UNIVERSITY OF PADOVA

Department of General Psychology

Bachelor's Degree Course in Psychological Science

Final dissertation

The Role of Parents' Gender Stereotyped Attitudes and Gender Typed Toy Preferences in Children's Future Career Aspirations

Supervisor
Professor *Paola Rigo*

Candidate: İpek Gökmeral
Student ID number: 1222484

Academic Year 2022-2023

Abstract

Gender roles play a significant role in the lives of many individuals. One important area in which gender roles have a prominent impact is the career choices of children. Children's attitudes and beliefs about vocational interests are often shaped by the values and beliefs held by their parents, as well as the toys that they play with during childhood. This dissertation will review existing literature about how parents' gender stereotyped attitudes and gender-typed toys can influence children's perception of gender roles and their career preferences.

Introduction

From the moment children enter the world, they are born into a world of gendered expectations and stereotypes. Society, and particularly parents, dictates specific behaviors, preferences, and vocational interests based on an individual's gender. These stereotypes vary across cultures, families, age groups, and educational settings, shaping individuals' beliefs about themselves and influencing their everyday actions. Parental attitudes, rooted in cultural and familial beliefs, exert a significant influence on children's development. Traditional and gender-stereotyped attitudes held by parents play a crucial role in shaping their children's self-perception, behaviors, and career aspirations. Moreover, stereotypes go beyond parental attitudes and influence children's toy preferences. Toys are often marketed and categorized by gender, reinforcing societal norms and expectations. They promote specific skills and activities that are considered appropriate for boys or girls, reinforcing gender divisions in the workforce, and limiting children's exposure to a diverse range of career options. The purpose of this dissertation is to explore the complex relationship between gender-stereotyped parental attitudes, gender-typed toys, and children's future vocational interests. I will examine how traditional parental attitudes and gender-typing of toys can influence children's career aspirations, highlighting how seemingly simple toys and casual interactions with parents can shape children's abilities, interests, and future career aspirations.

Groundwork

Gender development is crucial, it profoundly impacts many important aspects of people's lives. This includes their talents, their perceptions of themselves and others, the opportunities, and limitations they encounter, in addition to the paths they choose to pursue in their personal and professional lives. These aspects are heavily influenced by societies' expectations and stereotypes. (Bussey & Bandura 1999)

The career aspirations of children are affected by multiple factors, such as their social environment, cultural values, and, most importantly, the influence of their parents. Parents serve as influential figures who transmit their values, beliefs, attitudes, and expectations onto their children. One crucial aspect of parental influence is their level of traditionality, that is, the extent to which they adhere to gender roles, values, and stereotypes within the family. By serving as role models, they shape their children's career choices and aspirations. They convey their beliefs and attitudes through explicit and implicit messages, the roles they assume within the family, in addition to the toys and activities they provide, strongly impacting children's career aspirations and their perceptions of gender roles. Those who adhere strictly to traditional gender norms may inadvertently limit their children toward specific career paths, restricting their potential. Conversely, parents with egalitarian values who challenge gender stereotypes and encourage their children to pursue their interests without conforming to traditional gender norm can open up more career opportunities for their children.

In addition to parental influence, another significant topic to consider in this dissertation is the impact of children's gender-typed toy choices. Play behavior is a crucial part of child development as it allows children to envision themselves in various roles, including those related to occupations, while promoting the exploration and the acquisition of diverse skills. However, toys have been categorized and gender-typed as either "girl toys" or "boy toys" for a long time. This sharp distinction has led to significant implications, as numerous studies, which will be discussed later, highlight substantial differences in the skills promoted by toys designed for boys versus those designed for girls. This stark division in toy preferences can heavily influence on a child's overall growth and, particularly, their career development.

1. The Role of Parents' Gender Stereotyped Attitudes

1.1 Gender Roles, Stereotype Formation & Career Development:

Social cognitive theory (Bussey & Bandura, 1999) posits that as children develop the ability to differentiate between males and females, the process of modeling plays a crucial role in their understanding and application of these gender concepts. Parents, as the primary influencers in a child's life, contribute significant to gender modeling though explicit and implicit cues. As children grow, their interactions with others and the establishment of social networks further shape their cognitive developments. This developmental framework emphasizes the interplay between individual development and the child's social environment in the construction of their beliefs about gender. It is important to note that modeling extends beyond mere mimicry of behaviors, it encompasses the transmission of rules and structures that guide generative behavior. Furthermore, while there are gender differences related to biological foundations, many stereotypical attributes, and roles primarily stem from cultural influences rather than biological endowment (As cited in Bussey & Bandura, 1999).

