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Pretend play in pre-schoolers: Need for structured and free play in pre-schools

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Background: Pretend play is a form of play that involves nonliteral actions. There are limited studies reporting the developmental trends of pretend play behaviours of typically developing pre-schoolers. This knowledge would be beneficial in the early identification of deviations in pre-schoolers who have or are at risk of developing developmental disabilities.

Aim: The present study aimed to describe the developmental trends in pretend play skills across different age groups of pre-schoolers. The study also aimed to understand the differential patterns in pretend play observed across the Free Play and Structured Toy Play scenarios.

Setting: This study was conducted on pre-schoolers in a classroom of the school.

Method: The study followed a cross-sectional study design. Forty-eight participants were recruited for the study and were divided into four groups. A video recording of the child's pretend play skills was recorded using a Sony-HDRCX405 camcorder in Free Play and Structured Toy Play scenarios. The recorded video was coded and analysed for the occurrence of pretend play skills using the Play in Early Childhood Evaluation System (PIECES) coding scheme.

Results: The study results depict a developmental trend in the occurrences of pretend play skills in pre-schoolers. It also emphasises the importance of amalgamation of Structured Toy Play and Free Play scenarios for the child's holistic development because of the unique benefits of each scenario.

Conclusion: The study findings could help in the formulation of Individualised Education Programme objectives for typically developing children and children with developmental disabilities involving play, thus enabling these children experience normalised, contextually pertinent experiences like their peers.

Keywords: child development; free play; pre-schoolers; pretend play; toys.

Introduction

Play, which is considered a critical milestone for a child's well-being, learning, and development (Ginsburg et al. 2007), can be described as any activity spontaneously chosen, inherently motivated, and personally directed. Play takes various forms, differing widely across culture, thus being difficult to categorise. However, researchers have classified play into physical play, play with objects, symbolic play, pretence/sociodramatic play and games with rules (Whitebread 2012). Among these play types, pretend play is a type of playful behaviour that engages in nonliteral actions (Russ & Dillon 2011) which is seen during early childhood. During pretend play, children imagine one object to be another object or person with the complete knowledge of reality. It generally emerges around 12–18 months of age, during which children make evocative associations to their own experience and knowledge (Weisberg 2015). Play is essential for the holistic development of a child, with a wide range of literature supporting the role of play in promoting healthy development in young children (Bento & Dias 2017; Ginsburg 2007; Nijhof et al. 2018). Play is linked with the development of neural connections in the brain, social skills like perspective-taking, language capabilities, physical skills, problem-solving capacities, and cognitive skills such as creative thought, leading to later abstract thinking (Dankiw et al. 2020; Frost, Wortham & Reifel 2008). It provides children with a context to learn multiple skills such as literacy skills, problem solving and impulse control (Xu 2010). During the early years of childhood, play is the major means of physical activity for children (Prioreschi et al. 2020). Children develop and understand the norms of society through play which provides them with a safe arena for exploring these skills without the fear of negative consequences (Hoffmann & Russ 2016).

Pre-schoolers go through many developmental changes (Jones, Rothbart & Posner 2003) in socio-pragmatic skills, emotional regulation (Lillard 2017), communication skills (Weisberg, Hirsh-Pasek

& Golinkoff 2013), and cognitive skills (Thibodeau et al. 2016). This period is also considered the peak phase for pretend play, which generally ceases by 11 years occasionally continuing into adolescence and adulthood (Smith & Lillard 2012). Pretend play can be classified into *Object-Dependent Pretend Play*, *Socio-Dramatic Play*, and *Thematic Play* (Wyver & Spence 1999), of which the *socio-dramatic* and *thematic* types are considered to be more complex. Pre-school period marks the onset of *object dependent pretend play* which begins by 12–18 months, reaching a peak around 3–5 years (Bosco, Friedman & Leslie 2006). On the other hand, *Thematic Play* is the usage of dramatic or imaginary activities by children, where they involve an imaginary entity for a longer duration of time (Gleason 2013), making up their own fantasy play or modifying the script (Goldstein 2012). By the pre-school period, children's imagination, curiosity, and communication skills enable them to involve in *Socio Dramatic Play*, which is more complex as it lacks the usage of physical objects (Weisberg 2015). As children grow older, there is a reduction in the occurrence of pretend play, especially during middle school (Singer & Singer 1990). This reduction in pretend play is attributed to the increase in the cognitive abilities, societal constraints, parental admonitions and also the ability of the child to adapt to the society which causes the child to engage in higher frequencies of silent self-talks with lesser need to engage in symbolic transpositions and distortions (Piaget 1962; Singer & Singer 1990). Children begin to find an outlet for their imaginations through video games and board games with extended amount of time engaged in internalised fantasy without overt pretend play behaviours (Singer & Singer 1990).

