

# **European Journal of Education Studies**

ISSN: 2501 - 1111 ISSN-L: 2501 - 1111

Available online at: www.oapub.org/edu

DOI: 10.46827/ejes.v11i5.5275

Volume 11 | Issue 5 | 2024

# A THREEFOLD APPROACH TO CHILDREN'S CHOICE OF PLAY IN THE SCHOOL AND FAMILY ENVIRONMENT

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#### **Abstract:**

The present study aims to investigate the preferences of children aged 3 to 5 years old regarding their choice of play in two different environments, taking into account participatory pedagogical approaches, which support the value of children's actions and "voice". Its purpose is to pinpoint any gender stereotypes in children's preferences, to enable the comparison of data and the highlighting of the way they complement or contrast with the opinions of educators and parents regarding those preferences. The research revealed that children prefer commercially successful toys related to mass culture, which they employ for role-playing. Children choose different types of toys mostly gender neutral- in the ECEC settings, in contrast to their choices in the family environment, which shows that gender stereotypes prevail at home. Boys and girls choose toys based on gender. Modern pedagogy aims to empower children to develop relationships of respect and equality and to provide equal learning opportunities. It is therefore imperative to encourage the use of gender-neutral toys to deconstruct the gender dichotomy and adopt gender-neutral pedagogy, helping to reduce stereotypes and raise awareness of social justice from early childhood.

**Keywords:** children's voice; family environment; gender; play; preschool age; ECEC settings

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#### 1. Introduction

Early childhood environment – centres in ECEC settings –are key to creating safe spaces where children are encouraged to explore, identify and express their authentic selves, as well as help to acquire a positive self-image (Conyer, Reynolds & Qu, 2003), enhance the sense of security and also instil respect for peers, adults, and for themselves. These high-quality, responsive natural learning environments are also democratic in which ideals, such as respect for the individual and the whole, rights, and obligations are reflected. In such a learning context, students can express their views, participate, and communicate, so that ultimately democratic values are experienced and applied in everyday life in order to contribute to the formation of active citizenship (Flowerday & Schraw, 2003). Therefore, children's perceptions of gender also play a crucial role in the formation of a democratic and integrated personality.

Gender can be defined as a social construction that categorizes people and creates social expectations of what a person is supposed to be like. According to Bruner's theory of social learning, gender is structured in the child's mind through imitation, observation, and reinforcement, initially within the context of the family and then in every social context that follows, as pinpointed in Vygotsky's socio-cultural theory (Massey, 2013). From the age of two years old, children can usually understand other people's gender and begin to associate different activities and play preferences with gender instead by the age of 4-6 years old, children have acquired a number of fixed ideas and patterns of behaviour, related to traditional gender roles (Martin & Ruble, 2010). This knowledge is a precursor to the formation of gender-related schemata and the construction of stereotypes (Bigler & Liben, 2007).

In recent years, there has been growing interest in the search for the children's own 'voice' and their 'participation' in social processes (Sofou, 2022). Traditionally, children do not take part in research regarding issues that affect their lives. However, in the last two decades, important economic, institutional, and academic developments, led to the active participation of children as agents who act independently (Harcourt & Hägglund, 2013) and recognize the children as bearers of rights (Brooks & Murray, 2016· Murray & Cousens, 2020), as the 'experts regarding their own life' (Flewitt & Ang, 2020) and as autonomous persons with emerging abilities (Broström, 2012).

In this context, this research aspires to investigate children's preferences for play in the ECEC environment and in the family environment, through their own 'voice' but also through the perspective of parents and educators. Children attend centres in ECEC settings to be a part of a pedagogical framework with methods and programs suitable for their holistic development, learning, and their well-being (Sidiropoulou & Tsaoula, 2008). The majority of research on play is based on reports from parents and educators or on inferences from researcher observations, which may not reflect the children's actual desires and experiences (Rogers & Evans, 2008). In addition, there are no studies that attempt to compare children's preferences in the two familiar environments - preschool and family. Given that gender stereotypes seem to emerge and be reinforced during early

childhood (Ruble *et al.*, 2006), the present study attempts to detect any stereotypical perceptions based on the photographs of toys children take and in their actual words with the ultimate goal of adding up the views of the three groups that participate in the research and comparing how they complement or contrast with each other.

#### 2. Literature review

# 2.1 Approaching the concept of play

In an era characterized by the technological revolution and hyper-consumerism, play is a way of reflecting the culture and conditions of each society. Play, be it an object or activity, is a social and cultural product loaded with indirect or direct meaning and expresses the particularities of the society that produces it (Gougouli, 2000). More specifically, a toy object is described as either any object that can be imaginatively turned into a toy, regardless of its primary use, or any object constructed to meet the need for playing (Kudrowitz & Wallace, 2010). They are considered a distinct form of play as they fulfill the condition of pleasure and fun from the children's perspective, but they cannot be effectively integrated into the educational context.

It works as a necessary 'tool of the mind' in school and family environments to make up stories (Vygotsky, 1978). The child, by taking on different social, family, and class roles (Pellegrini, 2009) but also by using objects to represent something else, enters a zone that creates opportunities for learning and developing abstract thinking (Orr & Gera, 2015), the Zone of Proximal Development according to the sociocultural approach (Vygotsky, 1978). Learning and cognitive development are achieved through the social interaction and active participation of children with adults and more experienced peers (Vygotsky, 1978), leading to the construction of their own knowledge (Pyle Deluca, 2017; Nolan & Paatsch, 2017).

#### 2.2 What play do children prefer?

Children's choices regarding play mostly derive from mass culture and acquire a dynamic character, as they are constantly following the fast pace of technology and the changes in the toy industry (Chudacoff, 2008). Children tend to prefer toys related to their own gender (Cherney & Dempsey, 2010: Hartmann & Brougere, 2004: Weisgram & Dinella, 2018). Boys over 4 avoid toys that are considered 'feminine', labeling them as 'hot potatoes' (Blackmore & Centers, 2005). This tendency can be attributed to deeply rooted patriarchal norms (Dragowski & Scharrón del Rio, 2014). More specifically, boys reinforce their masculinity through 'masculine' toys, such as action figures, fighting/war games, football, Lego, and building materials. Toys suitable for construction and include movement appeal to them more because of their early advantage in mentally rotating figures (Quinn & Liben, 2014) and mapping of events (Schweinle & Wilcox, 2004). On the other hand, girls reinforce traditional femininity through dolls or toys related to housework and grooming (Ramdacni *et al.*, 2017: Servos *et al.*, 2016). Girls were attracted more to social stimuli, eye contact (Leeb & Rejskind, 2004), and the processing of facial

expressions (McClure, 2006), a finding that can be attributed to their preference for nurturing play. In addition, girls engage more in pretend play or role play and art activities, while boys engage in physical play (Barea & Martin, 2020. The results of the research by Golden and Jacoby (2018) and Coyle *et al.* (2016) on girls' gender attitudes through symbolic play with Disney dolls, also support the aforementioned findings. Video games also score high in children's preferences (Bay, 2020 Sapsağlam, 2018), with boys traditionally engaging in this kind of play more often than girls (Cherney & London, 2006), although gender differences also tend to depend on the kind of video game (Rehbein, *et al.*, 2016).

