge to the construct validity of the Child-Initiated Pretend Play Assessment (CHIPPA).

Procedure: The pretend play ability of 35 preschool children aged 4–5 years was assessed using the CHIPPA. Parent/guardians of the children were interviewed regarding their child’s social competence using the Vineland Social–Emotional Early Childhood Scales (Vineland SEEC Scales).

Main Findings: No significant correlations were found between the children’s play scores and their Vineland SEEC Scales scores. A significant and negative relationship was found between cooperation and sharing and elaborate play scores, suggesting that children who scored poorly on the play assessment were rated as cooperative by parents.

Principal Conclusions: Parent report of social competence cannot be inferred from play scores. Reasons for the negative and significant finding are put forward and clinical implications of the findings are discussed. Additional investigations are necessary to further explore the construct validity of inferring social competence using the CHIPPA.

KEY WORDS construct validity, interpersonal relationships, parent, symbolic play.

Introduction

Occupational therapists regard play as a primary, all-encompassing occupation of childhood (Bundy, 2001; Parham & Primeau, 1997; Stagnitti & Unsworth, 2000). It is the primary means by which children gain multiple developmental and social skills (Pierce & Marell, 2004). The client-centred practice era has increased the importance of basing therapy on the facilitation of purposeful and meaningful activity (Bundy, 2001), and for children, this is play. Because of the importance of play in childhood, it is imperative that occupational therapists use valid and reliable measures of play in order to facilitate interventions (Bundy, 1993; Stagnitti, 2004). Assessments and interventions relating to play should form the basis of paediatric occupational therapy (Bundy, 1993). Knowledge about the reliability and validity of assessments can inform therapists on the interpretation of assessment results and consequent interventions.

The aim of this paper is to present findings of a study that investigated the construct validity of the Child-Initiated Pretend Play Assessment (CHIPPA) (Stagnitti, in press) in relation to the theoretical background of pretend play and social competence. Construct validity is more appropriate in this context than concurrent validity as construct validity ‘refers to the extent that an assessment accurately measures a theoretical construct’ (Kaplan, 1996; p. 12). Play, including pretend play, has been linked to social competence or social and emotional development by a number of authors (e.g. Fein, 1981; Farmer-Dougan & Kaszuba, 1999; Lindsey & Colwell, 2003; Schaaf, 1990; Sturgess, 2003; Vygotsky & Cole, 1978).

Definitions of play, pretend play and social competence

Play

Play is a widely varied construct that is difficult to define (Bundy, 1997; Goodman, 1994; Parham & Primeau,
because of its multidimensional nature (Pellegrini & Boyd, 1993). Bundy (2001) described play as an important means of developing skills in childhood, whereas Sturgess (2003) regarded play as ‘non-literal, opportunistic and episodic. It is an activity that is engaging, imaginative and creative, is predominantly for the moment, and therefore concerned more with means than ends’ (p. 104). Play is an intrinsically motivated activity that is free from any constraints of reality. It can take on many forms, it varies in its complexity, it represents a transaction between children and their environment, and is more process rather than outcome driven (Bundy, 1993; Bundy, Murray, Lane & Fisher, 2002; Goodman; Mulligan, 2003; Parham & Primeau; Rubin, 1982; Singer & Singer, 1990; Sturgess).

Play is the primary means for young children to learn about themselves, attain fundamental socialisation skills, such as cooperative behaviours and team problem-solving, experience emotions, and develop friendships (Bracegirdle, 1992; Sussenberger, 2003; Mulligan).