Pretend play is strongly associated with the child's language, cognitive, literacy, social and narrative development (Westby 2000). Participation in pretend play activities helps in the development of cognitive abilities such as problem-solving (Pepler & Ross 1981), self-regulation (Bodrova, Germeroth & Leong 2013), and creativity (Hoffmann & Russ 2012; Moore & Russ 2008). There are three theoretical frameworks explaining the possible relationship between pretend play and child development. Firstly, pretend play is crucial for a child's holistic development (Vygotsky 1978). This was further reported in several studies that revealed a direct relationship between pretend play, creativity and cognitive functioning of children (Fein 1987; Hoffmann & Russ 2012; Singer & Singer 1990). Secondly, the equifinality of pretend play, which describes that although pretend play helps in development, it is just one such possible route (Smith 2010). Thirdly, pretend play is epiphenomenal, suggesting that pretending by itself does not contribute to the development, but the other activity or condition it is attached to, could be the actual contributor for development (Piaget 1962). These theoretical underpinnings emphasise the critical role of pretend play in the holistic development of a child.

Pre-schoolers often engage in pretend play across different settings, toys, and skill levels (Pierce-Jordan & Lifter 2005). Play in a school setting is critical for its academic environment as it ensures social, emotional and cognitive development in children. It helps children to adapt to school environment which enhances their learning readiness and learning behaviours. School environment also promotes peer-based play. This kind of play, which is also referred to as social pretend play (Whitebread & O'Sullivan 2012), occurs mainly in environments such as schools and playgrounds, with or without the involvement of toys. Studies have shown that toys positively impact problem-solving abilities, and trigger symbolic expressions, creativity, and social behaviours in children (Trawick-Smith, Russell & Swaminathan 2011). Studies also reveal that engaging in pretend play during childhood has a significant influence on the creativity, divergent thinking and cognitive flexibility well into adolescence and later adulthood (Mullineaux & Dilalla 2009; Russ 2016; Russ & Wallace 2012). This, emphasises the importance of studying pretend play in a naturalistic environment such as a school in the presence or absence of toys.

In naturalistic environments such as schools, pretend play could be analysed in different scenarios with the most common ones being unstructured or free play and structured or guided play. In an educational setup, sports and games are part of the curriculum which provides opportunities for educators and children to explore various forms of structured play activities. However, the curriculum fails to emphasise the importance of free play as it is not goal-oriented, adult-led and rule-bound. Free play is child-centric, based on the child's interest which helps children to explore materials, express and control their emotions, come to terms with traumatic experiences, and gain physical and mental strength (Santer, Griffiths & Goodall 2007). It also enables children to explore and play in unique ways in their naturalistic environment such as school or residence with the objects that they are exposed to on an everyday basis with minimal constraints (Whitebread et al. 2017). A type of free play that is usually endorsed is the sociodramatic pretend play, where children can practise and pretend imaginative characters and follow social rules (e.g. pretending to be a family). Although free play would help in the development of social interactions and cognitive abilities, it alone would not suffice to promote academic learning which could be benefited from structured play (Alfieri, Aldrich & Tenenbaum 2011). Structured play is adult-led or play with a restriction on either the play materials or types of play or the play environment. The fact that sets structured play apart from free play is the adult involvement and the existence of predetermined rules (Gmitrova & Gmitrov 2003). Structured observation of play restricts children's manipulation and usage of objects which is specific to that observational setting, which in turn constraints the activities and behaviours exhibited by them. However, there are studies which report that guided play or structured play helps children in learning (Mayer 2004). Although educators do understand the importance of pretend play, there is a lack of awareness on the importance of integrating both structured and free play in pre-schoolers. The pressures of the curriculum, alongside the expectation for academic outcomes, is one of the reasons why teachers have less time for using pretend play in their teaching routine. Therefore, the present

study is an attempt to bridge this gap by explaining the difference between free and structured play and providing evidence of the significant role of free play in child development.

