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## The role of props in promoting imagination during toddlerhood

#### **Abstract**

Engagement with the surrounding material world is widely considered to be one of the most critical aspects of children's learning and development during the first years of life. However, a review of the literature has shown that our understanding of young children's imaginary play and learning through materials in infancy and toddlerhood remains low. Drawing upon cultural-historical theory, the study in this paper seeks to understand the role of props in the development of imagination during toddlerhood. Four toddlers aged 1.9-2.1 years from an early childhood centre in Australia were followed to understand the role of props in the development of imagination. The study design was an educational experiment of a Conceptual PlayWorld: a collective model of practice for developing play and imagination. Digital data were collected through video recordings over two months. Thirteen hours of data were collected and analysed using the Vygotskian concepts of play and imagination. The findings revealed that through differentiated use of props, toddlers made transitions from the embodiment of the experience to sharing an intellectual and abstract space that indicates the genesis of imagination. The outcomes of the study advance theory and inform practice about the early development of imagination in toddlerhood.

Keywords: Conceptual PlayWorlds; Imagination; Imaginary play; Props; Toddlers

### 1. Introduction

Children's play experiences have a central role in everyday educational reality in early childhood settings. As a common practice, play explorations are tools for supporting children's development. However, for most infants and toddlers' engaging in play, especially imaginary play, constitutes a new reality. The early experience of imaginary play as a part of the institutional practice poses continuous challenges for infants, toddlers, and educators (Fragkiadaki et al., 2021, Fleer, 2018). The sense of imaginary play is still under-researched in infancy and toddlerhood. We do not know much about how children become oriented towards imaginary play and how imagination can be developed.

The research study examined how concrete props such as accessories, figurines, and books create unique conditions for the development of toddlers' imaginary play. The paper begins with a theoretical cultural-historical overview of what is known about children's play, imagination, and the mediating role of concrete props. Followed by the research methodology and the related study design. Three key points emerged from the analysis: a) props created the conditions for the development of toddlers' imagining, b) the more complex toddler's imagining, fewer props were used, and c) the toddlers achieved a symbolic use of props. The paper concludes by discussing the findings and the theoretical insights relevant to the formation of imagination in toddlerhood.

# 2. Cultural-Historical concept of play and imagination

Vygotsky (1966) suggested that play is the main source of development in early childhood. 'In play, children deal with things as having meaning. (p. 11). 'Play has a unique relation to reality that is characterised by creating imaginary situations or transferring the properties of some objects to others' (Vygotsky, 1966, p.

267). Vygotsky emphasises that play creates a space for children to use their imagination and experience to try social skills and roles that they have not mastered yet. The space created by the imaginary situation of play allows children to play with objects (toys) with meanings assigned to them, leading to the development of higher mental processes. Both play and the environment are significant factors contributing to developing children's imagination (Vygotsky, 1966; 2004). The more the child experiences, the more fertile the children's imagination (Vygotsky, 2004) which becomes the foundation to understand children's play. In play, a child creates a new reality using these acquired impressions from their everyday experiences. This unique and dependent relation between children's everyday experiences and imagination supports children to see possibilities in play, making both experience and imagination mutually dependent.

### The mediating role of tools

Vygotsky (1997) emphasises that tools play an auxiliary role in individuals' mental functioning, creating a mediating activity that is considered a psychological tool. Beyond an intra-psychological process, these tools help individuals develop their perceptions and as mediating agents become an inter-psychological process that supports developing higher mental functioning (Vygotsky, 1994; 1998; Kozulin, 2003). Further, Vygotsky (1994) highlights that children's development depends on the mediating agents present in their interactions with the environment. These mediating agents can be humans and symbolic concrete objects. The role of the human mediator appears once in the form of actual interaction and the second time as an inner internalised form elucidating the idea of how activities that start as an interaction become part of children's psychological functions (Vygotsky, 1997).

Likewise, concrete materials as mediators allow children to master the symbolic relationship between concrete concepts (DeLoach, 1995). These relationships between the human and the symbolic concrete mediator do not emerge spontaneously. They are systematically formed, highlighting the importance of the relationships between symbolic concrete materials and the human aspects of mediation. Children's cognitive development benefits from collaborating within a dialectical system of mediation between human and symbolic concrete tools. Such appropriations are dependent on the goals that the human mediator sets for the concrete materials as mediators made available to the children (Kozulin, 2003). The collaboration between the human mediator and the symbolic concrete mediator is essential because the symbolic concrete mediators can only derive their meaning from the cultural rules, values, and norms (Kozulin, 2003). The cultural conventions infuse the symbolic concrete mediators with their purpose and meaning, which can support their development when mediated in ways that are personally meaningful to children.

