
Reducing Gender Stereotypes in Toys and Play for Smarter, Stronger, and Kinder Kids



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The author discusses gender differences in children's play and its relation to the programs of *Sesame Street*, which for fifty years has sought to enhance children's physical, cognitive, and social development through playful learning. Gender differences in children's play, she asserts, are vast, and she notes that, consequently, boys and girls may develop different skills and learn different concepts through their play. Given this, *Sesame Street* remains committed to gender equity and opposed to gender stereotypes and seeks to prevent the development of and reduce the endorsement of these stereotypes among young children, especially in their play. **Key words:** gender equity; gender schema; gender stereotypes; gender-typed play; gender-typed toys; *Sesame Street*

FOR FIFTY YEARS, *Sesame Street* has been a leader in children's television, producing innovative programming aimed at helping children to grow "smarter, stronger, and kinder" (Sesame Workshop 2019). Learning through play, one of the principal themes of its programming, offers a primary path for preschool children to grow and develop (Singer, Golinkoff, and Hirsh-Pasek 2006). However, given that boys and girls have very different play styles and toy interests starting in preschool, they may be growing smarter, stronger, and kinder at different rates or along different developmental trajectories. Thus, promoting gender equity and reducing gender stereotypes are important for minimizing gender differentiation and have been, and continue to be, an integral part of Sesame Workshop's mission (Davis 2009; Cole et al. 2016).

In this article, I first briefly summarize the current research in psychology about children's gender-typed play behaviors. Then, I discuss how these gender-typed toy and play interests affect children's learning and development within the framework of Sesame Workshop's smarter, stronger, kinder curriculum. Lastly, I discuss evidenced-based practices for reducing children's gender stereotypes, highlighting the ways Sesame Workshop has developed programming to reduce gender stereotypes, and I explore how breaking down children's stereotypes

about toys and play may affect their later development.

Children's Gender-Typed Play Behaviors

Gender-typed play behaviors begin in preschool and continue throughout childhood. These play behaviors include gender-typed toy interests, gender-typed play styles, and gender segregated play groups. Gender segregation becomes tightly interwoven with gender-typed play styles. Research has demonstrated that boys are more likely to play with other boys, play in larger groups, and have a more rough-and-tumble play style than girls (Colwell and Lindsey 2005; Rose and Smith 2018). Girls, in contrast, are more likely to play with other girls, play in smaller groups, and have a more cooperative play style than boys (Rose and Smith 2018). This gender segregation begins in the preschool years as children first grow attracted to others whom they perceive to be similar and are highly compatible in their behavior (Martin et al. 2011; Maccoby 1998). These gender-typed play behaviors may give boys and girls different play experiences throughout their development, creating the “two cultures of childhood” noted by Eleanor Maccoby (1998).

Children's interest in gender-typed toys has been subject to a considerable amount of research in the recent literature (see Weisgram and Dinella 2018 for a recent review). Gender differences in children's toy interests consistently loom large in the psychological literature. Boys show greater interest in traditionally masculine toys (e.g., vehicles, toy weapons, super hero toys) and girls show greater interest in traditionally feminine toys (e.g., baby dolls, princess toys, domestic toys) (Blakemore and Centers 2005; Todd et al. 2018; Weisgram and Dinella 2018). These gender differences emerge in toddlerhood and become greater and more consistent throughout preschool and elementary schools (Todd et al. 2018).

There are many factors that contribute to children's gender-typed toy interests. Some researchers suggest that biological factors, in particular prenatal hormones, contribute to these gender differences (Hines, Constantinescu, and Spencer 2015). Numerous studies of girls with Congenital Adrenal Hyperplasia (CAH), a condition in which the adrenal gland produces too many androgens, have found that CAH girls have more masculine play interests and styles than their unaffected sisters (Wong et al. 2013). However, the level of masculine play interest is not as great as that of boys, which suggests that environmental socialization may also play an important role.

Social agents also influence children's toy interests. Indeed, research has found that parents are more likely to buy gender-typed toys and neutral toys for their children than toys typically associated with another gender (Weisgram and Bruun 2018). They are also more likely to encourage play sessions in which the available toys are associated with their children's genders (Caldera, Huston, and O'Brien 1989). Peers also influence choices through modeling gender-typed play and reinforcing this play with peer acceptance, leading children to engage in more gendered play over time (Brown and Stone 2018). Media and advertising also often affect children's gender-typed toy interests by explicitly labeling toys "for boys" or "for girls," depicting only boys or only girls on its packaging, and using implicit gender labels such as color to differentiate between target consumers (Fine and Rush 2016; Auster and Mansbach 2012; Spinner, Cameron, and Calogero 2018; Sweet 2014).

