# Children's Dynamic Gender Identities Across Development and the Influence of Cognition, Context, and Culture

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## Introduction

Children's dance with gender is a fascinating spectacle to observe. We can see gender in the toys that children play with, in the peers that children befriend, and the ways that they dress. Moreover, observing the ways in which children express gender provides a unique opportunity to understand the development of a social identity more generally. Examining children's forays and, sometimes, love affairs, with gender provides a valuable glimpse into the machinations in children's minds and behaviors as they first become aware of gender, gather and form knowledge and an understanding about gender, and enact the schemas they construct.

Gender is one of the first, if not *the* first, social category children notice (Halim & Ruble, 2010). Cues in our world inform children that we divide and classify people along a dichotomous category of male and female. Further, children not only become aware of gender categories during early childhood, but also come to identify with these categories and form a sense of belonging to a gender group. According to cognitive theories of gender development, information about gender captivates the attention of young children as they earnestly strive to learn what it means to be a girl or a boy (Martin, Ruble, & Skryzbalo, 2002; Kohlberg, 1966). These theories are also consistent with social identity theory, which proposes that individuals strive to achieve self-esteem by distinguishing one's group from another (e.g., girls versus boys) and evaluating one's group more favorably than the other (Tajfel & Turner, 1986).

Awareness of gender categories has motivational consequences for children (Martin et al., 2002); they strive to adhere to gender stereotypes (characteristics assumed to be associated with a gender, Kite, Deaux, & Haines, 2008) and their attitudes toward girls and boys shift towards strongly favoring their own gender group (Halim, Ruble, Tamis-LeMonda, Shrout, & Amodio, 2014; Yee & Brown, 1994; Powlishta, Serbin, Doyle, & White, 1994). Overall, gender

tends to be very salient and important to young children – it colors so many aspects of their worlds. Early understanding and enactments of gender also have the potential to shape future developmental trajectories. For example, early on, girls might learn that "science and math are for boys", avoid activities that develop their spatial skills, such as building with Legos, as they play primarily with other girls (Fabes, Martin, & Hanish, 2004), and then later on avoid pursuing science- and math-related occupations. Recognizing that appearance is central to how girls are evaluated and valued might lead girls to focus on how they physically present themselves to a degree that might be detrimental to their well-being and supersede other interests and goals. For these reasons, it is important to study early gender development.

Our current chapter will focus on one aspect of gender development – that of *change*. We will walk the reader through different periods from infancy to middle childhood and discuss normative processes that we and other researchers have observed in the fluctuations, growth, and diminishments of children's gender-typing. Gender-typing is a broad, inclusive term that includes children's concepts or beliefs, preferences, behaviors, and identity or self-perceptions that align with society's expectations of what is appropriate for each gender (Ruble, Martin, & Berenbaum, 2006). More specifically, we hope to emphasize the dynamic nature of gender identity, children's sense of self as a male or female (Zucker & Bradley, 1995). In doing this, we will emphasize a particular perspective -- cognitive theories of gender development -- highlighting the role that children's understanding and knowledge about gender plays in shaping their gender-typing.

### **Historical Context**

In the work that we present, we hope to contribute to the literature in two primary ways. First, most work on children's gender-typing has focused on children's toy preferences and play,

as well as peer preferences. Although this research is valuable in understanding children's gender development, scholars have identified multiple dimensions of gender-typing – as many as 16 dimensions – and have called for the need to study these other dimensions (Huston, 1983; Ruble, Martin, & Berenbaum, 2006). Studying different dimensions is particularly important because each dimension of gender-typing is indeed unique and different dimensions are not necessarily associated and do not necessarily change in tandem (Halim, Ruble, Tamis-LeMonda, & Shrout, 2013). Hence, we will focus at times on a relatively unexamined dimension –children's gender-typed appearances – as a new and exciting window into children's gender identity.

Second, most previous work on gender development has been limited to White American children from middle- to upper-middle income backgrounds and is thus restricted in its generalizability. In the United States, and in many other countries worldwide, there is a growing presence of ethnic minority children, such that for children under the age of one year, ethnic "minority" infants already outnumber White, non-Hispanic infants (U.S. Census, 2012). Further, this trend is projected to continue through 2060, such that one out of three people in the United States will be Latino (U.S. Census, 2013). Hence, studying children from diverse backgrounds is important as they make up an increasing presence in the United States. Studying children from diverse backgrounds is also important because different groups might reveal interesting differences in the degree to which gender is made visibly apparent and important as a category in everyday language and routines (such as creating girls' and boys' teams), the differentiation of gender roles (prescribed norms for behavior set by society on what is expected based on gender, such as the expectation for women to take care of the home), and the dimensions of gender-typing that most define gender (e.g., appearance or activities).

For these reasons, we describe several studies that sampled children from different ethnic backgrounds. We conducted these studies as part of a larger study on culture and school readiness conducted at the Center for Research on Culture, Development, and Education (CRCDE) at New York University, and followed children (ranging from N = 212 to 246, depending on the particular study) from birth through age 6 years. These children lived in an urban setting in the United States, and were from Mexican and Dominican immigrant families, as well as from African American families. Families were from low-income backgrounds and mothers had low levels of education on average. When children were age 4 years, we began collecting data on a sample of Chinese immigrant children, with equivalent socioeconomic backgrounds. Thus, in the following chapter we will often discuss findings based on these Mexican-, Dominican-, and African-American children, and sometimes will include Chinese-American children where available. To supplement our discussion of this research, we cover a few studies that sample White American children from middle to upper-middle income backgrounds.

# **Theoretical and Empirical Considerations**

Our cognitive theories approach emphasizes the role of children's awareness of gender and their understanding of gender as a category, and how these cognitions affect children's motivation to seek out further information about gender and adhere to gender norms in their beliefs and behaviors (Kohlberg, 1966; Martin et al., 2002). Children's active search for information about gender reflects "self-socialization" (Maccoby & Jacklin, 1987; Tobin et al., 2010). Instead of conceptualizing children as passive recipients of messages from others around them, cognitive theories of gender development focus on children's active role in constructing knowledge and forming gender stereotypes (Ruble, 1994; Miller, Trautner, & Ruble, 2005).

Because children's awareness and knowledge about gender increase over early childhood, this self-socialization approach predicts developmental change in gender-typing as well. This prediction is distinct from other theories of gender development. For example, biological theories often focus on the influence of prenatal hormones on *levels* of gender-typing (e.g., higher levels of testosterone exposure are linked to higher levels of preference to play with trucks) (e.g., Berenbaum, 1999; Hines, 2010) and not necessarily increases or decreases in gender-typing over time during childhood. Socialization theories also focus on levels of gendertyping. For example, socialization theories would expect that children in more gender-traditional households would show more traditional gender-stereotyped behavior than those in less gendertraditional households (e.g., Fagot, Rodgers, & Leinbach, 2000). In contrast to biological and socialization theories, cognitive theories of gender development focus on change, rather than levels at one point in time, and explicitly posit that children's gender-typing should increase in rigidity, or stereotypicality, over early childhood, as children become increasingly aware of gender and begin to understand the permanence of gender categories (Huston, 1983; Kohlberg, 1966; Martin & Ruble, 2004; Ruble, 1994). Similarly, only cognitive theories of gender development explicitly posit that, in middle childhood, children's gender-typing should become somewhat more flexible as their understanding of gender becomes more sophisticated and deepens and as other social cognitive skills develop (Bigler & Liben, 2007; Liben & Signorella, 1980; Halim, Ruble, & Amodio, 2011).