According to developmental researchers, rudimentary stereotypes typically emerge at around age of two, whereas basic stereotypes are usually formed around age three (Adya & Kaiser, 2005). During this age, children start recognizing gender differences that are related to physical appearance, roles, toys, and activities, as well as associating genders with concepts such as hardness or softness. Gender stereotypes, which are pre-conceived notions or generalizations about the characteristics and attributes typically associated with males and females (Bussey & Bandura 1999), can restrict opportunities for individuals of all genders and hinder the utilization of diverse talents in the workforce by limiting the development of skills and interests (Adya & Kaiser, 2005). These stereotypes are influenced by social cues, parents, teachers, and peers. Furthermore, while gender stereotypes are classified as a social construct, they originate from a combination of both social and structural factors. As children begin contemplating their future during early childhood, they consider both their future careers and family lives (Fulcher & Coyle, 2018). Many research suggests that at a young age, children tend to develop fixed beliefs

about gender roles that are prevalent in their society (Zosuls et. al., 2009) and according to Fulcher & Coyle (2018) their occupational aspirations become closely intertwined with gender by preschool age. Furthermore, a study by Fulcher (2011) reveals that gender is the most influential factor that shapes future career aspirations among school-aged children.

1.2 Vocational Interests and Gender-Segregated Workforce:

Understanding the influence of social context on gender-based interests and aspirations is crucial in comprehending the impact of stereotypes on various aspects of children's lives. According to the social cognitive perspective (Bussey & Bandura 1999), gender-based interests and aspirations are greatly influenced by the social context. As mentioned previously, stereotypes can have adverse effects on children's academic performances, occupational aspirations, emotional expressions, and social development (As cited in Halpern & Jenkins, 2015). Strict adherence to these stereotypes can limit children's potential and negatively impact their growth in various areas by negatively impacting the formation of career interests in various ways, such as discouraging individuals from pursuing careers perceived as incompatible with their gender and pursuing the ones that are associated with their own gender (Eccles, 2011). This kind of behavior can lead to a gender-segregated workforce. For example, Hayes et al. (2017) found that girls show a greater interest in occupations portrayed by female workers rather than male workers, while boys exhibit a stronger preference for occupations associated with male workers rather than with female workers.

1.3 Parental Attitudes, Behaviors & Beliefs:

Gender socialization plays a significant role in shaping children's perceptions of gender roles and behaviors. According to Bussey & Bandura (1999), as children continue to improve their language and cognitive abilities, parents expand their understanding of gender by teaching them about gender-specific behaviors and roles that are more complex than just classifying people and activities as male or female. For example, girls are often encouraged to be nurturing and polite, whereas boys are encouraged to be adventurous and independent (As cited in Bussey & Bandura 1999). Parents communicate gender roles also through their actions, such that when children are consistently exposed to gender-stereotyped activities, it can reinforce the notion that certain

activities are appropriate for specific genders (Jungen, 2008). For instance, Enrolling girls in ballet and boys in football promotes gender-stereotyped activities, thus discouraging them from exploring activities that fall outside of traditional gender boundaries. (As cited in Jungen, 2008). When children and adolescents are faced with decisions regarding their future, they may seek guidance from their parents, who may in turn rely on their own gender stereotypes to provide feedback (Chaffee & Plante, 2022). Seemingly small comments from parents, such as expressing doubts about the suitability of a particular career for a woman or a man, could have a significant long-term impact on their children's career choices.