#### 2.3 Factors affecting children's preferences

From an early age, children understand the complexity of gender identity. Stereotypic beliefs emerge at the age of 3-5 years old, reach a peak between ages 5-7, and decline thereafter (Martin & Ruble, 2004). There are many factors that contribute to the formation of a child's gender identity. Some researchers claim that biological factors—especially prenatal hormones-contribute to this differentiation (Alexander, 2014. Hines, Constantinescu & Spencer, 2015. Wong et al., 2013). Other researchers such as Collins (2000) state that gender is a life process and is shaped through the behaviors and actions of adults, who in turn reflect their own expectations and views of what it means to be a boy or a girl (Wingrave, 2018). Parents may claim that they treat their children equally and promote gender equality, but their true perceptions are clearly revealed when they are mirrored in their children's play choices (Kambouri-Danos & Evans, 2019); parents tend to buy their children same-sex toys or non-gender toys (Weisgram & Bruun, 2018) or encourage encounters and create appropriate environments where thematic play is related to their child's gender. Research suggests that parents tend to be more tolerant regarding girls' play, as opposed to boys' play which perpetuates stereotypes (Kollmayer et al., 2018. Our Watch, 2018). There is however a small percentage of parents who question stereotypes and promote flexible gender experiences.

Society, through the media, films, and advertisements, shapes children's interests by explicitly pointing out 'only for boys or girls' toys. Research confirms that nearly three-quarters of children's toys today, depict heroes and heroines from popular television movies or series (Edwards, 2013).

Educators' perceptions of gender can influence children's play (Chapman, 2016) but also the way they learn (Kambouri-Danos & Evans, 2019). Recent research highlights the strong contradiction that lies in educators' deep beliefs about gender. In fact, while they claim to be in favor of gender equality and purport the holistic development of children, at the same time they are unable to perceive the unconscious reproduction of messages and ideologies on their part in the educational process (Hilliand & Liben, 2010). Educators fail to provide their students with equitable teaching and learning experiences when they 'reproduce and recreate gender-based expectations' through 'dimorphic biased treatment of boys and girls based solely on biological differences rather than their

individual needs' (Wingrave, 2018); as a result, they have different expectations from boys and girls (Del Rio & Strasser, 2013).

On the other hand, a minority of teachers who recognize stereotypical views try to cultivate a non-stereotypical play environment, or keep a gender-neutral attitude by designing programs and activities around the children's interests, avoiding any form of intervention (encouragement or disapproval) in gender norms (Chick *et al.*, 2002). Inclusion of gender-neutral toys, urging boys and girls to regularly exchange play areas, and encouraging children's active participation in pretend play, are practices that foster exploration and challenge stereotypes (Chapman, 2016· NAEYC, 2019).

#### 3. Methods and Materials

The research employs a mixed-method approach, drawing from different sources of data, to ensure validity and reliability. Data from different sources – children, parents, educators – are cross-referenced for confirmation or reinforcement purposes (Thurmond, 2001), that is, the children's photographs and actual words are studied in combination with the teachers' and the parents' answers. The present study focused on below questions:

- 1) What are children's preferences aged 3 to 5 years old regarding their choice of play in the family environment and ECEC environment?
- 2) Do any stereotypical perceptions arise in children's choices of play and their actual words during the process in ECEC settings?
- 3) What are the educators' and parents' viewpoints regarding children's preferences for play?

#### 3.1 Research process

The data collection process began with the children's interviews (Adhabi & Anozie, 2017). The transcription process and the photography are discussed with children as part of the research process in the nursery. The procedure was carried out in consultation with the researcher, always with the help of the teacher. The children were in an environment familiar to them. The children were asked questions individually or in pairs related to their favourite toy. Then they were asked to take a picture of their favourite toy at the ECEC setting. Using this particular research instrument can empower the role of children in the context of democratic and participatory practice in research and educational practice (Clark & Moss, 2001/2010· Loizou, 2011).

They found it interesting and fun; they wanted to photograph more than one toy, which they did. Next, they were asked to choose only two of the photos they took. The interview-discussion and the photos are the actual research data. One-to-one semi-structured interviews were conducted with the educators of the class. Structured interviews were carried out with the parents of the children who participated in the research with questions about children's toy choices at home. All the involved parents received written information from us and signed a consent form.

## 3.2 Participants

The research sample was selected based on the age of the child. The children are between the ages of 3 and 4 years from three public centres in ECEC settings in a provincial city of Greece; Mytilene, which may give the opportunity for the participation of children with different cultures. The number of the participating children is 60; 32 boys and 28 girls. Parents identified children on the consent forms as Greeks (38), Hispanic (1), Albanians (13), English (1) and eight families declined to state their child's race/ethnicity. Moreover, 12 educators (all women) and 60 parents (43 women and 7 men) of those children voluntarily participated in this research. The basic criterion for parents' and educators' participation was to be related to children.

## 3.3 Ethical approval

The research was approved by the Research Ethics Committee of the University of West Attica (Prot. No.26303/13-03-2023). Ethical issues had to be carefully considered in the research process: at the planning stage, in the research design, during data collection and analysis, and in the storing and sharing of data (Creswell, 2014). All parents of the participant children gave written consent allowing them to take part in the research group, after being informed of the objectives and scope of the research. Even though we had written consent from the parents, we orally informed the children about the project and the research process. We also informed the children that they have the option to withdraw from the group at any time or not to participate at all. On both occasions, our situational ethics are fulfilled. The digital records collected from the researchers did not contain personal names or the preschool setting's identification to protect children's anonymity (Cohen, Manion & Morrison, 2012). Pseudonyms also are used to protect participant identity. All copies of data are kept in a secure format and location.