Children's gender-related cognitions also help determine gender-typed play behaviors. Gender-related cognitions can include a child's gender identity, gender schemas, gender knowledge, and gender stereotypes. Children are first able to apply the labels "boys" and "girls" to themselves and to others around 2.5 years of age, establishing a rudimentary gender identity. Although children show some gender-typed preferences for toys in infancy, gender-typed play behaviors increase after gender identity is established in the toddler and preschool years (Todd, Barry, and Thommessen 2016). Children also gain in their gender knowledge about the activities associated with males and females in our society throughout early childhood (Martin and Ruble 2004). This knowledge is a precursor to the formation of gender schemas and the construction of gender stereotypes (Bigler and Liben 2007). Gender stereotypes include personal endorsements of beliefs about who should play with what toys and do which activities. These stereotypes begin to emerge in the preschool years and peak in early elementary school, after which children develop more flexible gender beliefs (Martin and Ruble 2004). I have mentioned many social agents that influence the content of this knowledge and these stereotypes. Because toys and play dominate young children's lives, they help children easily form stereotypes through personal experience (Weisgram 2016).

Gender cognitions developed in early childhood play an active role in children's choice of gender-typed play behaviors. Gender schema theory suggests that children are motivated to develop gender schemas about toys and activities in the children's environment and are more likely to engage with toys and activities associated with their own genders and less likely to engage with

toys and activities associated with the genders of others (Bem 1981; Martin and Halverson 1981). Substantial research about young children supports this gender schema theory (e.g., Martin, Eisenbud, and Rose 1995; Weisgram, Dulcher, and Dinella 2014). For example, both Martin, Eisenbud, and Rose (1995) and Weisgram (2016) found that when children are presented with unfamiliar, novel toys and given gender labels for each, they are more attracted to toys whose label matched their gender than toys whose label matched another gender (regardless of the actual toy considered). Recent research also suggests that children who endorse more gender stereotypes (i.e., gender schematic children) may be especially prone to using gender schemas to make decisions about their play behaviors than children who endorse fewer gender stereotypes as suggested by Liben and Bigler's (2002) attitudinal pathway model (Weisgram 2016).

The factors that contribute to children's gender-typed play behaviors are multidimensional and complex. These factors simultaneously influence children's interests and behaviors and interact with each other. As some researchers continue to investigate these complex influences, others have become interested in the impact these gender-typed behaviors have on children's development.

Making Kids Smarter, Stronger, Kinder through Play

Play is the primary vehicle by which children learn and develop in early childhood (Singer, Golinkoft, and Hirsh-Pasek 2006). A large body of literature has demonstrated the impact of play on children's cognitive, physical, and social development—domains of development that roughly correspond to Sesame Workshop's mission of making kids "smarter, stronger, and kinder" (Sesame Workshop 2019). As noted, children's play experiences may vary based on their gender, both through the environmental messages they receive about who "should" engage in what types of play and through the active choices they make about toys, activities, and peers. Thus, scholars question whether children's development may differ by gender as a result of their gender-typed play behaviors (Brown 2014; Eliot 2009; Weisgram and Dinella 2018).

Smarter

Gender-typed play affects many of children's cognitive and academic abilities (Liben et al. 2018). Relatively few studies have examined the link between play with feminine toys and children's cognitive development, though Cherney and

associates (2003) have found that play with feminine toys was linked to greater play complexity than play with masculine toys. Eliot (2014) suggests that play in smaller groups may lead to advanced verbal skills among girls and that use of larger space could enhance spatial skills among boys, but calls for more research to test these associations.