All of these processes – biological, socialization, and cognitive – are likely at work, but cognitive theories of gender development provide unique insights into the ways in which children's motivation to connect to their social words and build their identities influence gender development. We will discuss these changes from rigidity to flexibility in the following studies.

We should note that our inclusion of studies here are not exhaustive. Rather, they exemplify pieces of our research program that highlight the key characteristics of each period of gender development.

# **Change in Gender-Typing Across Development**

Toddlerhood: First steps toward establishing and enacting a gender identity. Early in infancy, children show some ability to discriminate by sex (Quinn, Yahr, Kuhn, Slater, & Pascalis, 2002) and might show some gender differences in toy preferences (e.g., Campbell, Shirley, Heywood, & Crook, 2000; Serbin, Poulin-Dubois, Colburne, Sen, & Eichstedt, 2001). However, children's investment in gender starts to more fully take shape during the toddler years. Children's gender-stereotyped interests strengthen through early childhood, shown through behaviors such as play with gender-stereotyped toys (Ruble et al., 2006). By the time children are in kindergarten, girls and boys show strong proclivity to play in separate groups (Maccoby, 1998; Thorne, 1993). Our research indicates that children's development of an explicit understanding of gender categories plays an important role in their increasing interest in gender-stereotyped toys across early childhood. Whereas children might have an early proclivity for gender-stereotypes toys due to biological and socialization factors, such as differential exposure to stereotyped toys, once they develop an understanding that there are two gender categories – male and female – they become explicitly motivated to differentially attend to toys stereotyped for their own gender. In one study involving 82 children from predominantly middle-class white families (Zosuls et al., 2009), we coded for the presence of gender labels (e.g., girl, boy, lady, man) in children's vocabularies, based on detailed diaries of language development from 9 through 21 months. In particular, we were interested in children's flexible production of gender labels, such that children were counted for knowing the label "girl" if they

used the word accurately across different contexts, in relation to different children. Children were also videotaped playing alone with a set of gender-stereotyped and gender-neutral toys at 17 and 21 months and these tapes were coded for the amount of time they spent in contact with each toy. Modest gender differences in play with a doll and truck were present at 17 months and increased at 21 months. Most critically, children who had greater gender category knowledge according to a few different metrics (knowing both "boy" and "girl," knowing a greater number of gender labels, applying the correct gender label to themselves) increased in their gender-stereotyped play from 17 to 21 months. In contrast, children without evident knowledge of gender categories did not show change in their gender-stereotyped play between the two ages.

Interestingly, our study found that a rather general level of gender category knowledge (i.e., the ability to properly identify males and females), not just the demonstration of a basic gender identity (i.e., labeling oneself as male or female) was linked to increases in gender-stereotyped play. Thus, it appeared that, despite a historical theoretical focus on basic gender identity as a catalyst for the development of gender-stereotyped behaviors, self-categorization did not appear to hold any particular primacy above using gender labels to categorize males and females more broadly.

In a follow-up study using the CRCDE sample (Zosuls, Ruble, & Tamis-LeMonda, 2014), we further investigated the aspects of gender category understanding that are critical for increases in gender-stereotyped play. We assessed gender category knowledge at 24 months using two methods: maternal reports of children's flexible production of gender labels and children's performance on a gender-pointing task. We coded children's gender stereotyped play at 24 and 36 months in order to assess developmental change to gendered behavior. The results indicated that children's knowledge of just one or the other gender category was insufficient to

instigate increases in gender-stereotyped play over time. Rather, the children's knowledge of *both* gender categories (male and female) was related to increases in gender-stereotyped play. Children who did not demonstrate such knowledge did not show changes in their play from 24 to 36 months. Thus, children's earliest gender self-socialization fundamentally entails rudimentary intergroup cognitions – namely, that there are two categories, male and female – and that this understanding is likely integral to the very establishment of gender identity. These findings also support the tenets of social identity theory that point to the fundamental importance of a comparison group to the formation of an attachment to one's own group and related attitudes (e.g., favoritism for one's own group), beliefs (e.g., stereotypes), and behaviors (e.g., adherence to group norms, prejudice).

Together these studies show that there exist individual differences in toddlers' attunement to gender categories very early in development. Toddlers who were more aware of gender categories, as expressed through their language development and the correct identification of others and themselves by gender, showed increases in gender-stereotyped play over time.

Toddlers who were less aware of gender categories did not show changes in their play. Further, these studies underscore the role of self-socialization on children's gender development, suggesting that the awareness of gender categories motivated children to play with toys considered appropriate for their own gender. Finally, these studies show generalizability across samples, with the same processes occurring in White, middle class samples and an ethnically-diverse, low-income sample.

**Early childhood: A time of gender rigidity.** By early childhood, between the ages of 3 and 5 years, children's gender identities further develop and gender rigidity becomes normative.

We have found children to be rigid across several dimensions of gender-typing, including in their beliefs and cognitions, gender intergroup attitudes, and behavior.

**Rigidity in gender cognitions.** Young children have generally been found to strongly endorse and believe in gender stereotypes (Signorella, Bigler, & Liben, 1993), for example, believing that only boys play with trucks, and only girls play with kitchen sets. Moreover, they strictly apply these stereotypes to others, reporting, on average, that they would not be friends with someone who committed a gender "transgression", such as a boy who wears nail polish (Ruble et al., 2007). Analysis of cross-sectional samples of children ages 3 to 7 years responding to hypothetical stories, indicated that this "shunning" of children who transgress gender norms followed a quadratic curve, with peak aversion to gender transgressions being seen at ages 4 and 5 and more acceptance of gender transgressions at ages 3, 6, and 7 (Figure 1, right). During early childhood, children also tend to feel extremely positive about being a girl or boy (gender private regard/evaluation) and find being a girl or boy to be important, or central to their selfconcepts (gender centrality) (Ruble et al., 2007; Halim, Ruble, Tamis-LeMonda, Shrout, & Amodio, 2014). Moreover, a quadratic trajectory was found for positive gender identification as well, again based on cross-sectional analyses, with the highest levels of feeling positive about their own gender and considering gender to be important being seen at ages 4 and 5 compared to ages 3, 6, and 7, similar to the trajectory found for acceptance of gender transgressions (Ruble et al., 2007) (Figure 1, left).

Thus, early childhood is a time for gender rigidity in children's beliefs and cognitions, spanning gender stereotypes, rejection of gender violations in others, and gender identification. Moreover, some studies have found a direct link between children's understanding of gender categories and children's rigidity in their gender-related cognitions. Specifically, researchers

have linked children's understanding that gender remains stable across time (*gender stability*; e.g., a girl becomes a woman, a man was once a boy) with increased rigidity in gender stereotyping, accepting gender violations, and gender evaluation/centrality (see Halim & Ruble, 2010; Ruble et al., 2007). With these data, the tenets of cognitive theories of gender development are more firmly supported, suggesting that children, with the knowledge that their membership as a girl or boy in a gender category is relatively permanent, might be more enamored with their gender, considering it to be a positive and important aspect of themselves, and more committed to clearly defining the boundaries between male and female in their stereotypes, beliefs, and identification.

Rigidity in gender intergroup attitudes. Another area where children's demarcation of female versus male is apparent is in their gender intergroup attitudes, how children evaluate other girls and boys. During early childhood, children's gender intergroup attitudes also tend to be highly rigid, as was seen for their beliefs. Among Canadian and Welsh, mainly White samples, young children showed a strong preference for their own gender compared to the other gender (Powlishta et al., 1994; Yee & Brown, 1994). This strong ingroup bias was found across several different measures of gender attitudes, such as interpersonal distance, affective attitudes (feelings towards girls/boys) and trait evaluations (e.g., judging boys or girls as nice, smart, or mean).