Present Research

Although we know that the complexity of pretend play increases as a function of age (Ariel 2002; Szabó 2014), there are limited studies reporting the developmental trends of pretend play behaviours of typically developing pre-schoolers (Lillard et al. 2013). The knowledge of pretend play in typically developing pre-schoolers would be beneficial in the early identification of deviations in pre-schoolers who have or are at risk of developing developmental disabilities. Children with developmental disabilities exhibit delay in pretend play behaviours compared to their typically developing peers (Barton & Wolery 2008). A delay in the occurrence of pretend play could be a potential diagnostic marker in identifying several child developmental disorders such as autism spectrum disorders, attention deficit hyperactivity disorder, and hearing impairment, thus indicating the pressing need to assess the pretend play behaviours exhibited by these children. In order to compare and contrast deviant pretend play behaviours, assessing the occurrence of pretend play behaviours in typically developing pre-schoolers is essential. Typically developing pre-schoolers spend a substantial portion of their time engaging in object play in their schools. This study could help in understanding the developmental trend of pretend play and also help in the formulation of Individualised Education Programme objectives for children with developmental disabilities involving play. This would enable children with disability experience normalised, contextually pertinent experiences like their peers.

Profiling pretend play behaviours exhibited by pre-schoolers in school setting will contribute to the emerging concept of play-based assessment and intervention which helps to gather information about the developmental deviations of a child in developmental domains such as communication, gross and fine motor skills in a real and functional context. To address the aforementioned limitations the present study aimed at profiling the developmental trends of pretend play in pre-schoolers and to understand the influence of play scenarios (free and structured toy play) on pretend play behaviours.

Materials and methods

The present study followed a cross-sectional study design and participants were recruited through non-random sampling. Prior to the commencement of the study, ethical clearance was obtained from Institutional Ethical Committee (IEC KMC MLR11-18/462). Permission was obtained from the Block Education Officer and school authorities to conduct the study. Informed assent was taken from the parents or guardians of the participants.

Participants

Forty-eight typically developing children aged between 3.5 and 5.6 years of age were divided into four groups (Group I: 3.5–4.0; Group II- 4.1–4.6; Group III- 4.7–5.0; Group IV- 5.1–5.6 years) with 12 children in each group. The children were recruited from three pre-schools following the English medium of instruction. All schools were located in the Dakshina Kannada District of the state of Karnataka, South India. Dakshina Kannada District is a district in Karnataka with a total population of 2 089 649, and seven taluks (Chandramouli 2011).

Selection criteria

The participants' selection for the current study followed stringent criteria. The Modified Kuppuswamy Classification of Socio-economic Status Scale for the financial year 2019 (Mohd Saleem 2019) was used to determine the children's socio-economic status. This scale estimates the socio-economic status by considering the family's education, occupation, and income. As Socio Economic Status (SES) influences and predicts several aspects of a child's development with its influence being pervasive in nature, and across all domains (Hoff, Laursen & Tardif 2002), the current study included children only belonging to the upper middle class SES to avoid the influence of SES on the pretend play behaviours in pre-schoolers. The 'Assessment of Language Development' (Lakkanna, Venkatesh & Bhat 2008) was used to determine children's receptive and expressive language ability. This tool is a norm-referenced performance-based tool used to assess children's receptive and expressive language abilities from birth to 7 years and 11 months. Children with age-appropriate receptive and expressive language skills were included in the study. The 10 questions of the World Health Organization (WHO) Disability Checklist (Singhi et al. 2007) were used to rule out any disabilities. This checklist is a questionnaire to screen for disabilities such as physical, mental, speech, hearing, and visual impairments, and epilepsy in children between 2 and 9 years. Children who passed the screening test were recruited for the study. The pre-schools that were selected followed state board curriculum with English as a medium of instruction. All the teachers who were employed in these schools had completed a Basic Training Certificate (BTC) and a Diploma in Education.