The cultural-historical perspective views concrete objects as cultural tools, the function of which is adaptive depending on the activities and interactions within the social context (Tudge & Odera-Wanga, 2009). To acknowledge the importance of concrete objects as mediating tools, how they are connected to children's everyday lives, and what cultural significance they represent (Holzman, 2009) needs to be considered. When concrete objects are situated in children's environment as a bridge between concrete objects' significance in relation to children's cultural knowledge of the object, we ask if this can serve as a mediating tool to support children's development? While the discussions provide a theoretical frame, it does not address what this means for the development of imagination through play in toddlerhood that the current study has taken up.

### 3. Play in the toddler age period

Play is understood as the most critical activity throughout childhood, across home, childcare, and school (Fleer, 2013) allowing progressive and significant physical, social, cognitive, and emotional development for children (Garner and Bergen, 2015). In the past three decades, our understanding of play in early childhood has increased exponentially, with a focus on the development of children aged three to six. The conceptualisation of play as a developmental phenomenon has resulted in trends of systematic studies on different types of play in childhood, giving rise to the assumptions concerning play at various stages within dominant cultures and institutions (Garner and Bergen, 2015). However, our understanding of play and the development of young children from birth to three years is limited.

Numerous empirical studies conducted since 1980 on young children's development highlight the influence of exploratory play. (Cohen & Tomlinson-Keasey, 1980; Main, 1983, Tamiis-Le Monda, Damast, & Bornstein, 1994; Farver& Wimbarti, 1995; Pierce, 1999; Shin, Elicker, & Noppe, 2004; Page, Wilhelm, Gamble, & Card, 2010; Wormann, Holodynski, Kartner, & Keller, 2012). The studies outlined the mother-child relationship through play exploration with objects (Cohen & Tomlinson-Keasey, 1980) in cognitive and language development (Main, 1983). Two studies highlighted the importance of mothers' knowledge of child development and their skills in creating play areas that supported symbolic and non-symbolic play (Pierce, 1999; Tamis-Le Monda et al., 1994). The role of mothers acting intentionally to foster emotional and cognitive development was discussed (Page et al., 2010; Shin et al., 2004). Tamis-Le Monda and Bornstein (1991) study investigated toddler and mother play using concrete objects to understand the developmental changes in the toddlers and mothers. The study highlights the simultaneous development in both toddlers and adults but does not indicate the role of concrete objects in play.

Fromberg (2002) elaborates that play is an intrinsically motivating activity for infants and toddlers, explicitly focusing on object play. As infants' stability and movability increase over time, leads to the emergence of functional play (object play with relational goals) as they enter toddlerhood (Garner and Bergen, 2015). The toddlers enter an age of experimentation stating the change from exploration to play. Karpov (2005) indicates how infants develop emotional interactions with their caregivers through 'infant-caregiver joint object-centred activity. Karpov highlights the mediating role of objects and adults in emotionally communicating with infants. However, the study does not highlight how joint object play between adults and children leads to imaginary play.

Henning and Kirova (2012) draw upon the understanding of Vygotsky's and Leontiev's idea of the environment where the child's use of concrete materials mediates their learning. They highlight how the deliberate use of cultural materials by the adults' supports children in bridging the gap between the home and classroom to 'find a unified, universal formula for relations with the environment' (Leontiev, 2005, p. 10). The study considered the concrete materials as an environment that guided children towards their learning in meaningful ways.

Whilst the studies discussed above provide a view of how infants and toddlers engage with early forms of activities such as exploratory play using concrete objects with support from adults, the discussions do not address what this means for infants' and toddlers' development of imagination through play which the present study addresses. The present study uses Conceptual PlayWorld (CPW) to understand the development of the

imagination in toddlers. This conception was born from research with older children and sits within a broader theoretical framing of playworlds.