#### 3.4 Toy selection

The toys were assigned to one of ten categories regarding the primary function of the toy: (1) small vehicles, (2) educational material (included and instructional toys), (3) art and crafts, (4) musical toys, (5) imaginary play, (6) building/construction toys, (7) sports/physical play, (8) digital play, (9) beach toys, (10) natural materials. Seven of these categories are familiar to those used by Melissa *et al.* (2022) in their research and Toys Industry Association (2017) and also span the standard sets of toys used in most studies on play; we identify also, three extra categories of toys in children's preferences, which are: beach toys, natural materials, and digital play. More specifically, educational materials include books, foam letter magnets with whiteboards, animal learning toys, and cubes with numbers and letters. Natural materials include leaflets, bottle caps, and bottles; instead, digital play includes any applications that children are being entertained. Beach toys are specific categories, as the research was conducted on an island in Greece during the summer session.

#### 3.5 Data analysis

The audio recordings were transcribed by the researcher before thematic analysis commenced (Braun & Clarke, 2006). A thematic analysis (TA) is a method for identifying, analysing, interpreting and reporting patterns of meaning across qualitative data (Braun & Clarke, 2012·Nowell *et al.*, 2017). Data for each group (children, educators, parents) were examined separately. Guided by the research questions, the data were systematically examined; the quotes related to each research question were identified and coded by group. Codes were reviewed to identify patterns across the data of all groups, in order to construct the representative themes, which were re-examined with the children's data and then compared with the teachers' and parents' data. Finally, the themes were presented and accompanied by representative quotes from the data, and the findings were drafted (Braun & Clarke, 2012). Finally, the views of the three groups that participated in the research compared how they complement or contrast with each other. Research data are illustrated with descriptive statistics (Nowell *et al.*, 2017).

# 4. Findings

Children's preferences at home are mostly small vehicles (N = 12), dolls (N = 13), and small animals (N = 13). There were fewer references to physical play (N = 4), arts and crafts (N = 2), educational materials (books, puzzles) (N = 2) and bricks (N = 3). Moreover, remote-controlled toy cars (7 out of 12) and toy figures (robots, wrestlers) (3 out of 13) reach a percentage of 20%. Children (N = 13) controlled toy cars (N = 13) and toy figures (robots, wrestlers) (N = 13) reach a percentage of 20%. Children (N = 13)

"I like the toy car because it has a sound ... it makes noise ... it has a light and it makes candies." (C 1)

"My favourite toy is a puppy doll because I look after it, we go out for a walk." (C 2)

"A baby doll, I take care of it...it was sucking on its dummy (she acts as if she has a baby in her hand)" (C 3)

"I like my mother reading me books...fairy tales before I go to bed." (C 4)

"I like music... to play drums because I dance all the time" (C 5)

"My favourite doll is the Barbie that Santa Clause bought me as a present.... I deserve it, It has a multicolour dress like a rainbow" (C 6)

"... many magnets because I can make neckless." (C 7)

"I like to play with my kitchen toy, as I cook with my mum pasta." (C 8)

At this age, games on mobiles or tablets also appear, but in a small percentage, 3.3% (N = 2):

"I play on my mum's tablet... I collect stars." (C 9)

What is interesting about these data is that some children mentioned a water gun, an inflatable toy, and diving in the sea as their favourite play (N = 4, 6.6%). Finally, two girls who stated that their favourite play is flowers and balloons respectively are worth mentioning:

"Every day I water the flowers in my garden with my grandpa." (C 10)

"I like balloons... the red ones, my dad bought me one yesterday." (C 11)

The preferences of children in centres in ECEC settings (Figure 1) are different. Pretend play (N = 14), such as doing chores in the kitchen (N = 4) or caring for babies (N = 3) and animals (N = 5), dominates the children's choices with a percentage of 28.58%. Next are constructions (N = 13) at 24.75%. Compared to the above results, there is a decrease in imaginary play in Preschool and an increase in construction play. Educational play also increases at a rate of 18.4%, while toy vehicles decrease at a rate of 8.2%. In addition, natural materials appear in the children's preferences at an increasing rate. Children like to play in the schoolyard with stones, soil, and leaves and they make castles, houses, and nests.

"I like to go to the beach and build towers and castles on the sand...." (C12)

At this age physical play also has an elevated rate in the children's choices at home compared to ECEC settings. These data are confirmed by the children's photos; the majority of the children took photos of bricks, small vehicles, babies, fruits, and jungle/sea animals.

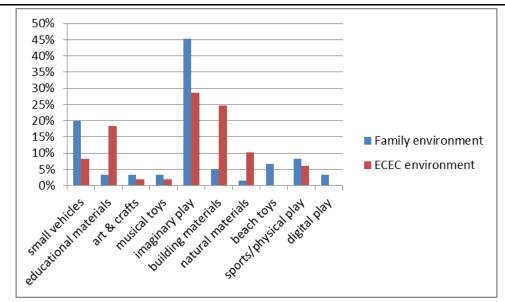


Figure 1: Children's preferred play at family environment and at ECEC settings

In the broader context of the semi-structured interviews, the parents stated that, in the majority, children like to play with building materials (bricks, magnets) (N=8) and cook in the kitchen, regardless of their gender. Also, small vehicles, dolls, and babies are preferred by children. Finally, they like to act out everyday life roles, such as the doctor, the cook, the hairdresser, or the mother. The data from the parent data contradict both the children's and the teachers' data. Specifically, as shown in Table 1, parents reported that painting dominates their children's preferences at home, followed by kitchen toys/objects, dolls/babies, books, and playing with a ball. Small toy vehicles are not among the first choices of children in the family environment. Finally, parents reported that their children when playing with them prefer free activities at a rate of 35%, followed by trading play at 29% and objects that can be turned into a toy at 22.7%, supporting symbolic play.

**Table 1**: Children's preferred everyday play at home according to the parents

Play Categories	Everyday Use
Painting	51,50%
Kitchen toys/objects	34,80%
Dolls/babies	33,30%
Books	29,20%
Ball	25,80%
Toy vehicles	21.9%
Educational toys	15,20%
Action figure	9,40%

A small percentage of children's preferences include digital play and a toy car that moves and makes sounds. Two children mentioned that their favorite toy is their mom's cell phone and tablet because they play electronic games and watch videos on them. It is worth noting at this point that educators report that a large percentage of children play

electronic games on their parents' mobile phones, a fact that becomes observable in the children's behavior as they become more aggressive, distracted, and show a lack of interest in simple toy objects. Everyday conversations with children also point to this practice. Specifically, they have stated that children: (Educator: E)

"In a small percentage, yes, they play electronic games, I have detected that from the way they play, the words they use, expressions." (E6)

"The father comes to pick up the child and pulls the mobile phone out of his pocket to play... as we speak the child has found the game and has started playing it." (E7)

"Some yes, they play and they show negative behavior." (E8)

The educators' views challenge the results of the parents' data, as the majority of parents unequivocally stated that their children do not play electronic games on mobile phones and tablets, a percentage reaching 60%, and only 9.1% stated that their children play these games on a daily basis.