More recently, we have investigated whether this rigidity in gender attitudes is robust across ethnic groups. Our study of the CRCDE sample suggests that rigidity in gender attitudes generalizes to these diverse populations (Halim, Ruble, Tamis-LeMonda, Shrout, & Amodio, 2014). We assessed components of gender attitudes (own- and other-gender trait judgments [e.g., *Do you think girls/boys are smart?*] and affective attitudes [e.g., *How do you feel about* 

girls/boys? with a sad to happy face response scale]. On all of these measures, children, on average showed strong bias, favoring their own gender group and disliking the other gender group. Girls showed more negativity towards boys than boys did towards girls on some of the attitude measures, consistent with some prior research (Arthur, Bigler, Liben, Gelman, & Ruble, 2008; Powlishta, 1995; Susskind & Hodges, 2007; Zosuls et al., 2011). We speculate that girls find boys particularly aversive because they might dislike boys' more rough-and-tumble play styles and competitive interaction styles (Pelligrini & Smith, 1998). Alternatively, the prevalent and well-known stereotype that "boys are bad" (versus that girls are sweet and nice) might color girls' views on boys (Heyman, 2001). Overall, these studies show that, across several countries, ethnic groups, socioeconomic groups, and both genders, young children normatively show rigidity in their intergroup attitudes.

Our study also investigated whether social cognitive development predicted children's gender attitudes, in line with cognitive theories of gender development. These theories predict that cognitive changes related to gender will have evaluative consequences for how children feel about other children, heightening the love of their own gender and possibly dampening their feelings toward the other gender (Martin et al., 2002). We found support for these theories. We followed the CRCDE sample longitudinally over time from age 4 to 5. Children who had greater knowledge of gender stereotypes at age four and who increased in their knowledge of gender stereotypes between ages four and five exhibited stronger ingroup bias at age 5 (Halim, Ruble, Tamis-LeMonda, Shrout, & Amodio, 2014).

We also examined children who were on the cusp of more flexibility in their gender cognitions at age 5. To assess flexibility in gender cognitions, we examined their flexibility in the belief in gender stereotypes (believing that both girls and boys can play with dolls). We also

assessed whether children understood *gender consistency*, the final stage of *gender constancy*, where children understand that despite superficial transformations (e.g., boy wearing a dress), gender remains the same. Our analysis showed that children who were more flexible in these gender cognitions made more positive judgments of the other gender. These positive judgments of the other gender, in turn, predicted fairer treatment between girls and boys in intergroup behavior.

In summary, as with gender cognitions, children's gender attitudes during early childhood also show rigidity, with children strongly favoring their own gender group, and sometimes showing negativity towards the other gender group. Further, emerging research suggests that social cognitive changes can predict some of the variation in these early gender attitudes.

Rigidity in gender-typed behavior and the "pink frilly dress" phenomenon. In addition to rigidity in cognitions and intergroup attitudes, young children also show rigidity in their gender-typed behaviors. During early childhood, children generally show high levels of gender-stereotypical play and preferences for gender-stereotypical toys, a phenomenon found across several ethnic groups (Halim, Ruble, Tamis-LeMonda, & Shrout, 2013; Servin, Bohlin, & Berlin, 1999). In one study we followed children from age 3 to 5 (Halim et al., 2013). Gender-typed play was high and steady in frequency across this three-year span. Interestingly, cross-gender-typed play decreased linearly over time from age 3 to 5. Girls increasingly avoided playing with toy vehicles, weapons and balls. Boys increasingly avoided playing with kitchen sets, dolls, and soft toys.

During early childhood, gender segregation also begins to emerge. Girls increasingly play primarily with other girls, and boys increasingly play primarily with other boys, a trend that

studies have supported in both cross-sectional and longitudinal research and across many cultural groups (Halim et al., 2013; Maccoby & Jacklin, 1987; Martin, Fabes, Evans, & Wyman, 1999; Serbin, Powlishta, & Gulko, 1993). Effects for gender segregation are so large that, based on observations, researchers have found that preschool and kindergarten children spend about half of their social interaction time with same-gender peers and only 10 to 15% of their time with other-gender peers (Martin & Fabes, 2001). This sense of separateness might be reflected in the biased treatment that young children exhibit, favoring their own gender group over the other gender group. For example, when asked to distribute coin prizes to pictures drawn by girls versus boys, five-year-old children give more coin prizes to the picture drawn by their own gender group (Halim, Ruble, Tamis-LeMonda, Shrout, & Amodio, in preparation). In short, it is common for young children to begin to segregate by gender and show biased intergroup behavior as well.

Thus it has been well established that the early childhood years are a time of rigidity for gender-typed play and peer preferences. However, one important and salient dimension of gender behavior that has been overlooked is gender-typed appearance. The way that children dress can reflect in a highly visible manner their emerging sense of gender identity. Generally, appearances are highly salient to young children, and young children use appearance on a daily basis in their person perception (Ruble & Dweck 1995). Further, the clothes and shoes that children put on, the way they fashion their hair, and the accessories they wear and carry are all powerful ways that children express, "Look! I'm a girl" or "I'm a boy" to others and to themselves. In addition, compared to more transient behaviors like play or peer choice, appearances remain with children from situation to situation through the course of a day, reflecting a relatively permanent index of gender identity. For these reasons, we have initiated a

program of research that empirically examines children's appearances and how they might relate to gender identity development.

Recently, we have identified an intriguing behavior related to gender-typed appearance, which we call the "pink frilly dress" (PFD) phenomenon (Halim et al., 2014; Ruble, Lurye, & Zosuls, 2007). In several studies we have found that some girls, at some point in their early childhood, go through a stage during which they strongly insist on wearing gender-typed clothing, such as pink, frilly dresses. Many aspects of the phenomenon exude rigidity. Children are extreme in wanting to wear gender-typed clothing from head-to-toe. For example, girls might not be satisfied with only wearing a pink shirt, but they want to wear a pink skirt, pink socks, pink shoes, and a pink barrette. Parents report that, for a period of time, every single morning, their daughters will insist on wearing a dress and vigorously shake their heads at the thought of wearing pants. They are extreme in their desire to wear gender-typed clothing without regard for practicality and inconvenience. In freezing weather in New York, for example, girls will insist on wearing summer dresses. Parents often report having to negotiate with their daughters to put a coat over the dress and some tights under the dress.

Girls are also extreme in their emotional reactions to decisions about what to wear.

Parents report tears spouting from their daughters' eyes when there are no more clean dresses to wear and they have to yield to wearing pants. We found that across two countries (U.S., Hong Kong) and several ethnic and socioeconomic status groups, 62% to 69% of girls were reported to show this *appearance rigidity* at some point in their early childhood (Halim et al., 2014; Arredondo et al., 2014). This prevalence suggests that appearance rigidity is actually normative, and, most fascinating, appears to be an early and common indicator of gender identity development.

We discovered that boys, too, show their own version of appearance rigidity (Halim et al., 2014). The most common theme that parents reported for boys was their avoidance of feminine-typed items, such as one boy's refusal to wear a burgundy hand-me-down that was one shade too close to pink. Boys also commonly wore sports-themed clothing and superhero T-shirts. Ethnic minority boys from urban, low-income settings wore baggy clothes, as well as shirts with graffiti-type writing on them. Interestingly, whereas the rates of appearance rigidity converged for girls across several samples, the rates of appearance rigidity for boys varied across the three samples we tested. For both of our middle class samples (White, middle-class boys in the United States, Chinese boys in Hong Kong) rates of appearance rigidity ranged from 27% to 30%, still a substantial proportion (Arredondo et al., 2014; Halim et al., 2014). In contrast, among U.S. ethnic minority boys from low-income backgrounds, 56% of young boys exhibited appearance rigidity. It might be that using appearance to define a male gender identity varies among socioeconomic and/or ethnic groups.