Pretend play

Pretend play is a type of play that emerges in typically developing children from 18 months of age and continues until 6 years, 11 months of age (Mulligan, 2003). In Australian children, observations of pretend play ability have also been made in children as young as 13 months. Pretend play occurs when children explore, experiment, and interpret social situations within an imaginary context or environment with the use of symbols (Mulligan; Vygotsky, 1978). It is an inherent, intrinsically controlled behaviour that serves for self-entertainment and assimilation of the complexities of the world (Singer, 1994). Pretend play can be categorised into two areas: functional play and symbolic play. Functional play (also referred to as functional-conventional play or functional-imaginative play) occurs when children’s play themes reflect the typical functional, conventional, and/or social uses for the play objects (Casby, 1992; Lewis & Boucher, 1997). Symbolic play occurs when play objects are unstructured and decontextualised from their functional use (Casby).

Social competence

Social competence is broadly described in the literature as a reflection of social judgements, the relational skills in social situations, or the behaviours and thought processes that reflect successful social functioning (Howes & Matheson, 1992; Wagenfeld, 2005). In childhood, social competence is viewed as the ability to meet social goals, the ability to enter established play groups, the ability to initiate play, and the ability to respond appropriately to peers (Howes & Matheson). Social competence is an individual attribute that depends on the developmental status of the child (Vaughn et al., 2000; Waters & Sroufe, 1983). Socially competent children have been described as having the ability to identify, respond and interpret cues and information in their social environment (Kemple, 1991). Socially competent children are likely to attract and positively engage other children, demonstrate good communication skills and abilities to participate in pretend play, share toys, and control affect and behaviour when required (Bierman & Welsh, 2000).

Links between play, pretend play and social competence

Play has been described as having a positive influence on a number of developmental areas, including social competence (Fein, 1981; Goodman, 1994; Schaa, 1990; Sturgess, 2003; Vygotsky, 1978). In 2000, Stagnitti and Unsworth suggested that children who self-initiate pretend play with peers facilitate the development of their social understanding. This viewpoint is consistent with Peter (2003), who suggested that during pretend play, children strengthen their awareness of social norms by engaging in imaginary situations that bring social opportunities and consequences. Children who lack the ability to spontaneously interact with their environment and other people are more likely to have impaired social understanding (Stagnitti & Unsworth).

Farmer-Dougan and Kaszuba (1999) found that the children who participated in ‘sophisticated play behaviours’ (p. 436), or engaged in pretend play, were more likely to be cognitively and socially competent with peers and adults. In a longitudinal study examining ‘social pretend play’, Howes and Matheson (1992) modified the Howes Peer Play Scale to include a high-level pretend play category involving complex social play. This assessment was used, among other assessments of play and social skills, to record social play of children aged between 10 and 59 months (Howes & Matheson). Howes and Matheson found that children who engaged in more complex play during earlier developmental periods were observed and rated as being more pro-social, less aggressive, and less withdrawn than the children who engaged in lower levels of play. This study found that a child’s ability to pretend play with peers is a viable indicator of that child’s social competence, and therefore social competence may be assessed through observation of pretend play with peers (Howes & Matheson). In a study that examined children’s emotional competence through teacher and parent report, and through observation of child–peer interaction, Lindsey and Colwell (2003) found that children who engaged in higher levels of pretend play with peers demonstrated a greater understanding of emotions than children who engaged in lower levels of pretend play. Lindsey and Colwell used...
the Preschool Socio-Affective Profile to assess teacher-rated emotional competence (LaFreniere & Dumas, 1996; Lindsey & Colwell). Gagnon & Nagle (2004) used the Vineland Social–Emotional Early Childhood Scales (Vineland SEEC Scales) to measure social competence in preschool children and the Penn Interactive Peer Play Scale to measure children’s play. Significant relationships were found to exist between teacher and parents’ ratings of children’s play and their social–emotional development. They concluded that the findings supported the role of play and peer relations in the development of social competence.

The importance of reliable and valid assessments of play

Play provides an excellent medium through which to evaluate children’s development as it is an enjoyable and motivating activity that appears to be instrumental in children’s social and cognitive development. Therefore, it is likely that children will exhibit this competence during play-based assessments (Pellegrini & Boyd, 1993).