# 3.1 Playworld

Playworld introduced by Lindqvist (1995), focuses on the concepts of imagination and creativity where children and adults create a mutual imaginary space of meaning using stories. Many studies have been undertaken using playworld in different countries. Such as Australia (Fleer, 2017); China (Fleer, Li, and Yang, 2018), Finland (Hakkarainen, 2010), Italy (Talamo, Pozzi and Mellini, 2010), Japan (Marjanovic-Shane et al., 2011), Lithuania (Hakkarainen et al., 2013), Serbia (Marjanovic-Shane et al., 2011), Sweden (Nilsson, Ferholt and Lecusay, 2017) and the US (Ferholt and Lecusay, 2010). These studies focused on children four years and older. However, Lindqvist's study in 2001 focused on toddlers that highlights the physical environment accompanied by dramatisation provided an opportunity for toddlers to engage with imaginary play. Even though the study highlights the props as the physical environment, it does not provide deeper insight into the roles of props within the environment. The present study identified this gap and investigated how the presence of concrete props supports toddlers' imaginary play.

In 2018, CPW was conceived, focusing on imagination in play and learning (Fleer, 2018). There have been two studies on infants' and toddlers' imaginary play using CPW. Li's (2020) study argues that educators' affective engagement involves embodiment, gestures and vocalisation which is crucial to developing collective play. The study does not highlight the development of imagination in toddlers. This was taken up by Fragkiadaki et al.'s (2021) study, which investigated the genesis of imagination in infants. The study reveals that teachers as play partners introduced a diverse form of imaging making explicit how these forms lead to the development of collective imaging for infants. Consequently, the key dimensions provided by the previous studies give insights into the focus of the present study which is the use of concrete props that support the toddlers to engage with imaginary play. The studies by Lindqvist (2001), Li (2020), and Fragkiadaki et al., (2021) provide an understanding of toddlers' imaginary play, but the role of concrete props in the development of imaginary play in infants and toddlers has not been explored. The growing knowledge of reality raises children's ability to move from modelling real-life actions, relationships, and concrete objects to abstracting their essentiality. Thus, urging the nature of the concrete objects as play materials to allow playful and symbolic use. The concrete objects present in the child's environment are an integral element and not only an external factor. A deeper exploration of the relationship between the concrete materials as an environment and the child in the context is called for. These key dimensions give insights into the focus of the present study which sought to explore how concrete props create conditions for the development of imagination during toddlers' play. Within this framework our research question was formed: How do concrete props support the development of toddlers' imagination?

## 4. Methodological Framework

### 4.1 The study design

To study the development of the imagination of toddlers, the study design sort to capture over time the transition process of development taking place in toddlers within the same activity setting (Hedegaard, 2008). The activity setting of a CPW (Fleer, 2017, 2018, 2019) as a practice model for the development of imagination within play-based settings was implemented. CPW allowed the study to determine the nature of imagining of

toddlers and look for micro-genetic transitions of development over time within the CPW to answer the research question. The model involves five key characteristics:

- 1. Selection of a story relevant to the toddlers' age, interest, and experiences that introduced a problem.
- 2. Designing a space to allow children to explore in different ways the problem that needs to be solved
- 3. Planning the entry and exit into the imaginary space creating a collective experience
- 4. Planning inquiries based on the story plot to explore different concepts and
- 5. Planning teachers/ educators' roles and interactions to build conceptual learning

The educator and the researcher planned a CPW based on toddlers' interest in the book 'Follow that Tiger' (Joyce, 2016). The story's plot is about a tiger who meets and greets all the animals that live in the jungle. A problem emerges; the flamingo is missing, and the tiger needs help to find the lost flamingo. Using different concrete props such as toys, accessories, and books, the toddlers were invited to enter the imaginary world of the CPW where they would look for the lost flamingo. In doing so, toddlers' interactions within the CPW were studied qualitatively and visually, which became the lenses for the study.

# 4.2. The participants and data generation

Eight toddlers from one early childhood centre were followed. The centre is one of the participating centres of the larger Australia Research Council Programmatic study. The centre was in a middle-class suburb in the southeast of Melbourne, Australia. All the families had mixed heritage backgrounds, ranging from British, European, Latin American, East Asian to South Asian. The data set of 4 focus toddlers aged 1.9 to 2.1 years is presented. The educator is Diploma qualified and has more than 10 years of experience. For data collection, one camera on a tripod was placed in the toddler room to capture the overall activities. Another camera was handheld by the researcher to closely follow the focus toddlers. A total of thirteen hours of digital video observations were collected. Digital data collection was chosen as it captures, the toddlers' narratives and additional dynamic aspects of toddlers' play such as gestures, verbal/nonverbal communication, cues, body positioning, and movements. Digital data collection allowed the researchers to continuously revisit and deepen the interpretation of the empirical data sets. Field notes, detailed logs, and research protocols were prepared after each visit. Ethics approval was granted from the Victorian Department of Education and Training and Monash University Human Ethics Committee. Parents' voluntary and informed consent was given to video-recording toddlers' participation within the CPW and the data for scholarly purposes. Parents and educators were encouraged to explain to the toddlers that photos and videos of them will be taken. The toddlers were asked before filming commenced. Educators' voluntary and informed consent was also given. All participants were provided pseudonyms. Data management complied with the Monash University data protection and privacy procedure, including the Privacy and Data Protection Act 2014 (Vic).