In lengthy qualitative interviews with a small sample of low-income parents of boys, African American mothers said things like, "It is always name-brand with boys... You can't buy boys stuff from Payless [Shoes] (a discount store). Everybody would be talking, 'Oh my gosh'..." and "Boys, you have to keep them dressed in the latest stuff... with boys you have to keep up with all [of] that" (Baeg, 2013, p. 28). A Dominican-American mother echoed these sentiments saying, "For [boys], you have to go to a good store... For [my son's] birthday... I didn't want to just put on a little sweater [vest] like that. I wanted to put on... a white shirt, expensive. I mean, not expensive, but made out of cotton with his vest..." These mothers' quotes suggest that what their sons wear is important and something they take time to consider. Mothers also implied that it was much easier to shop for girls. Their quotes also contrast sharply with what we observed in

the middle-class, White sample, where girls' appearances seemed to matter more than boys' appearances in general. We are still seeking to understand this difference between socioeconomic groups. Perhaps having sons wear name-brand and expensive clothes is a sort of cultural capital that enhances their family's and their son's social status position in their neighborhood. More generally, perhaps poverty and unemployment in inner-city contexts might be a particularly salient threat to the male identity, which they seek to bolster with signs of economic status. Why sons, and not daughters, are the vehicles for this goal remains to be seen.

In addition to being a prevalent and fascinating phenomenon in itself, our research has tested whether children's developing understanding of gender is related to this phenomenon. Indeed, we found that a greater understanding of gender stability as well as positive gender identification were associated with wearing gender-stereotypical clothing (e.g., greater degree of masculinity/femininity) (Halim et al., 2014). Surprisingly, parents' reports of how much they preferred and felt comfortable with their child's masculine or feminine clothing were not associated with children's actual gender-typed dress. In addition, parents reported that children, at ages 4 and 5, were influential in picking out their clothing choices and had more say about the day's outfit than parents did on average (Halim et al., 2014).

Overall, these research studies suggest that, normatively, early childhood is a time of growing identification with and investment in a gender identity, and that by preschool this identification is characterized by gender rigidity. Children show rigidity across several domains including in their cognitions, intergroup attitudes, and behaviors. Further, in line with cognitive theories of gender development, there is evidence that children's growing awareness, understanding, and knowledge about gender can account for some of the variability in this rigidity.

New empirical findings: Longitudinal look at gender-typed appearance. We end this section with one last example of how early childhood is characterized by gender rigidity, while also giving a glimpse of approaching gender flexibility in middle childhood. Thus far, we have summarized various cross-sectional studies and short-term longitudinal studies from different developmental periods and have pieced them together as a mosaic. Yet this approach has limitations in that we cannot be sure of what the actual developmental trajectory from early to middle childhood looks like. To address this limitation, we conducted a study following the 243 children from the CRCDE sample (Dominican-, Mexican-, and African-American) from age 2 through 6 and observed their gender-typed appearance each year. Through this approach, we were able to directly examine change over time from toddlerhood to the early stages of middle childhood. In a previous paper we examined trajectories of gender-typed appearance in this sample from age 3 to 5 (Halim, Ruble, Tamis-LeMonda, & Shrout, 2013). Here, we extend our analysis to two more waves of data for substantially the same sample such that it encompasses an age at which gender knowledge is first emerging and an age at which children are on the cusp of entering middle childhood.

To observe children's gender-typed appearances we coded videos of children's appearance during their annual interviews. Two independent raters coded the presence (0 = Not present, 1 = Present) of gender-typed colors (e.g., pink for girls), fabrics/fit (e.g., chiffon for girls, baggy pants for boys), logos/themes (e.g., hearts and flowers for girls, trains or superheroes for boys), and formalwear (e.g., tights for girls, tie for boys). For girls we additionally coded the presence of dresses/skirts, trendy clothes (e.g., knee-high boots), jewelry, and feminine hair accessories. For boys we additionally coded sports-themed clothes and masculine shoes (e.g., basketball shoes) (Halim, Ruble, Tamis-LeMonda, & Shrout, 2013).

We first tested whether children showed increases followed by decreases in gender rigidity in their gender-typed appearance across ages 2 through 6 by using a multilevel model. As hypothesized, the model revealed significant change over time in children's gender-typed appearance. More specifically, we found significant effects for each linear, quadratic, and cubic trends (see Figures 2 and 3). The figures show that children's appearances became increasingly gender-stereotypical from age 2 to age 3 or 4 depending on which group is examined. Following this peak, children's appearances looked less gender-stereotypical from age 3 or 4 to age 5. For the sample as a whole, there was no change in gender-typed appearance from age 5 to 6. Overall, this longitudinal study suggests that, for appearance, children generally increased and then decreased in gender rigidity across early childhood, as cognitive theories would predict. Further, there was no significant interaction between time and ethnicity, suggesting that these trends were robust across ethnic group.

In contrast, the data did reveal that the linear time trend for girls was more negative than was the linear time trend for boys (Figure 2). This finding might suggest that girls become more flexible in their gender-typed appearance compared to boys as they approach middle childhood. Greater flexibility in girls compared to boys has been found in other domains as well – such as in the endorsement of gender stereotypes, and gender-typed activities (McHale, Shanahan, Updegraff, Crouter, & Booth, 2004; Ruble & Martin, 1998). It is possible that society might allow girls to be more flexible in their dress compared to boys. Most people readily accept girls wearing pants, for example, but boys wearing dresses would likely cause a greater stir and even social punishment (Cohen-Kettenis, Owen, Kaijser, Bradley & Zucker, 2003; Thorne, 1993; Zucker, 1990). Girls' greater flexibility in dress might portend girls' identification with being a tomboy, a somewhat common phenomenon that we will discuss in the next section.

Overall, these findings suggest that during early childhood children's gender-typing is not static, but a dynamic construct that increases and decreases in rigidity. Children's appearances became more gender-stereotypical from age two to age three or four and then relaxed as they approached ages 5 and 6. These trajectories were robust across both girls and boys and across three ethnic groups, thus showing consistent support for cognitive theories of gender development. Children's appearance became more and then less stereotypical over time, perhaps in accordance with changing understanding and awareness of gender and other social cognitive developments (e.g., see Halim et al., 2014).

Middle childhood: A shift towards gender flexibility. As our example with gender-typed appearance suggests, whereas early childhood is generally a time of gender rigidity, as children approach middle childhood (approximately between the ages of 6 and 10), they tend to become more flexible in their gender-typing. For example, in terms of their cognitions, children's endorsement of gender stereotypes tends to decline (Blakemore, 2003; Carter & Patterson, 1982; Crouter, Whiteman, McHale, & Osgood, 2007; Huston, 1983; Marantz & Mansfield, 1977; Urberg, 1982). One study followed German children longitudinally from ages 5 to 10 and found a decline in the endorsement and belief in gender stereotypes (Trautner et al., 2005). Some studies suggest that this shift towards flexibility in gender stereotypes is greater for girls than it is for boys (Miller, Lurye, Zosuls, & Ruble, 2009; O'Brien, Mistry, Hruda, Caldera, & Huston, 2000; Signorella et al., 1993).