Parents, as the primary influencers in a child's life, shape their beliefs about gender roles, actively transmitting them through their attitudes, actions, and interactions. (Tomasetto et. al., 2015) For example, research has shown that parental attitudes towards gender roles does influence their children's views on gender roles. Such that when parents hold more traditional views, their children are more likely to have traditional gender-role attitudes (Fulcher, 2011). On the other hand, Sutfin et al. (2008) found that, irrespective of sexual orientation, parents with more liberal attitudes towards their children's gender-related behavior are less likely to create highly gender-stereotyped physical environments for their children. Consequently, their children also demonstrate less stereotypical attitudes towards gender development.

1.4 Parents' Attitudes and Children's Occupational Aspirations

Parents adherence to gender stereotypes across the child's development can significantly shape children's choices regarding traditional or non-traditional gender-stereotyped occupations, as children tend to adapt behaviors, attitudes, and beliefs of their parents. For example, Fulcher (2011) found that mothers' attitudes are associated with children's occupational aspirations. That is, mothers from middle classes with traditional beliefs about gender roles had children, aged between 7 to 12, with more traditional occupational aspirations. She further concluded that maternal attitudes are predictive of children's efficacy in traditional domains, such that children of mothers with traditional attitudes exhibited more efficacy in domains associated with traditional gender roles.

Furthermore, the influence of parents on their children's career preferences changes in time, with mothers and fathers exhibiting different influence on children. This was further examined in a longitudinal study that aimed to expand on previous research by examining the connection between parents' gender-typed occupational expectations and actual job preferences for their at different stages of life. The results showed that fathers' expectations at age 15 were more related to their daughters' career expectations at age 17, while mothers' expectations were related to both daughters' and sons' expectations. Fathers' expectations were more predictive of both daughters' and sons' job choices at age 28, while mothers' expectations were only predictive of daughters' job choices. Furthermore, at age 28, men were found to have more gender stereotyped occupations compared to women. It is also possible to see how parents' role changes over time, from providing exposure and modeling to providing guidance and encouragement, thus highlighting the importance of parents' roles in shaping their children's' career aspirations (Fulcher, 2011). This study not only underscores the evolving roles of parents in their children's lives but also emphasizes how gender-stereotyped parental expectations and occupational opportunities can shape career aspirations and perpetuate gender stereotypes.

It is also important to mention that fathers might play a unique and significant role in shaping their daughters' career aspirations. Their influence can have a lasting impact on their daughters' professional paths, guiding and influencing them based on their behaviors and attitudes. For example, Croft et. al. (2014) found that daughters showed a greater tendency to internalize the egalitarian views of their fathers compared to sons, this finding aligns with another study, which reveals that 73% of employed women indicated that fathers have played a significant role in shaping their career aspirations (As cited in Croft et. al., 2014). In particular, girls were more likely to express their interests for working outside home when their fathers held gender-egalitarian beliefs about domestic labor, as well as when their mothers showed less involvement in domestic care and identified as work-oriented (Croft et. al., 2014). This could suggest that fathers have the potential to provide girls with opportunities that suggests masculine pursuits by serving as gatekeepers to their daughters' interest regarding counter-stereotypical roles. Furthermore, there are two important points to highlight in the same study. In terms of children's career aspirations, for both mother-child and father-child dyads, it was found that boys tend to gravitate towards more gender-stereotypical careers compared to girls. Furthermore, when

mothers identified with traditional gender roles within the home, their children, particularly daughters, were more likely to pursue gender-stereotypical roles in the future. Fulcher et al. (2008), also found that lesbian mothers exhibited more liberal attitudes regarding gendered behaviors, compared to heterosexual parents. Furthermore, they were more likely to evenly divide the childcare tasks and paid labor. As a results, children showed more flexible attitudes regarding their own gender-stereotypes and aspirations for future careers. However, it is important to highlight that this was not a result of parental sexual orientation, but of the equal division of labor within the household. If children grow up in an environment in which parents have an equal division of labor, rather than one parent as the breadwinner and the other responsible for the childcare, they are exposed to non-traditional role models. Consequently, as reflected in this study by Fulcher et al. (2008), children may be more flexible towards gender-stereotypes and more open to considering a career that are not limited traditional gender boundaries.