# 4.3 Analysis

The data analysis framework drew upon Hedegaard and Fleer's (2008) dialectical interactive approach to studying children. Three iterative analysis dimensions encompass the methodology namely everyday

interpretations, situated interpretations, and theoretical interpretations. The *everyday interpretations* occurred when data was digitally logged in its raw form, and the researchers' initial observations as field notes were recorded. For *situated interpretation*, the whole data was cut into video clips and common themes were identified, such as props and imaginary situations. For *theoretical interpretations*, video clips were digitally brought together to observe the emerging theoretical categories that were used to analyse the complete data for frequency, type, duration, and quality of imagining. Observations were made on the pairing of props and toddlers' imagination as evident through the play, which drove this final part of the theoretical analysis.

#### 5. Results

It is argued that concrete props create unique motivating conditions for the genesis and development of imagination in toddler play and the transition of toddlers' thinking from concrete and physical forms to more abstract and symbolic forms. Indicative vignettes presented below illustrate the use of props, the toddlers' embodiment of the experience, and the focus on a shared intellectual and abstract space beyond concrete objects.

# 5.1 Vignette 1: Props as a transitional object toward imagination

In Vignette 1, Karen, the educator, begins to read the book 'Follow that tiger' to the toddlers. As Karen reads the story, she enters the imaginary situation by pretending to be a hero from the story, an animal in the jungle. Karen brings animal bodysuits and accessories such as heads, tails, and ears to the toddlers. She asks the toddlers which animal they want to be from the book. Zander, a toddler aged 1.10 years old, puts on the tiger head and bodysuit. Zandar roars as if being a tiger as he walks around the room. Karen takes out some animal figurines representing the book's heroes and sets them up on a table. The toddlers start playing with the figurines. Picking up the figurines Karen talks to the toddlers about different animal external biological characteristics (e.g., "Lachlan, a toddler aged 1.9 years old, is a big Zebra! Look Lachlan, the zebra has stripes. And you have stripes on your body (touching Lachlan's zebra costume). Lachlan is a zebra"). Lachlan touches and feels the animal suits and looks at the zebra strips as Karen talks to him. Zandar joins Karen and Lachlan, looking for a zebra in the story. They start talking about animal strips and tails, picking up each figurine and comparing them to their bodysuits and the pictures in the storybook. Lachlan points at the pictures in the book and then points at his tail. Karen affirms Lachlan's actions by saying, 'Yes, you are right, that is a tail'.

Fig. 1a: Lachlan is wearing a zebra suit and Zandar is wearing a tiger suit as they become animals from the storybook

In the meantime, Zandar picks up the pictures of the animal figure and says something that sounds like 'tiger'. Karen nods at him and says, 'You are a tiger'. Zandar comes up to the researcher and loudly says "roar" and continues touching the tiger head and costume he is wearing.

# Fig. 1b: Zandar roars

In this vignette, Karen uses diverse props such as costumes and figurines to invite the toddlers to enter the imaginary situation of the 'Follow that tiger'. By putting on the animal suit, Zandar enters the imaginary situation and embodies the role of the tiger. Wearing the suit, he maintains his imaginary character and stays within the imaginary situation. This is seen through the way he continuously makes the "roar" sound and uses that sound to communicate with others. He begins to act independently within the imaginary situation and explores the room as being a tiger. Karen validates Zandar's imaginary character by saying he is a tiger. For Zandar the animal suit appears to act as a transitional object from reality to the imaginary situation of the CPW. At the same time, props took a different role in Lachlan's experience. Lachlan appeared to engage with the imaginary characters from the story by playing with the animal figurines. Karen supported Lachlan in interrelating the two types of props, the figurines, and the costume, and invited him to enter the imaginary situation as being a zebra himself (e.g., Lachlan is a zebra). Although Lachlan did not appear to enter the imaginary situation himself at this stage, he seemed to use the figurines to connect with the imaginary story and make sense of the situation. For Lachlan, the figurines became the placeholders for imagining the animals from the book. What is also highlighted in this vignette is the role of the educator in creating the conditions for children's imagining using props. Karen oriented the toddlers towards the costumes, the accessories, and the figurines indicating that props act as an agency for imagination. By using the props, she consistently invited the toddlers to enter and experience the imaginary situation during their play.