We know less about whether children's gender intergroup attitudes grow more flexible in middle childhood and results are somewhat inconsistent. One cross-sectional study of kindergarten to 6<sup>th</sup> graders in Montreal showed that, in some ways, children became increasingly flexible with age in applying evaluative stereotypes (whether girls or boys are mean, nice, smart,

etc.) (Powlishta et al., 1994). That is, older children were more likely to apply positive and negative traits to *both* boys and girls compared to younger children. However, in the same study, on other measures of intergroup attitudes, there were no clear developmental trends, and in some cases, older children appeared to be more biased than were younger children, such as in their peer nominations of classmates with whom they would most and least like to interact.

Generally, gender segregation remains strong in middle childhood, with girls preferring girls and boys preferring boys (Thorne, 1993; Maccoby, 1998), as these peer nominations reflect. More recent work on ethnically diverse American children, including a substantial number of Latino and other ethnic minority children, also does not present a clear picture on the developmental patterns of gender intergroup bias (Halim, Martin, Zosuls, Ruble, & Andrews, in preparation). Kindergarteners, second graders, and fourth graders were followed over one year. Over the course of the year, each cohort showed change, such that applying negative traits to the other gender decreased and applying positive traits to other gender increased, which aligns with the expectation of greater gender flexibility at later ages. Cross-sectionally, younger cohorts would also be expected to show more evaluative stereotyping of the other gender compared to older cohorts. However, the data did not support this prediction. Thus findings for the cross-sectional and longitudinal analyses were inconsistent.

Surveying the literature, across studies, overall, older children appear to be more tempered than younger children in their positive evaluations of their own gender group. For example, a girl might recognize that not *all* girls are necessarily nice, smart, and friendly. However, attitudes toward the other gender might continue to be biased, although less biased than at previous ages, and gender segregation persists. It is possible that because girls and boys spend so much time playing and interacting with own-gender peers and so much time *not* playing

or interacting with other-gender peers (Maccoby, 1998; Martin & Fabes, 2001), they lack a sense of self-efficacy in navigating relationships with other-gender peers (Zosuls, Field, Martin, Andrews, & England, 2014). Research we have conducted on a construct we have termed gender-based relationship efficacy (Zosuls et al., 2014) suggests that children might continue to regard the opposite gender as "the other" and feel a sense of discomfort with other-gender children during elementary school because they lack confidence in their ability to understand and effectively interact with those peers. In other words, girls and boys might not "hate" each other, but they might prefer their own gender because their experiences have made them feel like there is a gulf between their own gender and the other gender.

In terms of behavior, our research indicates a shift towards flexibility, although more for girls than for boys. In contrast to early childhood, when pink frilly dresses are rampant, a substantial number of girls begin to self-identify as tomboys. In a sample of 5- to 13-year-old girls, a surprisingly large proportion, about one-third unequivocally responded that they were tomboys (Ahlqvist, Halim, Greulich, Lurye, & Ruble, 2013). Another third said they were "sort of" or "kind of" tomboys. Other cross-sectional research corroborates these numbers (Martin & Dinella, 2012). Further, in retrospective reports, about one-third to three-quarters of women claimed they were tomboys in childhood (Burn, O'Neil, & Nederend, 1996; Hyde, Rosenberg, & Behrman, 1977; Morgan, 1998; Plumb & Cowan, 1984). Thus, identifying as a tomboy is a common phenomenon in middle childhood and tends to be the most common between the ages of 7 and 10 (Ahlqvist et al., 2013).

Who are these tomboys and what does it mean to be a tomboy? Some research suggests that tomboys reject female-typed interests and female playmates (Carr, 2007; Saghir & Robins, 1973). However, most studies find that tomboys do not necessarily reject female-typed interests

and female playmates, but do show higher levels of interests and play with male-typed activities and male playmates compared to traditional girls (Ahqlvist et al., 2013; Bailey, Bechtold, & Berenbaum, 2002; Martin & Dinella, 2012; Plumb & Cowan, 1984). However, although self-identified tomboys do not necessarily reject female-typed activities, they do prefer them at a lower level compared to traditional girls (Ahqlvist et al., 2013). It is possible that girls explicitly come to value activities associated with boys because, in middle childhood, they begin to sense that males have higher status than females (Carr, 1998). They might also want to distance themselves from being "girly girls", whom peers might consider to be weak, as females, in general, are stereotyped as weak (Kite et al., 2008). Regardless of the motivation behind tomboys' orientations, tomboys do seem to encapsulate gender flexibility – they can navigate both male and female-typed activities and male and female peers.

Interestingly, boys do not show a comparable shift in being able to navigate female-typed activities and wanting to play with girls (Ruble & Martin, 1998). That is, there is no equivalent to the tomboy phenomenon for boys in middle childhood, a point underscored by the lack of an equivalent label to "tomboy" in the English language ("sissy" has a negative connotation). It is possible that boys flee from femininity in fear of being bullied or teased by others (Thorne, 1993; Zucker, 1990), as boys tend to experience more pressure to conform to gender norms than do girls (Egan & Perry, 2001). Alternatively, in middle childhood both boys and girls might begin to learn that males have higher status than females in society and as a result, both genders might gravitate toward masculinity (Halim et al., 2011).

Social cognitive changes corresponding to gender flexibility. Cognitive theories of gender development propose that developments in social cognitions account for the greater flexibility seen in gender cognitions and gendered behavior (Halim, Ruble, & Amodio, 2011).

Several changes might soften the clearly marked boundaries between "boy" and "girl" and encourage flexibility in gender category distinctions. By age 5 to 7 years, children grasp a full understanding of gender constancy, knowing that their gender will remain the same over time (e.g., boys grow up to be men) and despite superficial transformations (e.g., changes in hair and clothing; Szkrybalo & Ruble, 1999). Children also increasingly are able to classify an object across multiple dimensions (e.g., color and shape; Piaget, 1965). Thus, they can classify an individual as not only a girl, but also a student or an athlete. Children also tend to "essentialize" gender less in middle compared to early childhood (Gelman & Taylor, 2000). Essentialism includes the belief that there are some essential non-observable features that define males versus females and that these features are biologically based (e.g., there is "girl blood" and "boy blood" and girls and boys are fundamentally different). For example, younger versus older children are more likely to say that a baby girl who grew up with all males and never interacted with a female would persist in preferences for tea sets versus toy trucks (Taylor, Rhodes, & Gelman, 2009). Overall, these social cognitive developments might give children the understanding that gender is relatively permanent, gender is a part of one's identity, but not necessarily all encompassing of one's self-concept, and that girls and boys share similarities. This knowledge might encourage children to become more gender flexible and become more tolerant of gender flexibility in others.

Along with these developments, children increasingly recognize heterogeneity *within* gender categories. That is, they understand that not all girls have to be the same and not all boys have to be the same. As children progress from early to middle childhood, they better understand traits as being dimensional (e.g., "a little feminine" or "very feminine") instead of being categorical (e.g., "feminine" or "not feminine") (Heyman & Gelman, 1999, 2000; Gonzalez,

Zosuls, & Ruble, 2010; Martin, 1989; Martin, Woods, & Little, 1990). In addition, children are better able to subgroup social groups, although, to date, subgrouping has only been shown among preadolescents (Susskind, 2007; Verkuyten et al., 1995). We can speculate that in middle childhood, children begin to understand that boys, are not all just boys, but that there are different subgroups of boys, such as more masculine boys and more feminine boys, even if they do not commonly apply labels to these subgroups.