1.4.1   Parents' Gender Stereotyped Attitudes and STEM fields

Despite ongoing attempts to overcome gender disparities in science, technology, engineering, and mathematic (STEM) fields, there is still a significant underrepresentation of women in STEM fields. (Hill et. al., 2010) and stereotypes such as "girls are not as good as boys in mathematics" still persist. Chaffee and Plante (2022), found that parents' beliefs regarding their children' career aspirations in STEM fields differ significant for boys and girls. That is, for girls, parental stereotypes about their abilities in language can increase their motivation for language arts but discourage them from pursuing careers in STEM field. On the other hand, for boys, parental stereotypes regarding language arts and mathematics directly affect their aspirations and opinions in these fields by reinforcing the stereotype that mathematics is for boys and language arts is for girls. This gravitates them away from the latter, thereby limiting them to the option of mathematics. Furthermore, while both mothers and fathers have influence on career-choices of their children, it is suggested that fathers particularly influence girls' non-traditional career choices, such as fields like math, science, and technology (As cited in Adya & Kaiser, 2005).

1.4.2 Roles Parents Play at Home

The roles parent play at home can be highly influential in shaping children's understanding of gender roles (Jungen, 2008). By observing their parents' communication and division of responsibilities at home, children develop an understanding of what is considered appropriate for their gender (Bussey & Bandura 1999). Still, many household duties are performed by women despite the progress of males sharing household tasks, these gender socialization experiences contribute to children's perceptions and adaptation of gender roles which ultimately impact the career paths they choose to pursue. (As cited in Jungen, 2008). For instance, if the father takes on the role of the breadwinner while the mother is solely responsible for housework, children may perceive this as the norm, and it can impact their understanding of the availability of occupations (Fulcher & Coyle, 2018). Within the dynamics of the family, certain behaviors such as enforcing discipline, controlling the money, planning events, and initiating family dialogues also reflect and reinforce gender-stereotyped beliefs for their children (As cited in Jungen, 2008). For example, when the conversational patterns between husband and wives were analyzed, it was found that the topics introduces by women were perceived as tentative and more likely to be disregarded compared to those of men. Since children are routinely exposed to these kinds of power dynamics, they may appraise men as generally holding more power and influence, and generalize these values to many other areas, such as career preferences, in their lives. Similarly, Linda Lavine (1982) found that girls with strong paternal dominance, which refers to the extent of decision-making control and authority held by fathers within the family, were more likely to choose careers that were largely female occupied. She further highlighted that the reason for this might have been the girls' exposure to gender-specific roles in their homes, also noting that their perceptions regarding the father's power and gender- specific expectations might have impacted their career options since they mostly named traditionally female occupations when they were asked about their future vocational interests. She further found that girls raised with maternal dominancy showed interest in either neutral or male-dominant occupations and regardless of parent-dominancy, nearly all the boys expressed interest in male-dominated occupations. By embracing or challenging traditional gender norms and actively engaging in family life, parents play a crucial role in shaping their children's aspirations and their positions within the family ecosystem (Bussey & Bandura 1999). For example, when children identify with their own

gender and when their parents, especially mothers, strongly identify with traditional gender roles, both at work and at home, children are also likely to pursue careers and play a part in the family with roles that are in line with gender-typicality (Endendijk & Portengen, 2022).

1.4.3   Employment Status and Education Levels of Parents

Parental education and career choices emerge as effective motivators that significantly shape children's career trajectories. For example, children with parents who have attained higher levels of education tend to exhibit a resistance to gender stereotyping, whereas children whose parents have a high school education or lower are more inclined to conform to gender stereotypes (As cited in Adya & Kaiser, 2005). Additionally, women who pursue careers in mostly male-dominated fields, such as science, are usually from families in which mothers are working, both parents are highly educated, and achievement is valued, and mothers are more likely to influence their children's' career choices if they have four-year degrees (As cited in Adya & Kaiser, 2005). It is consistent with social learning theory that being the child of a homemaker is especially salient for expectations about whether girls, and boys' partners, will be homemakers themselves. (Weinshenker, 2006). Moreover, in his study, Weinshenker (2006) noted that the employment status of a mother can also shape their children's perspectives regarding their own career choices and found that the daughters of stay-at-home mothers were more likely to stay at home and not work if they were to have children. Similarly, sons were also likely to expect their future wives to stay at home after having children. Furthermore, Oliveira et. al. (2020) suggests that children, aged between 10 and 12, with mothers working in female-dominated jobs are likely to express interests in jobs that are also dominated by women.