Fig. 1c: Karen, Zandar, Lachlan exploring the animal figures

Fig. 1d: Lachlan playing with the elephant figurine.

# 5.2 Vignette 2: Emergence of embodied actions and words

In Vignette 2, after Karen reads the storybook, there is a phone call. Karen informs the toddlers that the tiger has called asking for help to find a lost flamingo (e.g., Karen says, 'the tiger needs our help, we must look for the lost flamingo.). Karen suggests that they quickly put on animal accessories such as tails and ears and go into the jungle. Karen puts on the bear's ears and begins to walk like a bear.

*Fig. 2a:* Karen and the toddlers are becoming different animals before entering the imaginary jungle. Zandar is a Zebra.

Talya has put on the Zebra ears and is a Zebra following Karen, the bear who says they should climb the tree to look for the flamingo (Karen suggests, 'walk around the tree, walk around the tree can you see if the flamingo is there?"). Talya nods and looks up at the imaginary tree that Karen is looking at. Zandar is wearing tiger ears and is roaring like a tiger. He joins Talya in following Karen. Slowly, all the toddlers join and walk like animals climbing the tree, taking big steps, and holding on to the branches. No flamingo is found on the tree. Then Karen suggests swimming across the water. Talya follows Karen crawling and swimming behind Karen. As they swim, they find some feathers, "Karen asks Talya, Zandar and the other toddlers, "Is this where the flamingo was? Is this the flamingo feather?" Talya, Zandar and the other toddlers look curiously at the pile of feathers on the floor. Karen gives toddlers' the feathers. Talya grabs some feathers, looks at Karen feeling and blowing the feathers and starts to do the same. Zandar looks at Karen, so he blows the feather too. All the toddlers begin to blow the feather.

Fig. 2b: Talya is a Zebra looking for the lost flamingo under the river



Fig. 2c: Toddlers find the lost flamingo feathers

# 5.3 Vignette 3: Transition of props from concrete to abstract

In vignette 3, after reading the book and putting on the animal accessories, Karen informs the toddlers that they must continue to look for the lost flamingo. Chloe and Talya are already looking for the flamingo in the jungle. While Talya puts on Zebra ears, Chloe refuses to put on any animal accessories and says she is a Zebra. They are pretending to walk through the tall grass in the jungle (Chloe is saying, 'Tallgrass, Tall grass'). Karen tells Chloe and Talya that they must now go into the water under the cave (Karen says, 'Chloe are you going under, underneath the cave?') Chloe immediately gets down on her knees and hands go under the table calling out to Talya to join her. Karen is also on her hands and knees and tells the toddlers that they must look for the flamingo in the water (Karen says, 'let's go look for Flamingo. Oh, here's a big river, can we swim across the river?') Chloe is pretending to swim saying, 'swim swim swim under the river'. Karen mentions that she sees a big tree and points up as they are swimming. Chloe looks up from under the table and asks where. Karen points up saying 'let's climb over the big rocks. Here we go, let's keep climbing over the big rocks.' Chloe immediately starts to pretend she is climbing by using big feet movements.

Fig. 3a: Toddlers are under the water looking for the lost flamingo

In this Vignette, the use of props in combination with verbal narratives has managed to bring the storybook to life. Karen has enticed Chloe to engage in an imaginary creative practice. Chloe connected within the imaginary space through gestures and bodily actions as she follows Karen and her verbal cues. Chloe was engaging more through words and gestures. Chloe found this compatible as it was based on actions, such as climbing up the tree, swimming under the water, and performing the actions that most closely, actively, and

directly corresponded to experiences. The toddlers' ability to express themselves through gestures and words within the imagined space was apparent. The exchange between Chloe and Karen is characterized by words, and gestures representing ideas as they continue looking for the flamingo. For Chloe, words have become the new pivot that led to Chloe imagining the storybook. It can be observed that the development of imagination within the CPW represented a holistic, dynamic, and collective process that encouraged imaginative thinking in toddlers. When the toddler's engagement is viewed from the wholeness approach, it identifies toddlers' perspectives through their actions (and words), verbal/non-verbal language, and curiosity. Karen's perspective is evident through her use of props and narrative pedagogy which brought the imagination to life within the CPW.