More work is needed to determine whether these social cognitive developments directly predict more gender flexibility in children. To date, most work has examined the links between gender constancy and gender-typing, as well as a few studies on multiple classification skills and gender stereotyping (Bigler, 1995; Bigler & Liben, 1992; Halim, Ruble, Tamis-LeMonda, Shrout, & Amodio, 2014). These studies have found evidence that gains in social cognition do indeed relate to gender flexibility. However, no work to date has touched upon other areas of social cognition (e.g., subgrouping, understanding of traits) and connections with gender flexibility.

# Determinants of Individual and Group Differences in Gender-Typing: Family, Media, and Culture

Thus far we have discussed normative changes in gender-typing from early to middle childhood. We have also discussed in detail how cognitive development and self-socialization play a role in shaping this trajectory of gender rigidity to gender flexibility. It is important to remember that along with these normative changes, children do show individual and group variation. For example, although most children increase in gender-typed dress from age three to four, some children and some groups remain high in gender-typed dress compared to their peers at both ages four and five. Similarly, children who are low in gender-typed dress compared to

their peers remain low at both ages 4 and 5 (Halim et al., 2013). What factors might influence this variation? We will now discuss three factors we have identified based on our own recent research: family, media, and culture.

**Family and media.** Only a relatively small body of research has investigated the role of parents' gender attitudes on children's gender development. Interestingly, fathers' traditional gender role attitudes have been associated with children's early gender category knowledge (Fagot & Leinbach, 1989; Weinraub et al., 1984), whereas results with mothers have been mixed. Some studies have found no relation between mothers' gender role attitudes and children's gender category knowledge (Fagot & Leinbach, 1989; Weinraub et al., 1984), and one study found that mothers with more traditional gender role attitudes had children who were more likely to pass a gender labeling task (Fagot et al., 1992). The more consistent findings involving fathers might also indicate that the relation between mothers' attitudes and children's gender labeling is, in fact, weaker and more difficult to detect. Studies investigating these links have typically used popular gender role attitude scales, but have not assessed attitudes that more directly relate to parents' responses to their children's everyday behaviors (e.g., playing with toys stereotyped for the other gender). Thus, in one of our studies we assessed two forms of mothers' gender-related attitudes: gender role attitudes (i.e., concerning marital roles and child rearing) and attitudes about children's counter-stereotypic behaviors (Zosuls, 2008).

First, we found that African American mothers held the least traditional gender role attitudes, and Mexican immigrants held the most traditional attitudes. However, in the case of attitudes about children's counter-stereotypic behaviors, African American mothers of sons expressed the most negative attitudes about counter-stereotypic behaviors.

Next, we investigated whether the two different types of attitudes would differentially relate to children's gender category knowledge and gender-typed behaviors at 24 months. We expected that gender role attitudes might be more likely to reflect a range of parent behaviors that make gender distinctions more salient (e.g., household division of labor) and thus support the acquisition of gender category knowledge. Indeed, we found that mothers who had more traditional gender role attitudes had children with a greater level of knowledge of gender labels that are applied to children (i.e., girl, boy). On the other hand, no associations were found between mothers' attitudes about counter-stereotypic behaviors and children's gender category knowledge. However, we did find a link between mothers' attitudes about children's counter-stereotypic behaviors and mothers' reports of their children's gender-typed behaviors. We were somewhat puzzled that this measure did not show a relation with children's observed play behaviors, but speculate that such effects might have be difficult to detect at such a young age when gender-typed preferences and maternal enforcement of gender norms might not yet be particularly strong.

In another study, we examined two household characteristics thought to potentially affect children's gender-typing and gender cognitions: household division of labor and television exposure. One observable, concrete behavior that young children might be aware of is the division of household chores between mothers and male partners. If mothers do more housework than fathers, and if children and other people view these chores negatively, then children might become more aware that gender is a salient, meaningful category. Further, children might become aware that females have a disadvantaged and lower status position in society compared to males. In these traditional households where women do the majority of the housework, children might be more likely to observe breadwinner fathers coming home from "important"

jobs and thus view males as more powerful and important. A few studies provide evidence for this connection. Young children from more egalitarian households, where both parents do more equal amounts of housework, tend to have less knowledge about gender and more stereotype flexibility than do children from less egalitarian households (Baruch & Barnett, 1981; Weinbraub et al., 1984). Perhaps when housework is divided relatively equally, and not on the basis of gender, then gender is less of a salient and functional category to young children. Our own research examined gender public regard, children's awareness of how others view their gender group. At age 4, most children were relatively unaware that others value males more than females. We suspect that an explicit awareness might be apparent much later, such as at ages 10 or 11, due to developments in social cognition and more experience (Brown & Bigler, 2004; Liben, Bigler, & Krogh, 2001). However, even at age 4, some children did show sensitivity to contextual factors in their public regard. Among four-year-olds, for girls, specifically, and not for boys, unequal division of labor, with mothers doing more than their male partners, was associated with girls believing that others value males more than females (Halim, Ruble, & Tamis-LeMonda, 2013). We found this connection between parental division of labor and gender public regard across girls from four ethnic groups.

In addition to division of labor, another contextual factor that can affect children's gender-typing is media exposure. Television has a major presence in the households of many children. We found that, on average, four-year-old children from diverse ethnic backgrounds spent between 1 and 4 hours a day watching television (Halim et al., 2013), a substantial daily activity. Further, although programming has strived to make gains in reducing the portrayal of gender stereotypes, television in general, including child-directed television, is still rife with gender stereotypes. Overall, television portrays males as more important and capable

(Rivadeneyra, 2011). Males are represented more (Baker & Raney, 2007; Davis, 2003; Paek, Nelson, & Vilela, 2011) and are more likely to be protagonists than are females (Larson, 2001). Male characters are also more likely to show ingenuity, achieve goals, and show more control compared to female characters (Aubrey, & Harrison, 2001; Brown, 1998; Signorielli, 2012). Thus, exposure to more television content might lead children to gain an earlier understanding that males have higher group status than do women. Indeed, in our study of four-year-olds, we found this link. For both girls and boys, and across ethnic groups, more television viewing was associated with reporting that others consider boys to be better than girls (Halim et al., 2013).

We have included just a few examples of how family context and the media can shape individual differences in children's gender-typing. Yet these examples show that some children are sensitive to the messages and cues that surround them; these messages and cues teach children gender stereotypes and the positions of males and females in society and can influence children's early gender identities in terms of beliefs about how others view their gender.

Culture. Beyond family and media, the larger cultural context can also potentially influence children's gender-typing. Groups can differ in their cultural values and histories, which might affect aspects like the importance of gender to a group, which dimensions of gender-typing are emphasized, and gender stereotyping. For example, in many Latino cultures *machismo* (male dominance) and *marianismo* (female submissiveness) are pervasive constructs that might be taught in traditional households. Traditional Latino households uphold stricter gender roles and put them in practice, for example, by assigning different responsibilities and liberties for girls and boys (Guilamo-Ramos et al., 2007; Suárez -Orozco & Qin, 2006). East Asian cultures also have a history of supporting male dominance through the passing down of Confucian ways of thinking (Fang, 2000; Hofstede, 1980). On the other hand, a few studies have suggested that

African American families tend to promote more gender equality. Mothers and fathers share more equal roles in the home than do mothers and fathers from White backgrounds (Jarrett, Roy, & Burton, 2002; Stanback, 1985), and African American parents report that they try to raise their girls to be strong (Hill, 2002; Collins, 1990). Thus, in African American children, we might see less gender-typing than in other children. Overall, unfortunately, as we have mentioned earlier, we generally know little about how different cultural groups operate in terms of gender.