However, there are some contradictory results regarding the effects of the level of traditionality of the work of parents. For example, Barak et al. (1991) found that traditionality of mothers' job, however not fathers', was found to be significant for children's' (aged between 5.5-6.5 years) career aspirations in traditional domains, for both boys and girls. That is, children of mothers with non-traditional occupations expressed less interest in gender-stereotyped occupations.

On the other hand, Oliveira et al. (2020) found that when fathers work in occupations that are predominantly held by women, their children exhibit a higher level of interest and aspirations

towards careers that are also traditionally female-dominated. For example, boys are more likely to work in female-dominated jobs than daughters when their father has a female-dominated job, whereas they are less likely than daughters to express interest in female-dominated jobs if their fathers were working in a male-dominated occupation (Oliveira et. al., 2020).

According to Barak et al. (1991), one reason why fathers did not have significant effect on children' career aspiration could be that mothers generally exhibit more influence over children. Despite the progress regarding childcare, mothers still have the primary responsibilities, thereby may exert greater influence on their children. Another noteworthy finding is that mothers engaged in non-traditional occupations could potentially generate more interest and may subsequently exhibit a stronger influence on their children compared to fathers. However, the contrasting findings may also be influenced by factors such as cultural contexts, age differences among children involved in the studies, and the uniqueness of each participant. One common finding is that by working in non-gender-stereotypical jobs, both mothers and fathers can act as role models for their children and help them to overcome gender-based barriers and weaken their gender-based attitudes.

2.   Gender Typed Toy Preferences

Research suggests that children exhibit preferences for gender-typed toys at 14-16 months, these preferences are shaped by infants' daily motor activities, their experiences with toys, and parental attitudes (Liu et al., 2014). As children engage in play and interact with peers and adults, they observe and imitate both their playmates and the toys themselves, shaping their future aspirations (Fulcher & Coyle, 2018). Toys are often classified in as either "masculine" or "feminine", and pink and blue toys are frequently used as symbolic representations of toys associated with girls and boys, reflecting the societal gender norms and expectations. (Dinella & Weisgram, 2018).

2.1 Play Behavior and Interests in Girls and Boys

Children typically prefer toys that are associated mostly with their own gender, and this gender-typed preference increases with age. (Davis & Hines, 2020; Cherney & London 2006). Boys tend to engage in more active and rough-and-tumble play, whereas girls tend to prefer verbal interaction and nurturing behaviors (Hines & Golombak, 2002). According to Wood et al. (2002) parents show gender-appropriate preferences when they are playing with their children, such that the most suitable toys for girl were associated with domestic care, while vehicles and tools were associated with boys. Furthermore, it was suggested that while girls tend to be more flexible regarding their engagement in gender-typed toy play, boys are usually limited to playing with masculine toys, when in presence of adults. Additionally, boys show more preference for manipulative toys such as blocks and Legos (Cherney & London 2006). These gender-stereotyped play behaviors can influence the development of gender role identity and contribute to differences in cognitive abilities, career interests, social interactions, and behavioral tendencies between boys and girls (Campenni, 1999; Weisgram & Fulcher, Dinella, 2014). Apart from gender-typed toys like vehicles or baby dolls, colors are often associated with specific genders as well. For instance, the stereotype of associating pink with girls and blue with boys is widely accepted (Dinella & Weisgram 2018). This type of association can be one of the earliest stereotypes that children are exposed to, such as decorations of boys' rooms being designed in blue and girls' rooms in pink, even before birth. This association is also evident in increasingly popular gender reveal parties where pink or blue is used to indicate the expected gender of a

baby. Research suggests that segregating toys based on their colors and gender labels can increase stereotypes and lead to a greater gender-differentiation among boys and girls (Bigler, 1995). For example, continuously playing with pink toys can activate girls' perceptions about femininity and can hinder the development of important masculine skills, even when interacting with a typically masculine toy. According to Weisgram, Fulcher, and Dinella (2014), the color of toys given to children, particularly among girls, has been found to have a significant impact. For example, in their study, girls anticipated that other girls would express slightly more interest in toys described as "for boys" when they were in pink rather than toys labeled as "for boys" when they were in blue. Therefore, pink may give girls permission to discover toys that are typically described as other-gendered and overcome barriers that are leading to a gender-segregated toy preference.