#### 6. Discussion

The above vignettes showed how the dynamic use of concrete props managed to create conditions for the development of toddlers' imagination within the activity setting of the

CPW. Three key points emerge from the analysis: a) props created the conditions for the development of toddlers' imagining, b) the more complex toddler's imagining was becoming, the fewer props were used, and c) the toddlers achieved a symbolic use of props.

### 6.1. Props and toddlers' imagining:

First, the imagination within the CPW was brought to life using props. The wearing of animal suits, ears, and tails acted as placeholders for toddlers taking on imaginary animal roles, followed by the feather, which portrayed the flamingo. The extracts showcased a process that inspired the toddlers and educators to engage in joint play and shared experiences, creating conditions for toddlers' engagement within the imaginary world. The concrete props present in the room allowed the toddlers to create an imaginary situation that drives their actions and gestures. The dramatic form of the CPW is compatible with toddlers as it allows them to link between all dramatization and play. In the vignette, the props within the imaginary space managed to facilitate the composition, and improvisation of the imaginary play. The verbal creation through which Karen attempts to engage toddlers is the preparation for or a natural part of a complete and fascinating imaginary play.

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# 7. Conclusions

This study sought to explore the early genesis and development of imagination in the toddler age period. Consistent with the study by Fleer (2018), Li (2020) Fragkiadaki et al., (2021), the research findings presented the development of collective imaging in toddlers. However, the study also revealed how props within the CPW created the conditions for the toddlers to engage with imaginary situations. The study contributes to understanding better the role of props in the early childhood setting.

Further, similar to the empirical studies conducted since 1980 on infants and toddlers as discussed above, this research provided insights into how toddlers engaged with exploratory play with support from adults using concrete objects. The study found how props allowed the toddlers to collectively engage in exploring imaginary situations through actions, gestures, verbal/non-verbal communication, and imitation. Further, the study reported shows how props have become the means that allowed toddlers to transition from the usual play activities within the room to imaginary play. The development process of imagination within the CPW has represented a holistic, dynamic, and collective process that encouraged imaginative thinking in toddlers.

It can be noted that while the props are physical and tangible, the imagining is psychological, which became a vital role in creating imagining (Fleer, 2018; Fragkiadaki et al., 2021). The experiences afforded conditions for developing imagination that position toddlers to efficiently deal with the social process of working with abstract symbols, content knowledge, and thinking. It has allowed relations between imagination and reality to foster when props are given new meaning (Vygotsky, 2004). Even though it is the concrete props that toddlers are engaging with as highlighted by Fromberg (2002), Karpov (2005), and Garner and Bergen (2015), our research showcases it is their engagement with the imaginary situation created by the props that support the toddlers to develop relational links by systematizing their play explorations leading to the earliest development period of formation of imagination in toddler play. This study adds to our understanding of the formation of imagination through play in toddlerhood. The overall contribution of the study provides insights into the possibilities of play-based pedagogies toward the development of the imagination in toddlerhood.

#### References

- Cohen, N. L., & Tomlinson-Keasey, C. (1980). The effects of peers and mothers on toddlers' play. *Child Development*, 51(3), 921–924. https://doi.org/10.2307/1129488
- DeLoach, J. (1995). Early understanding and use of symbols. *Current directions in psychological science, 4,* 109-113
  - Farver, J. M., & Wimbarti, S. (1995). Indonesian children's play with their mothers and older siblings. *Child Development*, 5, 1493–1503. https://doi.org/10.2307/1131659
  - Fleer, M. (2013). *Theorising Play in the Early Years*. Cambridge University Press. http://ebookcentral.proquest.com/lib/monash/detail.action?docID=1543620
  - Fleer, M. (2017). Scientific Playworlds: A Model of Teaching Science in Play-Based Settings [journal article]. *Research in Science Education*. https://doi.org/10.1007/s11165-017-9653-z
  - Fleer, M. (2018). Conceptual Playworld's: the role of imagination in play and learning. *Early Years*, 1-12. https://doi.org/10.1080/09575146.2018.1549024
- Fleer, M. (2019). *Conceptual PlayWorlds* as a pedagogical intervention: supporting the learning and development of the preschool child in play-based setting. *Obutchénie*, 3(3). https://doi.org/10.14393/OBv3n3.a2019-51704
  - Fragkiadaki, G., Fleer, M., & Rai, P. (2021). The social and cultural genesis of collective imagination during infancy. *Learning, Culture and Social Interaction*, *29*, 100518. https://doi.org/10.1016/j.lcsi.2021.100518
  - Fromberg, D. P. (2002). Play and meaning in early childhood education. Boston: Allyn & Bacon.