Of course, there are differences worth noticing regarding children's preferred play at home and at Preschool. Only 17.5% of the children chose the same category of play both at home and in the ECEC setting, a finding which indicates that the environment influences their choices. Children continue to like imaginary play but other kinds of play are present in ECEC settings, such as the kitchen toys, which did not appear in the choices of play at home, especially by boys.

In addition, two new kinds of play make their appearance; natural materials and beach toys, probably due to the time period where the research was carried out, in the summer, and the geographical location of the study, on an island provincial area, where children come more easily in touch with nature. Educational games, such as puzzles, fairy tales, or cars with shapes and colors, impressively increase in the ECEC setting. All the above indicates that the children's favorite toys may not be found in the ECEC environment. The ECEC setting may provide a limited number of toys or the children may follow the educators' instructions.

Children both at home and at the ECEC setting show a particular preference for indoor play or toys, rather than outdoor play. This finding is not consistent with the educators' responses, who stated that the children like to play outside in the playground more than indoors 'in the playground all the children run and chase each other, plays thieves and policemen, these are their choices'.

Finally, it is worth noting when children were asked to name the play they do not like at all, the vast majority found it difficult to answer. The parents, however, stated that their children do not prefer electronic games at all at a percentage of 60%, playing 'at the hairdresser's' at an equally high percentage of 47.7%, and dress-up games at a percentage of 34.8%.

## 4.1 Play as agent of gender

Differences are observed in the choices of play in both genders and in the two different environments (Table 2 and 3). As can be seen, boys choose gender-neutral toys at home at a rate of 28.3% and 'boyish' play at a percentage of 23.3%, their main choice being toy vehicles, while they avoid 'girly' toys (1.6%). In more detail, boys like to play with vehicles (18.3%) followed by imaginary toys (toy animals, dolls, and kitchen toys-objects) at a percentage of 14% and beach toys at a rate of 5%, as well as physical play at a percentage of 5%. At the ECEC environment, the choices change, with 'boyish' toys decreasing by about 13%, 'girly' toys increasing (6.1%), and gender-neutral toys dominating. Building materials dominate their preferences at a percentage of 12.20%, followed by toy cars, educational materials, and kitchen toy objects at a rate of 6.12% each.

**Table 2**: Type of play by gender in the family and the ECEC environment

Type of play by gender	Family Environment		ECEC Environment	
	Boys	Girls	Boys	Girls
Boyish toys	23,30%	1,60%	10,20%	2%
Girly toys	1,60%	30%	6,10%	18,40%
Gender-neutral toys	28,30%	15%	28,60%	34,70%

**Table 3:** Choices of play by gender in the family and the ECEC environment

Play Categories	Family Environment		ECEC Environment	
	Boys	Girls	Boys	Girls
Small vehicles	18%	2%	6,20%	2%
Educational material		3,30%	6,15%	12,25%
Art & crafts	3,30%		2%	
Musical toys	3,30%			2%
Imaginary play	15,30%	30%	10,22%	18,36%
Building material	3,40%	1,60%	12,25%	12,25%
Natural material		1,60%	4,10%	6,12%
Beach toys	5%	1,60%		
Sports/physical play	1,30%	3,30%	4,10%	2%
Digital play	1,30%	2%		

The same picture emerges regarding girls. They choose 'girly' toys at a percentage of 30% and gender-neutral games at a percentage of 15%. In particular, they like to play with imaginary toys such as dolls, toy animals, and kitchen toy-objects at a rate of 30% and physical play and educational material at a rate of 3.30% each. Girls choose differently in ECEC environments; their preferences are geared towards gender-neutral play at a percentage of 34.7%, compared to 15% in the family environment. The percentage of same-gender toys also decreased compared to the percentage of play in the family environment, a finding which also occurred with boys. More specifically, imaginary toys are their first choice, followed by building materials and educational materials at the same rate.

Children of both sexes at the ECEC setting choose more 'gender-neutral' toys first and then same-sex play, as shown in Table 2. Both at home and at the ECEC, girls like to play with dolls/babies and animals for the purpose of beautifying the former and taking care of the latter. The interest in vehicles is reduced in the ECEC environment, perhaps due to the fact that these toys are not remotely controlled - there is no sound or movement- and as a result, they do not attract children. In addition, it is possible that the ECEC environment may be fostering a non-stereotyped culture, where children of any gender choose more gender-neutral types of play, which is not the case with the family environment. The words of educators confirm that, for example 'my little girl had a pram, a little boy came to play with it... his dad ran and took him away because he claimed the pram was pink'.

Similar results emerge from the interviews with educators, who state that children do not choose toys based on gender. Characteristically, educators state that:

"Now there is no stereotyping, it used to exist and it was intense." (E 1)

"All children play with the same free activities." (E 2)

"The children play freely with kitchen objects, building materials... the boys play with dolls too, they feed them .... take them for a walk, but all the children, boys and girls, are crazy about the kitchen toys .... the pans, the pots." (E 6)

It is worth pointing out that the educators answered questions regarding the children's favorite toys by separating them into boys and girls. Compared to the data from parents, 7.7% stated that they would not encourage their child to play with opposite-sex toys, compared to 4.6% who answered they would.

#### 5. Discussion

The present research, despite its limitations in generalization regarding the small number of participants, highlighted valuable insights that toys related to mass culture and commercial products that trigger story-making seem to dominate children's preferences at this age in both environments - family and ECEC (Nicholson *et al.*, 2014) and also in the responses of educators and parents. Media exposure to toys has a strong influence on children's choices. Playing with mass culture heroes and heroines fascinates children from an early age; these toys invade the school and family environment in multiple ways such as the design of their bags and water cans or their clothes. They are present in their drawings and colorings in their free time and of course, in their play, as children nowadays participate in the 'digital-consumer environment', as Edwards names it (2013).