2.2 Play Behaviors, Toy preferences, and the Related Skills

For example, studies have found that by the end of the first year of life (Davis & Hines, 2020) girls typically demonstrate a preference for dolls, stuffed animals, and educational toys (Cherney & London 2006; Davis & Hines, 2020), which are often associated with promotion of verbal abilities (Miller, 1987), nurturance, domestic care, and appearance (Blakemore & Centers 2005). On the other hand, in addition to vehicles and weapons (Davis & Hines, 2020), boys demonstrate preferences of outdoor activities such as basketball and football (Cherney & London, 2006). Engaging in such activities not only fosters the development of visual-spatial skills (Miller, 1987) but also encourages action, aggression, and building (Blakemore & Centers, 2005).

Girls who engage in frequent feminine toy play demonstrates higher exhibition of caregiving and comforting strategies compared to boys, thereof, it is predictable that children who engage in frequent masculine play may have limited opportunities to develop comforting skills (Li & Wong, 2016). Toys that are typically associated with boys, such as action figures, are usually linked to an already existing storylines from TV or movies, resulting in limited opportunities for boys to use their imagination. Furthermore, these action figures are usually produced with muscles, weapons, and angry faces, which do not represent masculinity in real life but an exaggeration of it (As cited in Fulcher & Coyle, 2018).

These characteristics of male and female typical are similar to the traits and skills that are associated with male and female occupations, such that while male-dominated occupations often involve higher levels of risk and are things-oriented, predominantly female occupations are centered around children, fashion, and helping other individuals (Lippa, 2005). Furthermore, Nelson (2005) suggested that toys associated with the private sphere, such as dolls' houses, kitchen appliances, furniture, clothing accessories, and jewelry, are more commonly owned and preferred by girls. On the other hand, toys associated with the public sphere, such as tools, transportation, machines, and military equipment, are more frequently owned and preferred by boys. This kind of separation can send a message to girls' that their future roles revolve around household duties, whereas boys are encouraged to imagine themselves outside the home in the future.

Understanding the potential effects of these early experiences on later outcomes, such as career aspirations, is essential. The results of a 10-year longitudinal study revealed a link between gender-typed toys, play behaviors, and subsequent career aspirations in children. That is, playing with gender-specific toys such as dolls or guns, taking the role of a female character, and enjoying rough or tumble play at age 3.5 years predicted career aspirations of children 10 years later at age 13 years. Masculine children expressed more interest in male-typical occupations compared to feminine or control children. On the other hand, feminine children expressed greater interest in female-dominated occupations more than control children, however the difference between them was not statistically significant (Kung, 2021).

Moreover, there are additional studies that supports the impact of gender-stereotyped toys on career preferences. The findings of research done by Kung (2022) suggest that the play behavior exhibited in childhood predicts the current occupational interest of university students, mediated by socio-cognitive processes such as goal endorsement and gender typicality. While both men and women demonstrate gender typicality (perceived similarity between oneself and peers of the same gender) as a significant mediator, gender contentedness (satisfaction with one's own gender) emerged as a significant mediator only for men. However, communal goal endorsement (e.g., altruism, connecting with others) had a significant mediating role for women, with no notable differences of goal endorsement for genders. In summary, these results imply that

childhood play behavior may play a role in shaping occupation interests through distinct socio-cognitive processes, particularly for girls and women.

From an early age, societal gender norms can impact children's' understanding of what is considered appropriate for their career aspirations in the future. Society often assigns specific roles and expectations based on gender, which can shape children's beliefs about the types of professions deemed suitable for boys and girls, limiting children's perception and opportunities of the wide range of career opportunities that exist, consequently leading to gender disparities in various occupations. For example, it seems that for children aged 2.5-3 years old, both male and female dolls represent occupations that are strictly gender-typed (Gettys & Cann, 1981). When children were expected to indicate whether two dolls, one male and one female dressed very similarly, belonged to a certain occupation, children from every age group had shown clear distinctions between gender-typing of occupations such that male doll was associated with doctors, police, mayor, construction worker, and basketball player, whereas female doll was assigned to occupations such as secretary, teacher, dancer, model, and librarian, with most of the children failing to associate the "librarian" to a gender.