According to Couch, Deitz and Kanny (1998), the majority of occupational therapists use clinical observations as the main method of assessing play. Rodger, Brown and Brown (2005) reported minimal use of play assessments by therapists in their survey of Australian paediatric occupational therapy practice. This may be due to the complexity of available formal assessments (Bundy, 2001). According to Stagnitti and Unsworth (2000) the use of assessments of play by occupational therapists is low because of the lack of available, reliable and valid assessment tools that allow assessment of children in a clinical setting. The difficulty in defining play and the lack of assessments that allow available time and resources are additional factors for this low use (Farmer-Dougan & Kaszuba, 1999; Gagnon & Nagle, 2004).

In order to assess play as an entity in itself rather than simply a means through which to assess other functioning, clinically viable and reliable play assessments are needed (Bundy, 2001; Couch et al., 1998; Farmer-Dougan & Kaszuba, 1999; Stagnitti, 2004). In regard to pretend play, there are three standardised assessments available. The Test of Pretend Play (Lewis & Boucher, 1997) assesses symbolic play and the Symbolic Play Test (Lowe & Costello, 1976) assesses functional play. Both of these assessments were developed by speech therapists and psychologists. The ChiPPA is the only assessment that measures both conventional–imaginative play (functional play) and symbolic play in the same assessment. While the ChiPPA has been shown to be reliable and valid in relation to pre-academic problems (Stagnitti, Unsworth & Rodger, 2000), there is a need to produce further evidence of the validity and reliability of the ChiPPA in relation to other areas of child development. Stagnitti et al. concluded that additional research was required ‘to explore the functional implications of the discriminative ability of the ChiPPA in terms of children’s problem-solving ability, social skills, ability to generalise and flexibility’ (p. 30).

In the literature there is evidence to suggest that pretend play ability is related to social competence. The purpose of this study was to test the construct validity of inferring social competence from a child’s play ability by investigating the relationship between pretend play and social competence in 4–5-year-old typically developing children using the ChiPPA and the Vineland SEEC Scales. The Vineland SEEC Scales are a parent report of a child’s social–emotional ability. This assessment was chosen to assess social competence because paediatric occupational therapists regularly interview parents about their concerns for their child and often rely on a parent’s report of their child’s behaviour. In examining the construct validity of the ChiPPA it was important, in this context, to establish whether social competence could be inferred. Two hypotheses were tested. First, it was hypothesised that there would be a positive and significant correlation between the ChiPPA scores and the Vineland SEEC Scales scores. Second, it was hypothesised that the social competence of 4–5-year-old preschool children could be inferred using the ChiPPA.

Method

Participants

A sample of 35 typically developing 4–5-year-old children were recruited from four preschools in various socioeconomic clusters in the City of Greater Geelong (low, medium, and high socioeconomic areas) (Glover, Harris & Temant, 1999). The child participants, 19 boys and 16 girls, ranged in age from 4 years 4 months to 5 years 10 months, with a mean age of 4 years 11 months and a standard deviation of 1 month 27 days. There was also a sample of 36 parents or guardians of the child participants. Thirty-one per cent of the sample was from a low socioeconomic cluster area, 29% of the sample was from a medium socioeconomic cluster area, and 40% of the sample was from a high socioeconomic cluster area.

Instruments

The Child-Initiated Pretend Play Assessment (ChiPPA)

The ChiPPA is a standardised assessment that measures how a child self-initiates and sustains pretend play. It is designed to be used to assess 3–7-year-old children’s ability to initiate pretend play over a 30-min (4–7-year-olds) or an 18-min (3-year-olds) session (Stagnitti,
The ChIPP assessments both symbolic and conventional-imaginative play using gender-neutral toys and standardised scoring procedures (Stagnitti, 2002). The ChIPP is a one-on-one assessment between the assessor and the child and is administered in a relatively quiet room that is separate from other children. The child and the assessor sit on the floor in front of a ‘cubby’ made up of a sheet over two adult chairs (Stagnitti). As the ChIPP is an assessment of both conventional-imaginative and symbolic play, one section measures conventional imaginative play using toys that resemble a farm set, such as fences, farm animals and a truck, and the other section measures symbolic play using unstructured play materials such as pebbles, a tin, and a shoe box (Stagnitti et al., 2000).