The differences in play choices between the ECEC and the home environment raise the question of whether adults - parents and educators, and even society as a whole consciously pay attention to the children's preferences. By banning or rejecting types of

play, the educational system allows the game industry to monopolize the children's interests and direct their preferences without restrictions. However, the controlled introduction and use of the children's favorite games with an educational purpose can reinforce the children's 'voice' as their choices and the right to freely express their opinions on matters that concern them are respected. This practice can also highlight the positive aspect of employing play to the children's advantage. Educators are asked to revise their views on this particular category of play and include it in the ECEC environment, since the main concern of education is to reach out to the children's emotional world, their interests, and their life outside school (Birbili, 2016.

The daily flow of the ECEC educational program implemented in Greece includes free time for unstructured activities indoors or outdoors. Nevertheless, this study confirms the findings of previous research, which claims that children of this age show a particular preference for indoor play (Bay, 2020· Charalampous & Sidiropoulou, 2023), which implies that unstructured outdoor play declines (Bento & Dias, 2017· Kemple *et al.*, 2016 · Miranda *et al.*, 2017). Although natural materials such as flowers, stones, sand, and soil were present in the children's preferences, however, their percentage is quite small. Educators are advised to provide children with opportunities to play outdoors with natural materials such as water, sand, and soil as creativity and cooperation are fostered (Bento & Dias, 2017· Kemple *et al.*, 2016· Miranda *et al.*, 2017).

The findings suggest that symbolic/pretend play is dominant at this age (Taggart *et al.*, 2020) both at home and in the ECEC environment. It presents opportunities for abundant reactions, as interactions arising from symbolic circumstances emerge (Sidiropoulou & Tsaoula, 2008). The symbolic use of toys enables the children to playfully experiment with the meaning they attribute to the toy and to create roles from everyday life (Vygotsky, 1978). With symbolic play, children act in a socially responsible and fair manner, take on leadership, and practice their socially evolving skills as active citizens engaging in fairer interactions (Kalessopoulou, Sidiropoulou, Sotiropoulou & Psatha, 2023). Child-initiated play allows them to exercise control over their activity and set appropriate challenges to cope with.

The present study confirms that children's favorite play, be it object or game, is a carrier of multiple meanings, experiences, and messages, which play a decisive role in the formation of the child's social, cultural, and gender identity, through a series of repetitive activities, which refer to the standards each society has imposed (Liamadis, 2003). Today toys are more gendered than ever, presented as suitable for 'boys' or 'girls', separated on store shelves, in different packaging and color, giving the impression that they are addressed to the gender they are made for (Kogkidou, 2015). Nowadays, even though children play with both gender-neutral toys, especially in ECEC settings, they mostly make choices based primarily on the gender stereotypes projected by the toys themselves in combination with their commercial promotion (Spinner, Cameron & Calogero, 2018) and also influenced by specific adult behaviors in the family environment. Children attach specific meanings to the play choices they make, aiming to

position themselves 'correctly' within what society defines as normative masculinity and femininity (Mayeza, 2016).

This research also highlighted that although teachers recognize the presence of stereotypical views in children's behaviors, they try to either re-evaluate these beliefs in order to cultivate a non-stereotypical play environment or to keep a neutral attitude by planning activities and promoting games, based on children's interests without encouraging or discouraging gender norms in any form (Click *et al.*, 2002).

The most remarkable finding is revealed by the fact that children play more with 'neutral' type toys in the ECEC environment than at home. The children's choices at home reflect their parents' expectations and views on gender (Eckert & McConell, 2013, quoted in Wingrave, 2018). However, the monitoring of practical and pedagogical programs by parents and educators with the aim to promote gender equality, especially in this critical transitional period, is deemed imperative.

Although the importance of active listening to children is recognized by adults, it is not clear that children's 'voice' is heard and taken into consideration in the family environment. Ignoring the children's views can be detrimental to their development. The school environment is called upon to modify school play and enrich it with contemporary types of play, which arouse children's interest. Furthermore, in view of the fact that the children learn through the rewarding of specific behaviors, parents are required to deemphasize the binary gender identity and adopt a neutral and social justice-oriented pedagogy regarding gender (Kalessopoulou *et al.*, 2023) and help them explore and challenge stereotypes without limiting their choices, in order to promote gender equality and the inclusion of a wide range of diversity (Chapman, 2016 · NAEYC, 2019).

#### 6. Conclusion

There is growing concern related to gender segregation of play observed at the beginning of the 21st century (Master & Meltzoff, 2020), as they reproduce gender stereotypes and do not allow the exposure of children to a wide range of experiences and skills, as a consequence the future professional training is limited. Therefore, in a deeply gender-divided society, it is necessary to overcome the gendered segregation of toys from early childhood in order to give children equal opportunities to lay a strong foundation for their all-round development and the discovery of their gifts both in childhood and later on. Moreover, it helps to eliminate arbitrary attribution of gender labels and roles and to ensure children's equal participation in the future in the social, economic, family, and political life of the country (Kogkidou, 2015).

Social justice awareness in early childhood unlocks the children's full potential, cultivates metacognitive and metacommunicative skills, and promotes equal participation in the learning environment, enabling them to explore their identity, develop different types of skills and shape a personality free from gender restrictions (Chi, 2018).

#### Disclosure statement

Conflict of interest No potential conflict of interest has been reported by the authors.

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#### References

- Adhabi, E., & Anozie, C. B. (2017). Literature review for the type of interview in qualitative research. *International Journal of Education*, *9* (3), 86-97.
- Alexander, G. M. (2014). Postnatal testosterone concentrations and male social development. *Frontiers in Endocrinology*, 5, 15. https://doi.org/10.3389/fendo.2014.00015.
- Barea, E. M. G, & Marín, Y. R. (2020). Gender stereotypes in childhood. *Pedagogical Social*, 36(36), 125–138. https://doi.org/10.7179/PSRI\_2020.36.08
- Bay, D. N. (2020). Examining The Plays That Preschool Children Prefer and The Characteristics Shaping Them Using Draw and Tell Technique. *European Journal of Educational Sciences*, 7(2), 91-115. <a href="http://dx.doi.org/10.19044/ejes.v7no2a7">http://dx.doi.org/10.19044/ejes.v7no2a7</a>
- Bento, G., & Dias, G. (2017). The importance of outdoor play for young children's healthy development. *Porto Biomedical Journal*, 2(5), 157-160. <a href="http://dx.doi.org/10.1016/j.pbj.2017.03.00">http://dx.doi.org/10.1016/j.pbj.2017.03.00</a>
- Bigler, R. S., & Liben, L. S. (2007). Developmental intergroup theory: Explaining and reducing children's social stereotyping and prejudice. *Current Directions in Psychological Science*, 16(3), 162–166. <a href="https://doi.org/10.1111/j.1467-8721.2007.00496.x">https://doi.org/10.1111/j.1467-8721.2007.00496.x</a>
- Birbili, M. (2016). Children's play in a changing world: An introduction. Dialogues! *Theory and practice in education and education sciences*, 2, 4-8. (in Greek) <a href="http://dx.doi.org/10.12681/dial.10889">http://dx.doi.org/10.12681/dial.10889</a>