Procedure

Setting the recording site

The investigators visited each of the three schools before the study's commencement to select suitable recording location. An appropriate classroom was selected which had limited auditory and visual distractions to ensure high quality pretend play. The classroom had adequate space, lighting, ventilation, and play mats to sit comfortably and play. This environment was chosen for recording as it promotes more natural peer interactions (Abbas, Othman & Megat Abdul Rahman 2016). The selected classroom was rearranged by moving the furniture away from the centre of the room in

order to provide space for the child to play. The selected room for observation was devoid of any play materials or toys. The recording of the play skills of children was conducted using Sony-HDRCX405 camcorder. The Camcorder was placed in a suitable position on a tripod stand to cover the entire play area to avoid personal handling by the investigator during the recording session. Video-based analysis was preferred over other forms of observational analysis, as it is repeatable and practical for offline analysis by multiple observers (Sommer, Hachul & Roßbach 2016). The investigator remained as a passive observer throughout the complete duration of each of the recordings.

Description of the play scenario

The study attempted to analyse pretend play in two play scenarios: Free Play scenario (FP) and Structured Toy Play scenario (SP). In the FP scenario, the investigator instructed the children to play anything, with any material available in the classroom. Here, the investigator did not provide any specific toy kit, but they were allowed to play with any other materials that were available in the classroom (chalk, duster, board, charts, etc.). However, in the SP scenario, the investigator provided children with toy kits which were placed in the centre of the classroom. The toys provided to all the children in the present study included a combination of gender-neutral (lego blocks, ball, miniature doctor's kit) and gender-specific toys (Male: superhero toy, Female: doll) (Cherney & London 2006) that was aimed to elicit a variety of pretend play acts. Each child was provided with a toy kit to ensure that every child had the opportunity to play with all the toys in the toy kit.

Observation protocol

The investigators visited the schools once a week for four consecutive weeks and scheduled a video recording session which lasted an entire day. The investigator recorded the play scenarios twice a day (morning and afternoon) to avoid fatigue or lack of interest. During pilot study, the investigator observed that SP scenario influenced the FP scenario. Hence, the recording sequence was maintained for all the children, with morning session targeting FP and afternoon session targeting SP. A 20 min recording of each scenario for every child was obtained (20 min recording, 10 min coding) with an average of 5 min recording per session per week. Children were divided into a group of four and the members of the group remained constant for both scenarios every week.

Data analysis

The coding scheme used for the current study was adopted from Play in Early Childhood Evaluation System (PIECES) (Kelly-Vance & Ryalls 2005) as this scheme elaborately describes pretend play. According to this coding scheme, pretend play was divided into simple and complex pretend play (CPP). Simple Pretend Play (SPP) consisted of play acts such as Approximate Pretend Play (AP), Self-Directed Play-Act (SD), Object Directed Play-Act (ObD), Repetitive Combination (RC), Agentive Play-Act (AGP), Object Substitution Play-Act (OSub), and Self Substitution Play-Act (SSub). Complex pretend play consisted of play acts such as 2 step Complex Pretend Play (2CPP), 3 step Complex Pretend Play (3CPP), 4+ Complex Pretend Play (4CPP), Pre-Planned Complex Pretend Play (PCPP), Complex Pretend Play with Substitution (SCPP), and Multi-Theme Complex Pretend Play (MCPP). The complete coding scheme is provided in Appendix 1. Coding was carried out in both FP and SP scenarios. The combined frequencies of AP, SD, ObD, RC, AGP, OSub, and SSub formed the SPP frequency. Similarly, combined frequencies of 2CPP, 3CPP, 4CPP, PCPP, SCPP, and MCPP formed the CPP frequency.

The interrater reliability was ascertained by two investigators who were Speech-Language Pathologists with more than 3 years of experience in the field. Both investigators were blinded to the child's age, and therefore independently coded the entire data as per the coding scheme based on the frequency of pretend play occurrence. The investigators were trained to code pretend play behaviours in practice trial sessions conducted over a week and substantial interrater agreement ($\kappa = 0.642$, $p < 0.01$) was obtained. Each investigator took an average of 40 min to complete the coding of both FP and SP scenarios for each child.