However, there have been a few studies that have begun to look at cultural differences in gender development. Here we will discuss our own recent work on the CRCDE sample. We acknowledge that our findings only pertain to one specific sample, but we hope that they will contribute to a future body of work where more studies will begin to explicitly examine cultural influences on gender development.

Cultural similarities. Our data from four different ethnic groups from age 2 through 6, overwhelmingly point to many similarities among ethnic groups. Across children from Latino, Chinese, and African American backgrounds, we found no differences in levels of gender identification (private regard and public regard), certain gender-typed behaviors (frequency of dress-up play, gender-typed play, and cross-gender-typed play), gender cognitions (gender constancy), and certain gender attitudes (trait judgments of girls and boys, intergroup behavior towards girls and boys) (Halim, 2012). Across ethnic groups, children often also showed similar developmental trajectories, such as in gender-typed appearance, as mentioned above, in decreasing engagement in cross-gender-typed toy play, in accumulating gender stereotypes, and in growing in their understanding of gender constancy. Further, when we looked at connections among variables, such as connections between gender cognitions and gender-typed behavior or intergroup attitudes, these connections were largely similar across ethnic groups. Overall, then,

we have gathered together a great amount of data that assessed multiple measures of gendertyping across several ages through several modes of assessment, including parent interviews, child interviews, and behavioral observations. These data together form a picture of gender development that underscores commonalities among children of different ethnic backgrounds.

It is possible that these similarities might, in part, stem from similarities in parent socialization of gender across ethnic groups. We extensively interviewed a small subset of the CRCDE mothers in the study (African American, Mexican-, and Dominican-immigrant mothers) when their children were one year of age (Baeg, 2013; Yoshikawa, 2011). Across ethnic groups, mothers similarly expressed expectations for and beliefs about boys and girls that were largely gender stereotypical (Baeg, 2013). For example, girls were consistently viewed as compliant, gentle, and emotionally sensitive, whereas boys were viewed as rebellious, unemotional, and independent. Mothers shared the idea that they should be careful with girls and use softer disciplinary strategies with girls, but with boys they "have to be aggressive" and "can be a little bit rougher" (p. 23). Mothers' gender-stereotyped beliefs about boys and girls might influence their socialization practices and lead to a confirmation of their beliefs (Tenenbaum & Leaper, 2002).

Cultural differences. Although we observed mostly similarities across ethnic groups, some interesting ethnic group differences did emerge in our research. One group, in particular, stood out. Dominican-American children showed especially high levels of gender rigidity in early childhood. Dominican-American children, across time, showed greater gender-typed appearance compared to Mexican- and African-American children (Figure 3). Mexican- and African-American children did not significantly differ from each other. The consistency of this group difference was remarkable. Looking within age, only at age 2, did Dominican-American

children look similar to the other children in terms of their level of gender-typed appearance. Otherwise, at each ages 3, 4, 5, and 6, Dominican-American children had heightened levels of gender-typed appearance. These Dominican-American children also exhibited greater knowledge of gender stereotypes, heightened gender identification (being very happy to be one's gender and finding gender to be important to them), and showed more bias in some components of gender attitudes compared to Mexican- and African-American children (Halim, 2012). More research is needed to understand this ethnic group difference. Scholars on the Dominican diaspora point to strongly defined gender roles in traditional Dominican culture (Duany, 2008; Guilamo-Ramos et al., 2007; Hendricks, 1974; Suárez-Orozco & Qin, 2006). Indeed, in our qualitative interviews, some Mexican immigrant and African American mothers explicitly mentioned encouraging more male-typed and tomboy qualities in their daughters, such as being physically active, independent, and playing with cars and action figures (Baeg, 2013). However, none of the Dominican immigrant mothers interviewed mentioned support for more masculine or tomboy behavior in their daughters. Perhaps Dominican-American children are picking up on this emphasis on gender as a category and the notion that appearances are linked to gender identity, and quickly incorporate gender into their overall self-concepts. Gender is generally important to most young children, but possibly even more important to young Dominican-American children.

#### **Future Directions**

We have shown that across early to middle childhood, there are normative shifts in gender-typing, with children increasing in gender rigidity as they first learn about gender, then approaching flexibility as they develop in their understanding about gender and about people in general. It would be interesting to explore whether this trajectory and the underlying social cognitive processes involved could serve as a broader model of general social identity

development. For example, religious identities are salient to young Israeli and Arab children (Diesendruck & haLevi, 2006). Would the formation of a religious identity follow the same trajectory of rigidity followed by flexibility, though with shifts at different ages? Can current models of ethnic/racial identity development map onto a similar expected trajectory?

Related to these questions is whether the gender rigidity we observed reflects general cognitive rigidity in young children or could be found during any developmental period when a social identity is emerging. Anecdotally, sometimes parents mention appearance rigidity in their children, but without the item of clothing having to be gender-typed (e.g., wearing only yellow, day after day). Perhaps there is a certain developmental period when children are more likely to exhibit compulsions in general (DeLoache, Simcock, & Macari, 2007). In our own exploration of whether general cognitive skills and cognitive flexibility (Zelazo, 2006) are associated with appearance rigidity and other forms of gender-typing, we have not found consistent relations. However, future research is needed to more fully understand whether these phenomena are tied to some other cognitive or motivational process.

As many children seem preoccupied with appearance, it is also important to contemplate the implications of this preoccupation for other aspects of development, both concurrently and later on in life. What is particularly troubling are the number of studies that have shown that adolescents and adults who are highly concerned with physical appearance, or whose self-worth is contingent on physical appearance, are at greater risk to experience a plethora of negative outcomes. These negative outcomes include depression and psychological distress (Eccles, Barber, Jozefowicz, Malenchuk, & Vida, 1999; Hyde, Mezulis, & Abramson, 2008), alcohol and drug use (Crocker, 2002), sexual assault victimization (Crocker, 2002), lower intrinsic motivation and self-efficacy (Gapinski, Brownell, & LaFrance, 2003), and lower achievement

and motivation in math and science (Fredrickson, Roberts, Noll, Quinn, & Twenge, 1998; Kessels, 2005; Kiefer, Sekaquaptewa, & Barcqyk, 2006; Lobel, Slone, & Winch, 1997). It is also possible that both boys and girls who are highly concerned with their appearance might be more prone to eating disorders, steroid use, or engaging in other extreme attempts to change their appearance including plastic surgery. To date, few studies have examined whether not only adolescents and adults, but young children with a preoccupation appearance might also be at risk for negative outcomes. We further need to understand whether a preoccupation with appearance is stable across development and whether these young children will be at greater risk for maladjustment in adolescence and in emerging adulthood.

Thus far we have discussed the normative population in terms of a striving towards gender conformity especially in early childhood. However, it is important to recognize that a substantial number of children do not show gender rigidity in one dimension or another, or perhaps across dimensions. For example, one third of girls and half to two-thirds of boys do not show appearance rigidity (Halim et al., 2014). Anywhere from 3 to 7% of children in our CRCDE ethnic minority sample felt especially negatively about being a girl or boy (Halim, 2012) and other studies find that between 6 to 23% of children feel dissimilar to others in some way based on gender (Martin et al., 2015). A small number of children also experience gender dysphoria (Zucker & Bradley, 1995), claiming, sometimes at young ages, that, despite their designated sex they *are* the other sex (e.g., boys saying that they are girls or vice versa). Further, these children often prefer colors that are associated with the other gender (Chiu et al., 2006). Future research should aim to understand these populations more deeply. For example, what other characteristics do these populations possess and what are their environments like? Research has suggested that biological factors like hormonal environments during the prenatal period can

play a role (e.g., Berenbaum & Hines, 1992). It would be interesting to see how different factors, like biology and socialization, interact in contributing to gender nonconformity. Research has also indicated that these non-normative populations are at risk for psychological distress, low self-worth, and other mental and physical health problems (Egan & Perry, 2001; Lick, Durso, & Johnson, 2013; see Halim & Bryant, 2015), possibly due to teasing and bullying from peers, feeling pressure to conform to gender norms, and/or inner turmoil over gender identification. These risks underscore the importance of understanding these populations.