- Blackmore, J. E. O., & Centers, R. E. (2005). Characteristics of boys' and girls' toys. *Sex Role*, *53*, 619–633. https://doi.org/10.1007/s11199-005-7729-0
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <a href="https://doi.org/10.1191/1478088706qp063oa">https://doi.org/10.1191/1478088706qp063oa</a>.
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology*, Vol. 2. *Research designs: Quantitative, qualitative, neuropsychological, and biological*, 57–71. American Psychological Association. <a href="https://doi.org/10.1037/13620-004">https://doi.org/10.1037/13620-004</a>
- Brooks, E. & Murray, J. (2016). Ready, Steady, Learn: School Readiness and Children's Voices in English Early Childhood Settings. *Education 3-13, 46* (2), 143–156. https://doi.org/10.1080/03004279.2016.1204335
- Broström, S. (2012). Children's participation in research. *International Journal of Early Years Education*, 20(3), 257-269. https://doi.org/10.1080/09669760.2012.715407
- Chapman, R. (2016). A case study of gendered play in preschools: How early childhood educators' perceptions of gender influence children's play. *Early Child Development and Care*, 186(8), 1271–1284. <a href="https://doi.org/10.1080/03004430.2015.1089435">https://doi.org/10.1080/03004430.2015.1089435</a>
- Charalampous, A., & Sidiropoulou, T. (2023). Exploring their favourite game. Views of preschool children and parents (in Greek). In 3rd Panhellenic Conference The educational game in formal and non-formal learning, Conference Proceedings, Volume B, edited by E. Katartzi and A. Fourgkatsiotis, 562-573. School Life and Education Museum, National Centre of Research & Preservation of School Material.
- Cherney, I. D., & Dempsey, J. (2010). Young children's classification, stereotyping, and play behaviour for gender-neutral and ambiguous toys. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 30(6), 651–669. https://doi.org/10.1080/01443410.2010.498416
- Cherney, I. D., & London, K. (2006). Gender-Linked Differences in the Toys, Television Shows, Computer Games, and Outdoor Activities of 5- to 13-Year-Old Children. *Sex Roles*, 54, 717–26. <a href="https://doi.org/10.1007/s11199-006-9037-8">https://doi.org/10.1007/s11199-006-9037-8</a>
- Chi, J. (2018). The importance to gender perspective in early childhood education policy.

  Brookings Institution, Washington DC.

  <a href="https://www.brookings.edu/blog/education-plus-development/2018/11/05/the-importance-of-gender-in-early-childhood-education-policy/">https://www.brookings.edu/blog/education-plus-development/2018/11/05/the-importance-of-gender-in-early-childhood-education-policy/</a>
- Chudacoff, H. P. (2008). Children at play. An American history. New York: NYU Press.
- Clark, A., & Moss, P. (2011). Listening to young children: The Mosaic approach (2<sup>nd</sup> ed.), National Children's Bureau for the Joseph Rowntree Foundation.
- Click, K. A., Heilman-Houser, R. A. & Hunter, M. W. (2002). The impact of child care on gender role development and gender stereotypes. *Early Childhood Education Journal*, 29, 149–154. <a href="https://doi.org/10.1023/A:1014528424032">https://doi.org/10.1023/A:1014528424032</a>
- Cohen, L., Manion, L. & Morrison, K. (2011). *Research Methods in Education* (7th ed.). Routledge. https://doi.org/10.4324/9780203720967

- Collins, P. H. (2000). Gender, Black Feminism, and Black Political Economy. *The Annals of the American Academy of Political and Social Science*, 568(1), 41-53. <a href="https://doi.org/10.1177/000271620056800105">https://doi.org/10.1177/000271620056800105</a>
- Conyers, L. M., Arthur J. Reynolds, A. J. & Ou, S. (2003). The effect of early childhood intervention and subsequent special education services: Finding from the Chicago child-parent centers. *Educational Evaluation and Policy Analysis*, 25(1), 75-95. <a href="https://doi.org/10.3102/01623737025001075">https://doi.org/10.3102/01623737025001075</a>
- Gougouli, K. (2000). Child and play in Modern Greek society (19th and 20th century), Kastaniotis.
- Coyle, E. F., Fulcher, M., & Trübutschek, D. (2016). Sissies, mama's boys, and tomboys: Is children's gender nonconformity more acceptable when nonconforming traits are positive?, *Archives of Sexual Behavior*, 45, 1827–1838. <a href="https://doi.org/10.1007/s10508-016-0695-5">https://doi.org/10.1007/s10508-016-0695-5</a>
- Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. London: Sage Publications
- Del Río, M. F., & Strasser, K. (2013). Preschool children's beliefs about gender differences in academic skills. *Sex roles*, *68*(3-4), 231-238. <a href="https://doi.org/10.1007/s11199-012-0195-6">https://doi.org/10.1007/s11199-012-0195-6</a>
- Dragowski, E. A., & Scharrón del Río, M. R. (2014). The importance of challenging hegemonic masculinity in preventing school violence. *School Psychology Forum*, 8(1), 1-18.
- Edwards, S. (2013). Digital play in the early years: A contextual response to the problem of integrating technologies and play-based pedagogies in the early childhood curriculum. *European Early Childhood Education Research Journal*, 21(2), 199-212. <a href="https://doi.org/10.1080/1350293X.2013.789190">https://doi.org/10.1080/1350293X.2013.789190</a>
- Flewitt, R., & Ang, L. (2020). Research methods for early childhood education. Bloomsbury Academic.
- Flowerday, T., & Schraw, G. (2003). Effect of choice on cognitive and affective engagement. *Journal of Educational Research*, 96(4), 207–215. <a href="https://doi.org/10.1080/00220670309598810">https://doi.org/10.1080/00220670309598810</a>
- Golden, J. C., & Jacoby, J. W. (2018). Playing princess: Preschool girls' interpretations of gender stereotypes in Disney princess media. *Sex Roles*, 79, 299–313. <a href="https://doi.org/10.1007/s11199-017-0773-8">https://doi.org/10.1007/s11199-017-0773-8</a>.
- Harcourt, D., & Hägglund, S. (2013). Turning the UNCRC upside down: A bottom-up perspective on children's rights. *International Journal of Early Years Education*, 21(4), 286-299. <a href="https://doi.org/10.1080/09669760.2013.867167">https://doi.org/10.1080/09669760.2013.867167</a>
- Hartmann, W., & Brougère, G. (2004). Toy culture in preschool education and children's toy preferences. In J. Goldstein, D. Buckingham & G. Brougere Toys, games and media, 37–54. New York: Routledge. <a href="https://doi.org/10.4324/9781410611000">https://doi.org/10.4324/9781410611000</a>
- Hilliard, L. J., & Liben, L. S. (2010). Differing levels of gender salience in preschool classrooms: Effects on children's gender attitudes and intergroup bias. *Child Development*, 81(6), 1787-1798. <a href="https://doi.org/10.1111/j.1467-8624.2010.01510.x">https://doi.org/10.1111/j.1467-8624.2010.01510.x</a>