Furthermore, there have been aims to investigate if girls' interests in masculine jobs could be influenced through the feminization of the game character that displayed some jobs. Coyle & Liben (2016) examined the gender salience filter of girls, which refers to the degree to which children readily associate and utilize gender-related beliefs during their interaction with the environment. Gender salience is specifically significant in people who has a strong gender salience filter, such that girls with a strong gender salience filter can connect their observations and experiences to gender, independently of external influences. For instance, when a girl finds a typically masculine toy appealing and enjoys playing with it, she will modify her belief and decide that the toy is for both boys and girls, rather than just boys (Coyle & Liben, 2016). Following the play session involving Barbie dolls, high GSF girls showed increased effect in feminine activities, meanwhile low GSF girls showed decreased effect. Overall, girls in the study demonstrated a preference for feminine activities over masculine activities with high GSF girls exhibiting a more distinct preference between the two. However, even for high GSF girls, the game did not have increased interests for masculine occupations and regardless of GSF or the

condition of the game, girls had less interest in culturally masculine occupations in the game compared to the feminine or novel occupations (Coyle & Liben, 2016). The results are disappointing, as they highlight the presence of rigid gender stereotypes and limited occupational aspirations among girls, to the extent that they did not even consider occupations that are typically considered masculine.

The effect of playing with the barbie doll is demonstrated once again in another study. Sherman & Zurbriggen (2014) found that Girls that played with Barbie, a sexualized female doll that is either dressed as a doctor or a fashion model, reported about 1.5 less occupation opportunities, both female and male-dominant, for themselves than for boys. On the other hand, there was relatively minimal differences regarding career preferences for girls that played with Mrs. Potato Head, a female character that is not sexualized). In short, playing with Barbie had caused girls to report less career opportunities for themselves in the future. "Perhaps Barbie can "Be Anything," but girls who play with her may not apply these possibilities to themselves." (Sherman & Zurbriggen, 2014)

2.3 Stem Skills and Toys

Underrepresentation of women persist in STEM fields (Adya & Kaiser, 2005-20) and stereotyping that implies lower abilities in certain domains can undermine women's confidence in effectively utilizing their mathematical competencies (As cited in Bussey & Bandura ,1999). Spatial abilities play a crucial role in determining career outcomes in STEM fields (Wai, Lubinski, Benbow & 2009). Toys that enhance visuospatial abilities typically include building and construction sets, vehicles, and video games (Fulcher & Coyle, 2018). These toys, which are mostly preferred by boys, provide opportunities for children to engage in activities that promote their visuospatial skills (Blakemore & Centers, 2005). Unfortunately, since these toys are usually marketed towards boys, girls' exposure to scientific play can unintentionally be limited, consequently, girls may have narrowed range of career options in STEM fields in their future. (Fulcher & Coyle, 2018). This division in gendered-typed play can hinder girls' confidence and interest in pursuing careers in STEM fields, perpetuating the underrepresentation of women in these disciplines.

3. Limitations

It is important to acknowledge that the studies mentioned here primarily focus on Western societies, and parental behavior and child play can vary across cultures. The perception of women and girls also differs across societies, with some unfortunately devaluing them and not even letting them work. To gain a more comprehensive understanding, more research is needed that includes diverse cultures and countries. Additionally, the discussion on parenting and toy preferences in children of homosexual parents is relatively limited. Differences may exist between homosexual and heterosexual parenting in terms of child-rearing practices and toy preferences, as homosexual parents often exhibit more egalitarian attitudes. Moreover, the understanding of gender is evolving, and the younger generation is increasingly flexible in their views, with a wide range of identities and expressions. It is crucial to recognize that gender is a social construct, and its meaning can vary from one individual to another. Furthermore, toy preferences can vary widely among children, and focusing solely on gender as the primary determinant of toy choice may overlook other significant factors influencing children's preferences. Moreover, there is an enormous lack of longitudinal studies that tracks children's toy preferences over time, such studies would provide a more comprehensive understanding of the developmental aspects and stability of gender-typed play. It is important to acknowledge one additional limitation, which is the imbalance in the literature regarding girls' and boys' interests in career choices, specifically the studies that examines parent traditionality, toy preferences and career aspirations. There is a greater number of research focusing on girls' career interests compared to boys regarding these particular topics. This discrepancy can be attributed to the evolving inclusion of women in the work force over the past decades, which has understandably gained significant research attention. However, this fact gives rise to challenges in accessing comprehensive data due to the relative scarcity of studies investigating boys' career aspirations, compared to girls. By addressing these limitations, researchers can promote a balanced understanding of the factors that shape career aspirations in both genders. This, in turn, can help researchers develop specific interventions and policies that provide support for the career development of all children.