Most research has focused on demonstrating the link between masculine gender-typed play and children's spatial skills and mathematic abilities. Gender differences in spatial skills are considered to be well established with a small to moderate male advantage, especially in tests of mental rotation (Halpern 2012; Hyde 2005). Scholars across psychology have sought an explanation for the moderate gender differences in older children's and adults' spatial skills. Researchers in the 1970s speculated that a link exists between traditionally masculine toys and children's spatial skills, although this research was limited (Connor and Serbin 1977). More recent studies have looked at individual toys and their link to children's spatial skills. Specifically, researchers have found links between children's use of blocks and building sets—toys traditionally considered by adults to be masculine (Blakemore and Centers 2005; Liben and Bigler 2002)—and children's spatial skills (Nath and Szücs 2014). In addition, experimental research has shown that giving children time to build with blocks during school as part of the curriculum significantly improves their spatial skills (Casey et al. 2008). Video game play has traditionally been considered a gender-typed activity in which males typically more frequently engage than females (Cherney and London 2006), although gender differences and the engagement in gaming may depend on the genre considered (Adachi and Willoughby 2011; Rehbein et al. 2016). Both correlational and experimental studies have shown more frequent video game play to be linked to higher spatial skills in children (Feng, Spence, and Pratt 2007; Spence and Feng 2010; Subrahmanyam and Greenfield 1994). These gender-typed activities may contribute to gender differences in cognitive skills in adolescence and adulthood.

Other cognitive areas have received less attention, perhaps because gender differences in cognitive abilities are smaller or nonexistent in other domains. For example, gender differences in mathematics are now considered null; research has shown that engaging with block play, chess, and board games can impact children's mathematics performance (Liben et al. 2018). In addition, gender differences in verbal skills are considered to be very small favoring girls (Hyde 2016), but there is little research demonstrating how gender-typed play may contribute to these differences. Christia Brown

(2014) posits that the smaller, less active groups in which girls participate provide ample opportunity for conversation and improving one's verbal skills in comparison to boys' groups. Considering creativity as a cognitive skill, one research study has found that children who choose less gender-traditional toys may show more creativity in play, although the direction of effect needs to be considered here and in future research (Cherney and Bucy 2012). Taken together, this research suggests that gender differentiation in cognitive skills and abilities, particularly spatial skills, may be impacted by gender-typed play behaviors in childhood.

Stronger

Sesame Workshop embraces a broad definition of "stronger" in their work that can incorporate both mental and physical strength. For the purpose of this analysis, I first consider how gender-typed play can affect children's physical strength and development. Different styles of play may differentially affect boys' and girls' physical development in terms of physical abilities, gross motor skills, fine motor skills, and perhaps even brain development, thus making boys and girls stronger in different ways. For example, boys engage in greater physical activity in free play than girls, often playing in large spaces that may require greater physical effort than playing in small spaces or in sitting (Fabes, Martin, and Hanish 2003). This physical activity is predictive of children's gross motor skills (Laukkanen et al. 2014). Relatedly, gender differences in throwing skill (velocity and distance) have an advantage for males, and these differences increase with age (Hyde 2005). These gender differences have been attributed to practice and play, often in sports settings (Thomas and French 1985). In addition, girls' greater participation in art and craft activities may help develop children's fine motor skills (Marr et al. 2003; Suggate, Stoeger, and Pufke 2017). Frequent play with small toys such as figurines and dolls (but not construction toys) also predict children's fine motor skills (Suggate et al. 2017). Lise Eliot (2009, 2018) posits that the gender differences in children's play behaviors may also contribute to gender differentiation of neural connections and brain regions, although we need further research to demonstrate this proposed connection.

Although I first characterized the "stronger" aspect of Sesame Workshop's mission as physical development, another important aspect of this theme is strength through self-regulation and resiliency. Considerable research exists about the benefits of sociodramatic play for children's self-regulation (Elias and

Berk 2002; Golinkoff and Hirsh-Pasek 2016) although few analyses consider the moderating effects of gender. Strength may also include concepts such as resilience, grit, and perseverance. However, there is little research on how children's play, particularly gender-typed play behaviors, impact these constructs and how this type of strength develops in childhood. Although some research demonstrates that enrollment in sports may provide resiliency against risky behaviors in adolescence (Lipowski et al. 2016), play with toys or engagement with many other childhood activities have not been investigated in this context. However, it is not hard to imagine that these characteristics can be developed through play such as building complex LEGO sets, completing complex craft projects, and playing and practicing sports in formal and informal settings. We need further research about the effects of gender-typed play on self-regulation and resiliency.