Statistical analysis

The statistical analysis was performed using SPSS software version 25. The current study considered groups (Group I, Group II, Group III, and Group IV) as independent variables and pretend play behaviours (SPP and CPP) as dependent variables. The obtained data were subjected to descriptive statistical analysis (frequency and range). The Kolmogorov-Smirnov and Shapiro-Wilk test was performed to ascertain the data distribution, which warranted non-parametric tests. Kruskal Wallis *H* test was conducted to analyse the difference between SPP and CPP across the different age groups. Post hoc test was performed using Mann Whitney *U* Test to analyse pairwise comparison between the different groups for SPP and CPP in both SP and FP scenarios. Wilcoxon Signed Rank Test was conducted to analyse the influence of FP and SP scenarios on SPP and CPP occurrence across the four age groups. Spearman's Rank Order Correlation was used to check the relation between age and occurrence of SPP and CPP in both the FP and SP scenarios.

Results

The results of the present study are described in the following sections.

Developmental trend of pretend play during Free Play scenario

The developmental trends of pretend play during FP scenario was ascertained using Kruskal Wallis *H* test that revealed a significant difference ($p < 0.05$) between the age groups in both CPP and SPP. To further analyse which of the age groups exhibited significant difference, a post hoc test of pairwise comparison was performed using Mann Whitney *U* test with Bonferroni correction for multiple comparisons ($p < 0.008$).

The Mann Whitney *U* test findings in the FP scenario are described in Table 1 and Table 2.

To ascertain the correlation between age and pretend play behaviours, Spearman's Rank Correlation test was performed. The results of Spearman's Rank Correlation test revealed that in CPP, there was a strong positive correlation ($r_s = 0.746$, $p = 0.000$) and SPP, a moderate positive correlation ($r_s = 0.430$, $p = 0.002$) indicating an increase in pretend play complexity across the groups for both SPP and CPP.

Developmental trend of pretend play during Structured Toy Play scenario

Kruskal Wallis *H* test revealed a significant difference between the groups in CPP ($p < 0.05$) and not SPP. This indicates that although a developmental trend was observed in both SPP and CPP, only CPP demonstrated a significant difference. A pairwise comparison was performed using Mann Whitney *U* test with Bonferroni correction for multiple comparisons ($p < 0.008$). A statistically significant difference ($p = 0.006$) was observed only for group I and IV comparison.

The results of Spearman's rank correlation revealed that in SPP ($r_s = 0.304$, $p = 0.036$) and in CPP ($r_s = 0.371$, $p = 0.009$), there was a significant but weak positive correlation between age and pretend play behaviours. A weak positive correlation indicates that both SPP and CPP demonstrated an increase in occurrence with age.

Influence of play scenario on the occurrence of pretend play

Wilcoxon Signed rank test results indicated a significant effect of play scenarios on the frequency of SPP occurrence ($Z = –3.991$; $p = 0.000$) and CPP occurrence ($Z = 3.136$; $p = 0.002$). The finding revealed that the play scenario has a significant influence on the pretend play skills demonstrated by pre-schoolers.

Discussion

Pretend play has a predominant role in developing cognitive and social skills in children (Whitebread & O'Sullivan 2012). The present study aimed to profile the developmental trends in pretend play skills across different age groups of pre-schoolers. The study also aimed to understand the differential patterns in pretend play observed across the FP and SP scenarios. The results of the study observed several interesting findings that are discussed in the following section.

TABLE 1: Mann Whitney *U* test findings in Simple Pretend Play Free Play scenario.

Groups	I	II	III	IV
I	-	0.06	0.003*	0.003*
II	-	-	0.191	0.541
III	-	-	-	0.521
IV	-	-	-	-

*, $p < 0.008$, **, $p < 0.001$.

TABLE 2: Mann Whitney *U* test findings in complex pretend play Free Play scenario.

Groups	I	II	III	IV
I	-	0.013	0.000**	0.000**
II	-	-	0.121	0.004*
III	-	-		0.030
IV	-	-	-	-

*, $p < 0.008$, **, $p < 0.001$.

Developmental trend of pretend play during Free Play scenario

The study findings revealed that pretend play (SPP and CPP) was observed to have the highest frequency of occurrence in 5.1 to 5.6-year old pre-schoolers and lowest in 3.5 to 4 year old pre-schoolers. This indicates a developmental trend with higher occurrences of complex forms of pretend play in older pre-schoolers (Melzer & Palermo 2016). One possible explanation for the developmental trend of pretend play could be the bidirectional influence of executive functions on pretend play. The development of executive functions could have influenced the higher occurrence of pretend play in older children, while children's engagement in pretend play could have also facilitated the development of executive function (Thibodeau et al. 2016). Moreover, the development of core component of executive functions (cognitive flexibility, inhibition, and working memory) increases the occurrence of pretend play in older children (4.7–5.6 years). The development of core components like cognitive flexibility and working memory is critical for switching back and forth between the make-believe world and to remember the rules of pretence during the switch between scenarios successfully (Thibodeau et al. 2016), which could have had a role in the improvement of pretend play in older pre-schoolers.