4. Conclusion

Parents play a critical role in shaping their children's gender development and career choices. They serve as influential role models and guides, impacting whether their children will adhere to or challenge gender stereotypes when selecting careers. It is important to recognize that parents often transmit their beliefs about gender-norms through their behaviors, roles they assume within the family, and their occupation and educational backgrounds. These factors significantly shape children's understanding of gender roles and subsequently influence their career aspirations. While the studies discussed here yield mixed findings on the specific influences of fathers and mothers on their children's career aspirations, determining whether it is the fathers or mothers who have a greater impact is complex due to various contributing factors. However, what remains clear is that parents carry significant responsibility in shaping their children's career choices. By serving as counter-stereotypical role models, challenging gender norms, and encouraging non-traditional career paths, parents can play a crucial role in supporting their children's exploration of diverse career possibilities. Furthermore, it is disappointing to mention that boys face more pressure to conform to gender stereotypes, as parents tend to be stricter when boys show interest in cross-sex interests and toys. This pressure can negatively impact boys' self-efficacy, particularly in domains traditionally considered unsuitable for their gender due to societal norms within the family. Moreover, when children observe their parents conforming to traditional gender roles in their own careers, they are more likely to adopt those beliefs and behaviors. Families must recognize that they are not raising duplicates of themselves, but unique individuals with their own characteristics and interests. It is crucial for parents to support and nurture their children's individual interests, providing them with various opportunities to explore diverse fields. Specifically, I believe that it is important for girls to be supported in STEM fields. For example, girls interested in pursuing STEM fields may not receive the same encouragement, resources, or access to educational opportunities as boys. Allowing these stereotypes to limit children's career aspirations is a significant loss for both individuals and society as a whole. Therefore, families should provide an environment that challenges stereotypes, fosters gender equality, and provides equal support and resources for all interests. Furthermore, toys play a crucial role in child development, often serving as participants in family play. However, research indicates that gender-typed toys are still sharply divided between toys for boys and girls. Girls'

toys frequently revolve around domestic activities, while boys' toys encompass a wider range of themes. Additionally, these toys often promote different skills, with girls' toys emphasizing nurturance and verbal skills, while boys' toys foster visuo-spatial abilities that are valuable for STEM fields. This division in toy preferences can disadvantage girls in developing STEM-related skills. It is important to resist rigid categorization of toys based on gender, as they contribute significantly to child development and the understanding of societal roles. Parents should actively encourage their children to explore a wide variety of toys, including those traditionally associated with both genders, as well as gender-neutral options. Unfortunately, societal pressures still exist for boys to avoid playing with toys that are typically considered as feminine. To overcome this, one potential approach could involve incorporating different aspects of toys, such as combining the color blue and with a stereotypically feminine toy, to create a more inclusive play environment. For example, research has suggested that the color pink may influence girls' willingness to engage in cross-sex toy play. Similarly, such adaptations can also be considered for boys, aiming to challenge their strict stereotypes regarding to toy play.

In summary, the combination of parental beliefs and gender-typed play behaviors often lead to girls envisioning themselves in traditionally female-dominated careers or domestic roles. When this message is reinforced both by parents and toys, children may internalize the notion that certain careers are inherently gendered. Parents should prioritize open communication, actively encourage exploration, challenge societal gender stereotypes, and critically reflect on their own attitudes and behaviors to ensure that they do not unintentionally limit their children's future opportunities.

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