The items that are assessed with the ChIPP are the ‘percentage of elaborate pretend play actions’ (PEPA), ‘number of object substitutions’ (NOS), and ‘number of imitated actions’ (NIA). PEPA reflects the elaborateness, complexity, and organisation of a child’s play, including their ability to maintain play themes, sequences, and narrative during play (Cartwright, 2004). The NOS represents the amount of times a child pretends a toy or object is something different to its functional use, e.g. a tin is used as the doll’s hat. The NIA represents the number of times a child imitates the play actions that are modelled by the assessor in the middle 5-min segments of play. The PEPA, NOS, and NIA are calculated for both the conventional imaginative and the symbolic sessions (Stagnitti, in press). Raw scores for PEPA items and NOS symbolic items can be converted to a standard score (based on 2 scores) on the ChIPP. For the other items (NOS conventional, and NIA items), raw scores are compared to the range and the mode of the normative sample as the majority of children in the normative sample scored 0 for these items. In other words, conventional toys are played with in a conventional manner; and typical children initiate their own play and do not typically imitate the examiner. Refer to Table 1 for the ChIPP items and abbreviations.

The ChIPP has been developed over 14 years. During this time, more than 400 children aged from 18 months to 7 years were assessed (Stagnitti, in press). Research to date on the ChIPP has established that its test–retest reliability is within acceptable limits (Stagnitti & Unsworth, 2004), as is interrater reliability (Stagnitti et al., 2000), and both the conventional imaginative and the symbolic toys are gender-neutral (Stagnitti, Rodger & Clarke, 1997). Stagnitti et al. (2000) found that the ChIPP scores were able to discriminate between typically developing children and those with pre-academic problems. Another study conducted on the ChIPP found a relationship between high levels of play behaviours (using symbolic toys) and language skills in 5–6-year-old children (Cartwright, 2004). Based on these studies it is concluded that the ChIPP is a useful clinical assessment of children’s pretend play abilities in relation to pre-academic and literacy skills.

The Vineland Social–Emotional Early Childhood Scales

The Vineland Social–Emotional Early Childhood SEEC Scales (Vineland SEEC Scales) assesses a child’s interpersonal relationships, play and leisure time, and coping skills (Sparrow, Balla & Cicchetti, 1998). They were derived from the socialisation area of the Vineland Adaptive Behaviour Scales and can be used for children aged birth through to 5 years 11 months. The Vineland SEEC Scales are administered as a semi-structured interview with the parent or guardian of the child. The interview takes approximately 20 min and open-ended questions are used to ask parents or guardians to comment on the child’s level of usual functioning. The interviewee is an adult who is most familiar with the child. A standardised score is obtained for each area of social–emotional development (Sparrow et al.).
According to the authors of the Vineland SEEC Scales, the interview method allows reliable descriptions of the child’s social skills to be attained. The Vineland SEEC Scales are highly reliable and valid and have high test–retest reliability (Sparrow et al., 1998). The Vineland SEEC Scales were chosen to assess social competence in this study because of this established reliability and validity.

As the Vineland SEEC Scales were developed in the USA, it was important that the interview questions were culturally appropriate to the Australian parents and guardians in this research. In a study using the Miller assessment for preschoolers, which compared the performance of Australian children to that of the USA norms, Hickey, Froude, Williams, Hart and Summers (2000) changed particular test items to increase the test’s cultural relevance to Australian children. The wording of three questions within the Vineland SEEC Scales was changed to suit the Australian sample in this study in order to increase the scales cultural relevance to Australia. The changes are shown in Table 2.