Kinder

Gender-typed play behaviors can also affect children's prosocial development. Murnen (2018) notes that research on the impact of gender-typed toys and play on children's social behavior is comparatively limited. However, some research demonstrates that play with feminine toys may have benefits for children's prosocial or "kinder" interactions in terms of children's social emotional development and behaviors. Recently, Li and Wong (2016) note that girls who play with feminine toys on a regular basis and boys who play with neutral toys were more skilled at developing strategies to comfort crying infants than their peers who play with masculine toys (note, there were not enough boys who played with feminine toys to include in their analyses). In another recent study, researchers found that play with princess toys (and engagement with princess media in general) were predictors of boys' prosocial behaviors (Coyne et al. 2016). Play styles may also contribute to prosocial development. Dramatic play, in which girls engage more than boys on average, has been found to relate to children's social skills (Li, Hestenes, and Wang 2016) and a predictor of emotion knowledge (i.e., naming emotions and knowing when they may occur) for girls and emotional expressiveness for boys (Lindsey and Colwell 2013). In addition, rough-and-tumble play, in which boys engage more often than girls on average, has been found to be a positive predictor of emotional expressiveness and self-regulation of emotions in boys and a negative predictor among girls of emotional expressiveness (Lindsey and Colwell 2013).

Reducing Children's Gender Stereotypes through *Sesame Street*

So far, I have noted that there are multiple factors that contribute to children's gender-typed toy interests including the effects of social agents such as media. These gender-typed toy interests may lead to gender differentiation of children's physical, cognitive, and social skills thus creating differences in the extent to which boys and girls develop into children demonstrating those qualities Sesame Workshop defines as "smarter, stronger, kinder." Children's television programming such as *Sesame Street* can affect the gender stereotypes that children hold by introducing and reinforcing societal stereotypes or by reducing existing gender stereotypes using methods outlined in the psychological literature. Indeed, throughout the last fifty years, *Sesame Street* has made a commitment to reducing stereotypes by promoting diversity and gender equity in the United States and throughout its coproductions and other initiatives around the world (Cole et al. 2016; Sesame Workshop 2019).

Scholars have noted that there are multiple techniques used to reduce children's gender stereotypes. *Sesame Street*, in its recent U.S. programming, uses three different techniques shown to decrease children's gender stereotypes in the area of toys and play: reducing the functional use of gender in the environment, explaining gender stereotypes and how we can counter them, and increasing the complexity of gender categories through counterexamples.

Reducing the functional use of gender in the environment has been shown to reduce children's gender stereotypes. Functional use of stereotypes refers to the use of gender to organize the environment including separating children by gender into groups, the verbal use of gender categories, and the use of different facilities for children of different genders (Bigler 1995). In two studies including either preschool or school-aged children (Bigler 1995; Hilliard and Liben 2010), researchers asked teachers either to make use of gender categories frequently (by having separate bulletin boards, by lining up children boy-girl, and by making verbal use of gender categories—"Good morning, boys and girls") or to refrain from mentions and organization by gender except for children's personal pronouns. In both studies, gender stereotyping was increased for the children in classrooms that made functional use of gender compared to the classrooms where gender was not salient. Thus, minimizing the salience of gender in children's environment and the functional use of gender may serve to reduce their gender stereotypes.

This strategy has been employed throughout *Sesame Street*'s programming. Aside from the use of gendered personal pronouns, which is commonplace in U.S. language and culture, characters on *Sesame Street* rarely make use of gender categories (with exceptions for when they are directly addressing gender issues or stereotypes). For example, when episodes feature characters or women in masculine domains, they do not denote their gender (i.e., Justice Sotomayor is a female judge), but note their jobs in an inclusive manor (i.e., Sonia Sotomayor as a Supreme Court Justice, Abby playing dress-up as a Supreme Court Justice). By avoiding the use of gender categories whenever possible and by using gender inclusive language (i.e., mail carrier instead of mailman), *Sesame Street* programming has likely helped prevent gender stereotypes from forming in children and reduced the use of gender stereotypes in young children.

A second strategy to reduce children's gender stereotypes involves explaining to children what gender stereotypes—and related concepts such as gender discrimination—are. Scholars have noted that children may need an explanation of gender stereotypes to process and counter information received from social agents in their environments (Bem 1998; Brown 2014). This explanation may give them a schema by which they can input such information. For example, a parent or teacher may explain to children that some people believe only girls can play princess, but some individuals do not, and that we believe anyone can play princess. Others may introduce the idea that gender stereotypes are silly ideas or ideas people used to have and thus, that these ideas (i.e., stereotypes) can be dismissed (Bem 1998; Brown 2014). Two studies with older children and adolescents have shown that learning about gender discrimination and hearing explanations of historical gender discrimination makes children more aware of instances of discrimination and reduces gender stereotypes among children (Lamb et al. 2009; Weisgram and Bigler 2007). It is important for children to hear that stereotypes are not always true but are maintained by culture over time. Thus, learning about gender stereotypes from trusted adults may help reduce gender stereotyping in young children as well.