- Hines, M., Constantinescu, M., & Spencer, D. (2015). Early Androgen Exposure and Human Gender Development. *Biology of Sex Differences*, 6(3). <a href="https://doi.org/10.1186/s13293-015-0022-1">https://doi.org/10.1186/s13293-015-0022-1</a>
- Kalessopoulou, D., Sidiropoulou, T., Sotiropoulou, E., & Psatha, F. (2023). Exploring social justice awareness in young children's shopping pretend play ay ECEC settings and museums. *European Early childhood Educational Research Journal*. https://doi.org/10.1080/1350293X.2023.2227366
- Kambouri-Danos, M., & Evans, A. (2019). Perceptions of gender roles: a case study. *Early Years Educator*, 20(11), 38-44. https://doi.org/10.12968/eyed.2019.20.11.38
- Kemple, Kristen. M., JiHyun Oh, Elizabeth Kenney, and Tina Smith-Bonahue (2016). The power of outdoor play and play in natural environments. *Childhood education*, 92(6), 446-454. https://doi.org/10.1080/00094056.2016.1251793
- Kogkidou, D. (2015). "Beyond pink and blue" All games for all children. (in Greek), Athens, Epikentro publications.
- Kollmayer, M., Schultes, M., Schober, B., Hodosi, T., & Spiel, C. (2018). Parents' Judgments about the Desirability of Toys for Their Children: Associations with Gender Role Attitudes, Gender-typing of Toys, and Demographics. *Sex Roles*, 79, 329-341. https://doi.org/10.1007/s11199-017-0882-4
- Kudrowitz, B. M., & Wallace, D. R. (2010). The paly pyramid: A play classification and ideation tool for toy design. *International Journal of Art*, 3(1), 36-56. https://doi.org/10.1504/IJART.2010.030492
- Leeb, R. T., & Rejskind, G. F. (2004). Here's looking at you, kid! A longitudinal study of perceived gender differences in mutual gaze behavior in young infants. *Sex Roles*, 50(1–2), 1–14. <a href="https://doi.org/10.1023/B:SERS.0000011068.42663.ce">https://doi.org/10.1023/B:SERS.0000011068.42663.ce</a>
- Loizou, E. (2011). Disposable Cameras, Hummour, and Children's Abilities. *Contemporary Issues in Early Childhood*, 12(2), 148-162. <a href="https://doi.org/10.2304/ciec.2011.12.2.148">https://doi.org/10.2304/ciec.2011.12.2.148</a>
- Martin, C. L., & Ruble, D. N. (2010). Patterns of gender development. *Annual Review in Psychology*, 61, 353-381. <a href="https://doi.org/10.1146/annurev.psych.093008.100511">https://doi.org/10.1146/annurev.psych.093008.100511</a>
- Massey, D. (2013). Space, Place Gender. Minneapolis: University of Minnesota Press.
- Master, A., & Meltzoff, A. (2020). Cultural stereotypes and a sense of belonging contribute to gender gaps in STEM. *International Journal of Gender, Science, and Technology*, 12(1), 152-198. <a href="http://genderandset.open.ac.uk/index.php/genderandset/article/view/674/1124">http://genderandset.open.ac.uk/index.php/genderandset/article/view/674/1124</a>
- Mayeza, E. (2016). 'Girls don't play soccer': Children policing gender on the playground in a township primary school in South Africa'." *Gender and Education*, 29(4), 476-494. https://doi.org/10.1080/09540253.2016.1187262
- McClure, E. B. (2000). A meta-analytic review of sex differences in facial expression processing and their development in infants, children, and adolescents. *Psychological Bulletin*, 126(3), 424. https://doi.org/10.1037/0033-2909.126.3.424
- Melissa N. R., Putnick, D. L., Bradley, L. P., Lang, K. M., Little, T. D, Suwalsky, J. T. D & Bornstein, M. H. (2020). Children's utilization of toys is moderated by age-