### Procedure

Ethical approval was obtained through Deakin University prior to commencement of the study. Four preschool centres in the Greater City of Geelong were approached to see if they would be interested to participate in the study. When the preschool committee approved the study taking place, the first author gave information on the study and consent forms to teachers to distribute to the parents in the preschool. Only those parents who gave consent for themselves and their child to participate were included in the study. Each child was assessed using the ChIPPA at their preschool centre in a room separate from the main group of children. Children were assessed prior to their parent or guardian’s interview using the Vineland SEEC Scales. Each child was assessed using the ChIPPA according to the procedure outlined in the ChIPPA manual (Stagnitti, in press). Following each ChIPPA assessment, Vineland SEEC Scale interviews were conducted with each parent or guardian of the child participants. Interviews were conducted face-to-face at the preschool and one parent was interviewed by telephone.

Scoring of each assessment was not carried out until both assessments had been completed for each child. Additionally, no feedback to parents was given and no assessment calculations were carried out until both assessments had been administered. These procedures were carried out to reduce the chances of the researcher unintentionally biasing the results, that is, the probability of experimental bias occurring was reduced (Portney & Watkins, 2000).

The first author undertook 7 h training on the administration and scoring of the ChIPPA. To allow for interrater reliability calculations of the ChIPPA in situ, 10 participants from two different preschools were assessed by both authors during the same play session. ChIPPA assessments were scored as the child played and no videotaping was used.

### Data analysis

Data were analysed using the Statistical Package for Social Sciences (SPSS) version 12 software program (SPSS Inc., Chicago, IL, USA). The data were screened for assumptions of normality which revealed normally distributed data with no outliers. To test hypothesis 1, a Pearson product–moment correlation (Anastasi & Urbina, 1997) was performed. To test hypothesis 2, a multivariate ANOVA was used (Pallant, 2005; Portney & Watkins, 2000) as well as a further correlation.

### Results

#### Interrater reliability

Interrater reliability was established for the ChIPPA using the Kappa statistic (κ), which is a chance-corrected measure of agreement (Portney & Watkins, 2000). Calculations revealed $\kappa = 0.7$, which represents a substantial level of agreement (Portney & Watkins).
TABLE 3: Mean scores and total actions of ChIPPA items for each assessor for 10 children

<table>
<thead>
<tr>
<th>Assessor</th>
<th>PEPA combined raw score</th>
<th>NOS combined raw score</th>
<th>NIA combined raw score</th>
<th>Total actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>118.56</td>
<td>19</td>
<td>0.3</td>
<td>168.5</td>
</tr>
<tr>
<td>2</td>
<td>118.66</td>
<td>18.4</td>
<td>0.1</td>
<td>173</td>
</tr>
</tbody>
</table>

ChIPPA, Child-Initiated Pretend Play Assessment; NIA, number of imitated actions; NOS, number of object substitutions; PEPA, percentage of elaborate pretend play actions.

TABLE 4: Descriptive statistics for pretend play and social–emotional development variables (N = 35)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEPA combined raw score</td>
<td>131.60</td>
<td>51.4</td>
<td>183</td>
<td>115.05</td>
<td>6.50</td>
</tr>
<tr>
<td>PEPA combined standard score</td>
<td>5.45</td>
<td>-3.38</td>
<td>2.07</td>
<td>-0.47</td>
<td>0.26</td>
</tr>
<tr>
<td>NOS combined raw score</td>
<td>35</td>
<td>1</td>
<td>36</td>
<td>14.37</td>
<td>1.74</td>
</tr>
<tr>
<td>NOS combined standard score</td>
<td>4.12</td>
<td>-1.45</td>
<td>2.67</td>
<td>0.18</td>
<td>0.18</td>
</tr>
<tr>
<td>NIA combined raw score</td>
<td>13</td>
<td>0</td>
<td>13</td>
<td>2.71</td>
<td>0.56</td>
</tr>
<tr>
<td>Vineland SEEC Scales sum of scale standard scores</td>
<td>154</td>
<td>318</td>
<td>472</td>
<td>372.66</td>
<td>5.84</td>
</tr>
<tr>
<td>Vineland SEEC Scales</td>
<td>51</td>
<td>106</td>
<td>157</td>
<td>126.83</td>
<td>2.04</td>
</tr>
<tr>
<td>Composite standard score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NIA, number of imitated actions; NOS, number of object substitutions; PEPA, percentage of elaborate pretend play actions; Vineland SEEC Scales; Vineland Social–Emotional Early Childhood Scales.