- Garner, P. & Bergen. D. (2015). Play development from birth to age four. In D. P. Fromberg & D. Bergen (Eds.). *Play from birth to twelve and beyond: contexts, perspectives and meanings* (pp.11-20). Taylor and Francis Group.
- Hakkarainen, P. (2010). Cultural-historical methodology of the study of human development in transition. *Cultural-Historical Psychology*, *4*, 75–89.

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- Hedegaard, M. (2008). The Educational Experiment. In M. Hedegaard & M. Fleer (Eds.), *Studying children: A cultural-historical approach (pp. 181-201)*. Berkshire: Open University Press
  - Hedegaard, M., & Fleer, M. (Eds.), (2008). *Studying children. A cultural–historical approach*. Open University Press.
- Hennig, K., & Kirova, A. (2012). The Role of Cultural Artefacts in Play as Tools to Mediate Learning in an Intercultural Preschool Programme. *Contemporary Issues in Early Childhood*, *13*(3), 226 241. https://doi.org/10.2304/ciec.2012.13.3.226
- Holzman, L. (2009). Vygotsky at work and play. New York: Routledge
  - Joyce, M. (2016). Follow that tiger. Bonnier.
  - Kozulin, A (2003). Psychological Tools and Mediated Learning. In A. Kozulin, B. Gindis, V. S. Ageyev and S. M. Miller (Eds.), Vygotsky's educational theory in cultural context (pp. 15-38). New York: Cambridge University Press.
  - Leontiev, A. N. (2005). Study of the environments of the pedological works of L.S. Vygotsky. *Journal of Russian and East European Psychology*, 43(4), 6-28.
  - Li, L. (2020). Developing a pedagogy of play: Toddlers' conceptual learning in a PlayWorld. *Early Years:* An International Research Journal, 1–15. https://doi.org/10.1080/09575146.2020.1739002
  - Lindqvist, G. (1995). The Aesthetics of Play: A Didactic Study of Play and Culture in Preschools. (Doctoral dissertation). *Uppsala Studies in Education*, 62, 10234. Acta Universitatis Upsaliensis.
  - Lindqvist, G. (2001). When small children play: How adults dramatise and children create meaning. *Early Years*, 21(1), 7–14. https://doi.org/10.1080/09575140123593
  - Main, M. (1983). Exploration, play and cognitive functioning related to infant-mother attachment. Infant Behaviour and Development, 6, 167–174.

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Tudge, J. & Odero-Wanga, D. (2009). A cultural-ecological perspective on early childhood among the Luo of Kisumu Kenya. In M. Fleer, M. Hedegaard & J. Tudge (Eds.). *Childhood studies and* 

- the impact of globalization: policies and practices at global and local levels (pp. 142-160). New York: Routledge.
- Wormann, V., Holodynski, M., Kartner, J., & Keller, M. (2012). A cross-cultural comparison of the development of the social smile. A longitudinal study of maternal and infant imitation in 6-and 12-week-old infants. *Infants Behaviour & Development*, 35, 335–347.
- Vygotsky, L.S. (1966). Play and its role in the mental development of the child. *Soviet psychology, 3,* 6-18.
- Vygotsky, L. S. (1994). The problem of the environment. In R. van der Veer, & J. Valsiner (Eds.). *The Vygotsky reader*. Cambridge Blackwell.
- Vygotsky, L. S. (1997). The history of the development of higher mental functions. In R. W. Rieber (Ed.). *The collected works of L.S. Vygotsky: The history of the development of higher mental functions* (pp. 1-251). Plenum Press.
- Vygotsky, L. S. (1998). The collected works of L.S. Vygotsky (Vol 5). In T. M. J. Hall, & R.W. Rieber (Eds.), *Child psychology*. Kluwer Academic and Plenum Publishers.
- Vygotsky, L.S. (2004). Imagination and creativity in childhood. *Journal of Russian & East European Psychology*, 42(1), 7-97.