- appropriateness, toy category, and child age, *Applied Developmental Science*, 21(1), 192-205. <a href="https://doi.org/10.1080/10888691.2020.1760868">https://doi.org/10.1080/10888691.2020.1760868</a>
- Miranda, N., Larrea, I., Muela, A. & Barandiaran, A. (2017). Preschool children's social play and involvement in the outdoor environment. *Early Education and Development*, 28(5), 525-540. https://doi.org/10.1080/10409289.2016.1250550
- Murray, J., & Cousens, D. (2020). Primary school children's beliefs associating extracurricular provision with non-cognitive skills and academic achievement. *Education 3-13, 48* (1), 37-53. <a href="https://doi.org/10.1080/03004279.2019.1572769">https://doi.org/10.1080/03004279.2019.1572769</a>
- NAEYC. (2019). Advancing equity in early childhood education: A position statement of the National Association for the Education of Young Children. <a href="https://www.naeyc.org/resources/position-statements/equit">https://www.naeyc.org/resources/position-statements/equit</a>
- Nicholson, J., Shimpi, P. M., Kurnik, J., Carducci, C., & Jevgjovikj, M. (2014). Listening to children's perspectives on play across the lifespan: children's right to inform adults' discussions of contemporary play. *International Journal of Play*, 3(2), 136–156. http://dx.doi.org/10.1080/21594937.2014.937963
- Nolan, A., & Paatsch, L. (2017). (Re)affirming identities: implementing a play-based approach to learning in the early years of schooling. *International Journal of Early Years Education*, 26(1), 42–55. <a href="https://doi.org/10.1080/09669760.2017.1369">https://doi.org/10.1080/09669760.2017.1369</a>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16(1). https://doi.org/10.1177/1609406917733847
- Orr, E., & Geva, R. (2015). Symbolic play and language development. *Infant Behavior and Development*, 38, 147–161. <a href="https://doi.org/10.1016/j.infbeh.2015.01.002">https://doi.org/10.1016/j.infbeh.2015.01.002</a>
- Our Watch, (2018). Challenging gender stereotypes in the early years: the power of parents. Melbourne, Australia: Our Watch.
- Pellegrini, A. D. (2009). *The role of play in human development*. New York: Oxford University Press
- Pyle, A., & DeLuca, C. (2017). Assessment in Play-Based Kindergarten Classrooms: An Empirical Study of Teacher Perspectives and Practices. *The Journal of Educational Research*, 110 (5), 457-466. <a href="https://doi.org/10.1080/01619569409538788">https://doi.org/10.1080/01619569409538788</a>
- Quinn, P. C. & Liben, L. S. (2014). A Sex Difference in Mental Rotation in Infants: Convergent Evidence. *Infancy*, 19 (1), 103-116. <a href="https://doi.org/10.1111/infa.12033">https://doi.org/10.1111/infa.12033</a>
- Ramdaeni, S., Adriany, V., & Yulindrasari, H. (2017). Gender, power and play in early childhood education. *1st International Conference on Educational Science*, 2, 109-114. <a href="https://doi.org/10.5220/0007046006580663">https://doi.org/10.5220/0007046006580663</a>.
- Rehbein, F., Staudt, A., Hanslmaier, M., & Kliem, S. (2016). Video Game Playing in the General Adult Population of Germany: Can Higher Gaming Time of Males be Explained by Gender Specific Genre Preferences? *Computers in Human Behavior*, 55(B), 729–35. <a href="https://doi.org/10.1016/j.chb.2015.10.016">https://doi.org/10.1016/j.chb.2015.10.016</a>
- Rogers, S., & Evans, J. (2008). *Inside Role-Play in Early Childhood Education: Researching Young Children's Perspectives*. London. Routledge. <a href="https://doi.org/10.4324/9780203930304">https://doi.org/10.4324/9780203930304</a>

- Ruble, D. N., Martin, C. L., & Berenbaum, S. A. (2006). Gender development. In N. Eisenberg, W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 858–932). John Wiley & Sons, Inc
- Sapsağlam, Ö. (2018). Okul öncesi dönem çocuklarının değişen oyun tercihleri. [Changing Play Preferences of Preschool Children]. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 19(1), 1122-1235. https://dergipark.org.tr/tr/pub/kefad/issue/59094/850552
- Schweinle, A., & Wilcox, T. (2004). Sex differences in infants' ability to represent complex event sequences. *Infancy*, *6*(3), 333–359. https://doi.org/10.1207/s15327078in0603\_2
- Servos, J. E., Dewar, B. A., Bosacki, S. L., & Coplan, R. J. (2016). Canadian early childhood educators' perceptions of young children's gender-role play and cultural identity. *Journal of Early Childhood Research*, 14(3), 324-332. <a href="https://doi.org/10.1177/1476718X15579740">https://doi.org/10.1177/1476718X15579740</a>
- Sidiropoulou, T., & Tsaoula, N. (2008). *Childcare and Research. Landscape of multilevel communication*. Athens, Ypsilon publications.
- Sofou, E. (2020). *The Active Listening of young children. Exploring its role and importance in early childhood education* (in Greek). Athens, Gutenberg
- Spinner, L., Cameron, L., & Calogero, R. (2018). Peer Toy Play as a Gateway to Children's Gender Flexibility: The Effect of (Counter) Stereotypic Portrayals of Peers in Children's Magazines. *Sex Role*, 79 (5), 314-328. <a href="https://doi.org/10.1007/s11199-017">https://doi.org/10.1007/s11199-017</a>
- Taggart J., Becker, I., Rauen, J., Hala Al Kallas, H., & Lillard, A. S. (2020). What Shall We Do: Pretend or Real? Preschoolers' Choices and Parents' Perceptions. *Journal of Cognition and Development*, 21(2), 261-281. <a href="https://doi.org/10.1080/15248372.2019.1709469">https://doi.org/10.1080/15248372.2019.1709469</a>
- Thurmond, V. A. (2001). The point of triangulation. *Journal of Nursing Scholarship*, 33(3), 253-258. <a href="https://doi.org/10.1111/j.1547-5069.2001.00253.x">https://doi.org/10.1111/j.1547-5069.2001.00253.x</a>
- Toy Industry Association. (2017). Annual sales data. <a href="http://www.toyassociation.org/TIA/Industry-Facts/salesdata/IndustryFacts/Sales\_Data/Sales\_Data.aspx?hkey=6381a73a-ce46-4caf-8bc1-72b99567df1e#.VTFwciHBzRY">http://www.toyassociation.org/TIA/Industry\_Facts/salesdata/IndustryFacts/Sales\_Data/Sales\_Data.aspx?hkey=6381a73a-ce46-4caf-8bc1-72b99567df1e#.VTFwciHBzRY</a>
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press
- Weisgram, E. S., & Dinella, L. M. (2018). Gender typing of children's toys: How early play experiences impact development. American Psychological Association. <a href="https://doi.org/10.1037/0000077-000">https://doi.org/10.1037/0000077-000</a>
- Weisgram, E. S., & Bruun, S. T. (2018). Predictors of Gender-Typed Toy Purchases by Prospective Parents and Mothers: The Roles of Childhood Experiences and Gender Attitudes. *Sex Roles*, 79, 342–57. <a href="https://doi.org/10.1007/s11199-018-0928-2">https://doi.org/10.1007/s11199-018-0928-2</a>
- Wingrave, M. (2018). Perceptions of gender in early years. *Gender and Education*, 30(5), 587–606. <a href="https://doi.org/10.1080/09540253.2016.1258457">https://doi.org/10.1080/09540253.2016.1258457</a>
- Wong, W. I., Pasterski, V., Hindmarsh, P. C., Geffner, M. E., & Hines, M. (2013). Are There Parental Socialization Effects on the Sex-Typed Behaviour of Individuals with

Congenital Adrenal Hyperplasia? *Archives of Sexual Behaviour*, 42, 381–391. https://doi.org/10.1007/s10508-012-9997-4

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