Highly similar results were revealed between assessors for the mean total actions of each play session (see Table 3).

Descriptive statistics

Table 4 displays descriptive statistics for the following variables: PEPA combined raw scores, PEPA combined standard scores, NOS combined raw scores, NOS combined standard scores, NIA combined, Vineland SEEC sum of standard Scores, and Vineland SEEC composite standard scores. No significant differences in pretend play or social competence scores were found for sex, age, or socioeconomic cluster of participants.

Correlation between the ChIPPA scores and the Vineland SEEC Scales scores

A Pearson's product–moment correlation between all ChIPPA and Vineland SEEC Scales standard scores revealed no significant correlations between variables of the ChIPPA standard scores and Vineland SEEC Scales standard scores (P > 0.05).

Social competence and the ChIPPA scores

Participants were assigned to three play groups based on their PEPA combined standard scores. Group 1 children had scores below the normal range for their age group. Group 2 children had scores within the normal range for their age group and Group 3 children had scores above the normal age for their age group. Groups were based on PEPA combined scores because this score reflects a child’s elaborateness, complexity, and organisation in self-initiated play. Refer to Table 5 for descriptions of the play ability groups. An analysis of variance was carried out between these play ability groups and the Vineland SEEC Scales standard scores (Anastasi & Urbina, 1997).

Because of the sample size and to avoid the possibility of making a type II error, alpha was changed to 0.1. In this case, a type II error would mean that if there was a true significant relationship between play ability and social competence but the null hypothesis was accepted, no further investigation would be carried out. Consequently, the alpha was changed because in small samples, statistical power can be improved when the alpha level is increased to 0.1 to obtain a higher power and to decrease the risk of a type II error (Ottenbacher & Bonder, 1986). A significant difference was revealed (F(2, 35) = 2.912, P < 0.1) between the play ability group and the interpersonal relationships standard score. Tukey's honest significant difference (HSD) multiple comparison test was performed to determine the differences between groups. A significant mean difference between play group 2 (mean = 117.7) and play group 3 (mean = 130.5) for interpersonal relationships was found (P < 0.1). No significant mean...
difference was found between play ability group 1 and play ability group 2 for interpersonal relationships, and no significant mean difference was found between play ability group 1 and play ability group 3. These results indicate that children with above normal range play ability in elaborate play are reported by parents to be more competent at interpersonal relationships than children who scored in the normal range on PEPA. There was no significant difference between parent report of interpersonal relationships when children’s scores were below normal range on PEPA compared to children scoring within or above normal range.

Further analysis was carried out using items from the play and leisure subscale of the Vineland SEEC Scales which were thought to reflect aspects of the ChIPPA scores. The play and leisure time subscale included cluster D (make-believe activities) and cluster E (sharing and cooperating) (Sparrow et al., 1998). The total raw score for cluster D and cluster E was converted to two separate percentage scores for each participant. As these new scores based on cluster D and cluster E were not standardised for age, the ChIPPA raw scores were used in analysis and age was added to the analysis to control for the confounding variable of age. Since PEPA combined and NOS combined reflect cognitive play abilities (i.e. elaborateness of play and ability to use objects as symbols in play), these play items were used in analysis.