Another possible reason could be the influence of creativity on pretend play (Bergen & Mauer 2000; Holmes et al. 2015). The increased occurrences of complex forms of pretend play in the older groups (4.7–5.6 years) in the present study could be attributed to the progressive development of creative skills, which is also in agreement with the study conducted by Bergen and Mauer (2000). Creativity is essential in pretend play as it helps in the symbolic transformation of objects and action, which enhances the ability to involve in complex forms of pretend play (Holmes et al. 2015). As creativity increases with age, it could have influenced the pretend play behaviours in older pre-schoolers. Although developmental markers of simple forms of pretend play were present among the younger groups (3.5–4.6 years), the frequency of complex pretend play was considerably less.

Furthermore, the nature of the FP scenario could have contributed to an increased occurrence of pretend play. As the FP scenario did not have any definite set of toys, children's imagination and creativity were not constrained. Hence a wide repertoire of pretend play forms was observed. The finding aligns with Wooley and Tullos's (Woolley & Tullos 2008) observation who reported that children's pretend play tends to be more abstract during pre-school years and not dependent on toys and objects. Studies have also reported that children develop the ability to make up their own fantasy play

and modify the script (Goldstein 2012) without depending on toys or play objects during the pre-school period.

In addition to these findings, the investigators also observed that most children adopted pre-play behaviours such as gestural (pointing, eye contact, facial expression) and verbal behaviours to attract their play partner's attention. This was observed prior to the commencement of play, as well as throughout the FP duration. The presence of pre-play behaviours indicates the children's interest in involving others in play and establishing common grounds for play acts (Gibson et al. 2020) which is the foundation for pretend play. The FP scenario's flexibility because of the absence of toys has increased the opportunities for verbal interaction in children, which is also in accord with the study by Weisberg et al. (2013).

Developmental trend of pretend play during Structured Toy Play scenario

In the SP scenario, a developmental trend was observed for both CPP and SPP. Analysis of CPP occurrences revealed a higher frequency in older children (5.1–5.6 years) than younger children (3.5–5 years). This is further supported by Lillard's (2017) findings, who reported that older pre-school children start pretending with objects more than younger children. The most compelling explanations for the major observations of the SP scenario are described below.

Firstly, the higher frequencies of pretend play (both SPP and CPP) in children provide evidence of cognitive skills development as a function of age. This is in accord with Mathew's (Matthews, Stienstra & Djajadiningrat 2008) findings, who has reported that with the development of cognitive abilities, children also develop better attention shifting ability, which is a requirement for complex forms of pretend play. Besides, children's pretend play mainly consists of activities that are comprehendible and controllable by them (Cohen 2018); this could also be the reason for the finding of the present study where younger children (3.5–4.6 years) exhibited fewer occurrences of CPP with higher occurrences of SPP.

Secondly, in the SP scenario, children were provided with a toy kit that included gender-neutral and gender-specific toys that varied in their structure (Low structure and High structure). High structure toys are more realistic (e.g. Doctor's kit, Doll) than low structure toys (e.g. Legos) (Cho 2000). As most of the toys included in the toy kit were of high structure (Doctor's Kit, Doll, and Super Hero Toy), the types of pretend play demonstrated by the children could be limited. This restriction is a result of the challenges that the child faces in violating the rules of toy usage (Cho 2000). Another possible reason could be attributed to the high structure toys' realistic nature, which could have restricted children from engaging in object-directed pretend play (Cho 2000). The present study findings support the evidence that children exhibit a limited type of pretend play when a restrictive set of toys are given.