In recent seasons, *Sesame Street* has explicitly addressed and explained gender stereotypes in its programming in the episodes "Baby Bear's Baby Doll" (2011) and "Dress-Up Me Club" (2016). In "Baby Bear's Baby Doll," Baby Bear (who identifies himself as a boy using the terms "brother" and "daddy" during play) plays with a doll and is embarrassed when he notices the audience and when a male friend (Telly Monster) arrives. Gordon, a male adult on the program (who happens to be wearing a pink shirt, thus serving as an exemplar for breaking

down gender stereotypes), listens as Baby Bear explains his embarrassment and knowledge of the stereotype that dolls are for girls. Gordon explains that people of all genders can play with dolls and wear pink shirts and notes, “If you love your doll and it makes you happy, there’s no reason to be embarrassed about that. It’s just part of what makes you, you!” In a more recent episode, “The Dress Up Me Club,” characters on *Sesame Street* such as Prairie Dawn (who identifies as a girl) and Elmo (who identifies as a boy) are playing dress-up with super hero and princess costumes. Abby Cadabby, a girl who is a fairy in training, comes along and dresses up as a “super hero princess.” Prairie Dawn then objects, becomes upset, and states that boys wear the super hero costumes and girls wear princess costumes (even pointing out signs over each set of clothes with explicit gender labels). An adult on the program, Chris, then comes along to explain that they do not need gender labels and everyone can dress up as they choose—Abby becomes a super hero and even Cookie Monster becomes a ballerina. Both episodes explicitly address gender stereotypes about toys and play and counter these stereotypes through explanations by trusted adults, thus using an evidence-based practice to reduce gender stereotypes in young children.

A third strategy for reducing gender stereotypes involves increasing the complexity of gender categories by demonstrating gender diversity in children’s toys and play. Presenting children with examples of children of various genders engaged in play may prevent children from forming gender stereotypes or may break down established gender stereotypes. Rothbart (1981) notes that stereotypes get revised as counterstereotypic examples are introduced. In her work, Brown (2014) advocates for a two-pronged approach to addressing gender stereotypes: explaining gender stereotypes (as noted previously) and providing a counterexample. Thus, if during play a child says “only boys can be fire fighters,” she notes the effectiveness of not only explaining that everyone can be a fire fighter, but also of pointing out a specific example of a female fire fighter in the community or in the media.

Sesame Street particularly excels at using this mechanism to prevent the formation of gender stereotypes and to reduce young children’s established gender stereotypes. When children play in groups, they are almost always playing in mixed-gender groups, breaking down the stereotype that children only play in single-gender groups. In addition, when children are engaged in cooperative play, in-group bias (gender bias) may be reduced (Sherif et al. 1961). In *Sesame Street*’s Season 49 episodes that focus on children learning through play, characters often pretend to be engaged in different occupations.

Sesame Street has shown female characters in male-dominated careers, such as Abby and Rosita as astronauts, and male characters in female-dominated careers, such as Grover as a librarian. The show also often presents both male and female characters pretending to do various jobs, such as Elmo and Abby as veterinarians. Characters are also often shown playing with counterstereotypical toys such as Rosita playing with a toy train. In addition, male and female adult characters are shown as possessing nurturing traits and engaging in child care roles, both roles that are stereotypically feminine. These exemplars not only give children role models across gender lines but are models to children's adult viewing partners for engaging with children in nurturing and caring capacities regardless of gender. These examples, among countless others in the last fifty years, illustrate the commitment that Sesame Workshop has had to preventing the formation of, and reducing of, children's gender stereotypes and to promoting gender equity through its programming.

Conclusion

Gender-typed play behaviors are prominent in early childhood and can lead to gender differentiated skills and behavior throughout life. Reducing children's gender stereotypes may promote gender diversity in their play and thus reduce this gender differentiation. Sesame Workshop has committed to fostering gender equity through programs and initiatives both internationally and domestically. On *Sesame Street* in the United States, Sesame Workshop has demonstrated its commitment to preventing the formation of gender stereotypes and reducing children's established gender stereotypes of toys and play by reducing the use of gender as a category, explicitly explaining and refuting gender stereotypes, and increasing the complexity of gender categories by depicting gender diversity in children's play behaviors. I am hopeful that these efforts will continue and be effective as we celebrate gender diversity and gender equity in our society and across the world.

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