To examine if there was a relationship between cluster D and cluster E, the ChIPPA scores of PEPA combined and NOS combined, and age, a Pearson’s Product–Moment correlation was used. Table 6 shows the matrix of the correlational analysis. Age was not significantly related to any other variable. PEPA combined was negatively and significantly related to the percentage scores for cluster E (\(P < 0.05\)), indicating that children with lower (i.e. poorer) play scores were rated by parents as being more cooperative in play.

### Discussion

#### Parent perception of social competence

No significant correlations were found between the ChIPPA scores and the Vineland SEEC Scales scores when the standard scores from both assessments were analysed for significant correlations. Based on this result, hypothesis 1 was rejected as it was found that parent report of a child’s social–emotional skills was not related to their child’s play scores on the ChIPPA.

Lawlor (2004) discusses parental perceptions in terms of the complex and multifaceted parental challenges when facing health professionals or others. A challenge faced by parents includes managing the perceptions of others towards their child, specifically, the desire to portray positive attributes of their child to others, and the crafting of how to act within health settings including the choosing of what to report to a professional. She suggested that parents try to maintain the ‘good parent’ persona, they work hard to avoid being labelled by professionals in negative ways, and to create
a positive identity with the professionals with whom they interact (Lawlor).

This discussion of parental perceptions is interesting when considering that no correlations were found between the ChiPPA and the Vineland SEEC Scales standard scores. According to Lawlor (2004), parents may choose what to report to professionals and their desire to portray their child in the most positive manner. In two separate studies using the Platform, clear differences were found between parent, teacher, and child report of play (Sturgess & Ziviani, 1995; Sturgess, 1999). Particularly, both studies found that parents reported their children’s play ability as higher than the children reported this ability themselves. Another study by Farmer-Dougan and Kaszuba (1999) found teacher report of social competence was consistent in terms of its relationship to pretend play ability. Howes and Matheson (1992) also found that teacher-rated competence was consistent with researcher observed competence. It is suggested that parents or guardians interpret their child’s ability in a different context to professionals (teachers and therapists) and parent reporting of play and social competence may produce different results to other methods of measuring these developmental areas in children.

No significant relationship was found between pretend play ability and ability to engage in make-believe activities as scored by the Vineland SEEC Scales. The above discussion on parental perceptions may be applicable here. It is possible that parents may not recognise when or how their child engages in pretend play activities as pretend play in preschoolers can take on many forms and is sometimes not obvious to the observer. A further explanation for the findings may be that, although three Vineland SEEC questions were altered to be more culturally suitable to Australia, the Vineland SEEC Scales is more suitable to an American setting than an Australian setting. The ChiPPA is an Australian assessment.

Social competence and the ChiPPA

When children were divided into groups based on their play scores reflecting elaborateness and complexity in play, it was found that children with above average play scores had significantly higher interpersonal relationships scores compared to children who scored within normal range of the ChiPPA. Therefore, it was found that the level of pretend play ability was significantly related to interpersonal relationship capacity. According to Sparrow et al. (1998), the interpersonal relationship scale demonstrates the strongest measure of social–emotional development as opposed to the other scales within the Vineland SEEC Scales. The result gives some support to hypothesis 2, although this support is guarded as children with poor play ability were not reported by parents as being significantly different in their interpersonal relationship skills from children with above normal range ability in play.

These findings give limited support to previous research that investigated the relationship between play, pretend play and social competence. Farmer-Dougan and Kaszuba (1999) found that children who engaged in high levels of play were rated as more socially competent than their peers who engaged in lower levels of play.