Another interesting finding of this study is the reduction of gestural and verbal behaviours exhibited by children in SP compared to the FP scenario. This could be attributed to the usage of toys, which could have reduced social pretend play occurrences and increased the occurrences of object-based pretend play (Weisberg 2015). The finding also confirms the reduction of interactive forms of pretend play among children in the presence of toys (Sosa 2016). As children are paired with the same play partners in both SP and FP scenarios, good rapport was already established with their peers in the FP scenario. The involvement of verbal and gestural behaviours during pre-play and during play situations was to set up mutual understanding between play partners. During the SP scenario, as the children were already familiar with their play partners, this scenario witnessed reduced verbal and gestural behaviours.

Influence of play scenario on Pretend play

The comparison of SP and FP scenarios revealed a significant difference in SPP and CPP occurrence, indicating that the play scenario influences pretend play in pre-schoolers. In the present study, the FP scenario elicited higher frequencies of CPP than the SP scenario. The factor that could have influenced the difference in SPP and CPP occurrence could be the presence of a toy kit. Toys trigger symbolic expression in children, and the presence of various toys stimulates the child to prolong the play in a particular way (Goldstein 2012). When children are provided with low structure toys, they exhibit higher frequencies of pretend play (Cho 2000). However, most of the toys included in the toy kit were high structure in the present study. Therefore, this scenario elicited higher frequencies of object-directed pretend play and non-interactive type of play than socio-dramatic forms of pretend play.

On the other hand, the FP scenario required children to utilise their creativity and cognitive abilities to play, which provided a vital experience for children to learn social, cognitive, and communicative skills (Santer et al. 2007). This does not mean that SP hinders the development of a child; rather, it facilitates the development of self-regulation, turn-taking skills, and planning of play acts (Healey & Healey 2019). As children grow older, they become more sensitive to the context of the play, such as the play scenarios and play partners (Heimann, Laberg & Nordøen 2006). This could have led children to respond differently to variations in the social contexts and modify their behaviour to meet the contextual requirements. Although the study had several contributing findings, there were certain limitations like, reduced sample size, restricted toy combinations and the sample being limited to upper-middle SES.

Conclusion

Pretend play is one of the types of play that is generally linked to children's cognitive, linguistic and social skills. The present study indicated a developmental trend in the occurrence of pretend play from 3.5 to 5.6 years, with older children exhibiting complex forms of pretend play than younger children. The study emphasises the importance of the amalgamation of SP and FP scenario for the holistic development of the child because of the unique benefits of

each scenario. Factors like the development of cognitive abilities, creativity, nature of play scenario, and the presence or absence of toy kit has influenced the findings of this study. The findings of the study provide an insight into pretend play behaviours of typically developing children which can be used to identify and diagnose deviations in play. This information would be vital for further interventions as pretend play is one of the domains severely affected in children with autism spectrum disorders and socio pragmatic disorders. In order to compare and contrast deviant pretend play behaviours, assessing the occurrence of pretend play behaviours in typically developing pre-schoolers is essential. Typically developing pre-schoolers spend a substantial portion of their time engaging in object play in their schools. The present study has strong implications for educators as research findings help educators to understand the benefits of integrating both free and structured pretend play activities in pre-school curriculum. Integrating both types of play creates an opportunity to explore both adult-led, well-planned activities as well as child centred pretend play activities with minimal constraints. The study could help in understanding the developmental trend of pretend play and also aid in the formulation of Individualised Education Programme objectives for children with developmental disabilities involving play. This would enable children with disability experience normalised, contextually pertinent experiences like their peers. Profiling pretend play behaviours exhibited by pre-schoolers in school setting will contribute to the emerging concept of play-based assessment and intervention which helps to gather information about the developmental deviations of a child in developmental domains such as communication, gross and fine motor skills in a real and functional context. It would be interesting to study the occurrence of pretend play skills in the presence of different toy combinations including more unstructured toys than structured ones. Further studies can also be conducted in different play scenarios having different play partners.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

M.M. contributed to the conceptualisation, preparation of original manuscript, and analysis of the study. S.K. contributed to the organisation and review of the manuscript. R.C. contributed to the preparation of original manuscript and data collection. J.S.B. contributed to the organisation and review of the manuscript. M.A.A. contributed to the organisation, interpretation and review of the manuscript.

Ethical considerations

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Data availability

The data that support the findings of this study are available on request from the corresponding author, Mohan, M. The data are not publicly available because it contains information that could compromise the privacy of research participants.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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