Elaborate play ability was found to be significantly negatively correlated with the sharing and cooperating raw scores within the Vineland SEEC Scales. This finding was independent of age. This finding suggests that children who obtained lower scores for elaborate pretend play ability as measured by the ChiPPA obtained higher scores for their ‘sharing and cooperating’ ability as reported by parents. This was an unexpected result. A possible explanation for this result is that the children who were lacking in pretend play skills may require direction from other children in regard to play ideas, that is, these children may wait for other children to initiate play as they may be unable to initiate play themselves. These children may appeal to their parents or guardians to share and cooperate well in play with others as they are passive (e.g. less able to negotiate and argue what they want to play) rather than active in their play with other children. Hence, parents or guardians may perceive this passivity in play as their children’s ability to share and cooperate well with other children.

This negative correlation explanation may be further supported when considering the results regarding play ability groups and the interpersonal relationship scale within the Vineland SEEC Scales. There was no significant difference in interpersonal relationship skills between children in the group 1 (below normal range play skills) and children in group 2 (within normal play skills) or group 3 (above normal play skills). It appears that children with below normal range pretend play ability were rated well by their parent or guardian for their interpersonal relationships capacity. This explanation would support the significant negative correlation found between pretend play ability and sharing and cooperating ability. Alternatively, the previous discussion on parental perceptions based on Lawlor (2004) may be applicable here.

Recommendations for further investigation

Further research is needed into the relationship between pretend play as measured by the ChiPPA and social competence in typically developing 4–5-year-old preschool children. It is recommended that additional measures of social competence are used in relation to
the ChIPPAs and that teachers’ assessment of a child’s social competence be included in future studies. The studies by Farmer-Dougan and Kaszuba (1999) and Howes and Matheson (1992) found greater agreement with teacher report of a child’s social competence and play than parent report. A larger sample size with a range of SES areas representative of the target population would ensure a higher power, even if the null hypothesis was confirmed again. Further studies are needed on parent perception of their child’s social competence and their child’s play ability to see if the results in this study can be replicated. Another avenue of research is qualitative research using case study methodology. For example, daily occupations of a child and parent could be documented with particular interest in play, social groupings, and social understandings to examine how the child and parent interpret their daily experiences.

**Limitations**

The issue of sample size and power may have been a limitation of this study. A larger sample may reveal stronger relationships, with higher power, between the constructs of pretend play (as measured by the ChIPPAs) and social competence. Considering the issues discussed on parent or guardian reporting of play and social competence, a limitation of the study could have been the use of a single measure of social competence. However, as the ChIPPAs and the Vineland SEEC Scales are both standardised assessments, have acceptable reliability and validity, it is reasonable to suggest the findings of this study are utilised in regard to further research and clinical practice.

**Conclusion**

Parent report of social competence using the Vineland SEEC Scales does not relate to how a child scores on the ChIPPAs. Thus, children’s social competence (as reported by parents) cannot be inferred from the ChIPPAs scores. An interpretation of some of the findings argued that parents interpret their child’s play behaviour differently to a therapist as they understand their child in a different context to a health professional.

The findings contribute to early childhood occupational therapy evidence-based practice in regard to the assessment of preschool children’s pretend play and social competence. The differences found between parent or guardian report of their child’s social competence and their child’s pretend play ability has implications for clinical practice and future research. For example, therapists need to be aware of how they ask questions and how they explain behaviours to parents or guardians for parent comment. It is recommended that therapists ask specific questions and give examples of the type of behaviour they would like parents to comment on.

This study found that social competence, as per parent report, cannot be inferred from ChIPPAs results. Clinically, concurrent validity of an assessment means that other behaviours can be inferred from an assessment result. For paediatric occupational therapists, this means that inferences regarding other areas of the child’s development are made from results of assessments. It is recommended, at this stage, that additional information regarding children’s social competence be included during assessment of preschool children and the ChIPPAs play assessment not be relied on to infer this information. Previous studies on the ChIPPAs have shown that pre-academic skill can be inferred from results because poor performance on the ChIPPAs was associated with risk of pre-academic problems (Stagnitti *et al.*, 2000). Research on the ChIPPAs as a measurement of an important occupation of childhood is continuing so that therapists have access to a reliable assessment tool that is also valid.

**References**


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