Finally, we have described some interesting cultural differences. Future research should expand its reach in terms of what groups are tested. For example, we were not able to compare ethnic minority children to White children, as it was difficult to recruit a White sample with an equivalent socioeconomic background in our locale. Thus we often had to infer that our sample was similar or different to what researchers have established in prior research. Firmer conclusions could be drawn if direct comparisons could be made. Similarly, to disentangle race/ethnicity from socioeconomic background, it would be interesting to explore early gender development in middle-class Latino and African American children as well.

In addition to describing cultural differences, we speculated on the causes of these differences. It would be interesting to test some of these speculations. For example, does the emphasis on boys' appearance in lower-income families stem from a desire to be respected by others? If so, why are sons and not daughters the vehicle for this desire? For Dominican-American children, we speculated that their immediate environments might stress gender more. What are the actual practices by which the environments convey these messages? Future studies should take a more fine-grained look at the environments of children from different cultural backgrounds to explain the interesting cultural differences that we observed.

### Conclusion

In this chapter we have demonstrated that gender identity is not static, but a dynamic, changing psychological phenomenon that fluctuates from early to middle childhood. We noted that these fluctuations align with the predictions of cognitive theories of gender development, which emphasize children's active role in shaping their own gender development. Early on, children become attuned to how society divides the world according to a male and female dichotomy. They are alert to the ways that girls and boys are defined, accumulate knowledge of these differences and form stereotypes, and attempt to conform to those stereotypes. With these cognitive changes, children often follow gender stereotypes in their play, in their dress, and in their peer choice. Remarkably, as their knowledge of gender deepens and their understanding of people in general becomes more sophisticated, there is a shift towards flexibility. Many girls claim they are full-fledged tomboys and both girls and boys tend to endorse gender stereotypes less than they did previously and are more open to being friends with others who violate gender norms. Thus the period from early to middle childhood is a time of change in gender development.

Along with these normative changes, individual and group differences were observed. Some children wore highly stereotypical dress, others less so. Some children were more aware of how society perceives males versus females, whereas others were less aware. Family, the media, and culture each play a role in influencing these early individual differences. Hence, although we stressed overall normative changes in children's gender development, it is important to remember that there is variation around these changes influenced by the surrounding context. Nevertheless our research suggests that, across ethnicity, gender, and socioeconomic lines,

gender colors many aspects of children's daily activities, and children actively partake in this ongoing consideration of gender and what gender personally means to them and to others.

## **Bibliography**

- Ahlqvist, S., Halim, M. L., Greulich, F. K., Lurye, L. E., & Ruble, D. (2013). The potential benefits and risks of identifying as a tomboy: A social identity perspective. *Self and Identity*, *12*(5), 563-581. doi:10.1080/15298868.2012.717709
- Arredondo, M., Walsh, A., Baeg, S. A., Halim, M. L., Ruble, D. N., Ng, F. F., Kwak,
  K., & Tamis-LeMonda, C. S. (2014, April). *Gender appearance rigidity in American and Asian 4-year-olds*. Poster presented at the Western Psychological Association Convention,
  Portland, OR.
- Arthur, A. E., Bigler, R. S., Liben, L. S., Gelman, S. A., & Ruble, D. N. (2008). Gender stereotyping and prejudice in young children: A developmental intergroup perspective. In S.
  R. Levy, & M. Killen (Eds.), (pp. 66-86). New York, NY, US: Oxford University Press.
- Baeg, A. (2013). A qualitative study exploring gender role beliefs and values of African American, Dominican, and Mexican mothers. Unpublished master's thesis, New York University, New York, New York.
- Bailey, J. M., Bechtold, K. T., & Berenbaum, S. A. (2002). Who are tomboys and why should we study them? *Archives of Sexual Behavior*, *31*(4), 333-341.
- Baker, K., & Raney, A. A. (2007). Equally super?: Gender-role stereotyping of superheroes in children's animated programs. *Mass Communication & Society*, 10(1), 25-41.
- Baruch, G. K., & Barnett, R. C. (1981). Competence-related behaviors of preschool girls. *Genetic Psychology Monographs*, 103(1), 79-103.
- Berenbaum, S. A., & Hines, M. (1992). Early androgens are related to childhood sex-typed toy preferences. *Psychological Science*, *3*(3), 203-206.

- Bigler, R. S. (1995). The role of classification skill in moderating environmental influences on children's gender stereotyping: A study of the functional use of gender in the classroom. *Child Development*, 66(4), 1072-1087.
- Bigler, R. S., & Liben, L. S. (1992). Cognitive mechanisms in children's gender stereotyping: Theoretical and educational implications of a cognitive-based intervention. *Child Development*, *63*(6), 1351-1363.
- 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*, 162-166.
- Blakemore, J. E. O. (2003). Children's beliefs about violating gender norms: Boys shouldn't look like girls, and girls shouldn't act like boys. *Sex Roles, 48*(9-10), 411-419.
- Brown, C., & Bigler, R. S. (2004). Children's perceptions of gender discrimination.

  Developmental Psychology, 40, 714–726. doi:10.1111/j.1467-8624.2005.00862.x
- Burn, S. M., O'Neil, A. K., & Nederend, S. (1996). Childhood tomboyism and adult androgyny. *Sex Roles*, *34*(5-6), 419-428.
- Campbell, A., Shirley, L., Heywood, C., & Crook, C. (2000). Infants' visual preference for sex-congruent babies, children, toys and activities: A longitudinal study. *British Journal of Developmental Psychology*, *18*(4), 479-498.
- Carr, C. L. (1998). Tomboy resistance and conformity: Agency in social psychological gender theory. *Gender & Society*, 12(5), 528-553.
- Carr, C. L. (2007). Where have all the tomboys gone? women's accounts of gender in adolescence. *Sex Roles*, *56*(7-8), 439-448.

- Carter, D. B., & Patterson, C. J. (1982). Sex roles as social conventions: The development of children's conceptions of sex-role stereotypes. *Developmental Psychology*, 18(6), 812-824.
- Chiu, S. W., Gervan, S., Fairbrother, C., Johnson, L. L., Owen-Anderson, A., Bradley, S. J., & Zucker, K. J. (2006). Sex-dimorphic color preference in children with gender identity disorder: A comparison to clinical and community controls. *Sex Roles*, *55*(5-6), 385-395.
- Cohen-Kettenis, P., Owen, A., Kaijser, V. G., Bradley, S. J., & Zucker, K. J. (2003).

  Demographic characteristics, social competence, and behavior problems in children with gender identity disorder: A cross-national, cross-clinic comparative analysis. *Journal of Abnormal Child Psychology*, 31(1), 41-53.
- Collins, P. H. (1990). Black feminist thought: Knowledge, consciousness, and the politics of empowerment. Boston: Unwin Hymen.
- Crocker, J. (2002). The costs of seeking self-esteem. *Journal of Social Issues*, 58(3), 597-615.
- Crouter, A. C., Whiteman, S. D., McHale, S. M., & Osgood, D. W. (2007). Development of gender attitude traditionality across middle childhood and adolescence. *Child Development*, 78(3), 911-926.
- Diesendruck, G., & haLevi, H. (2006). The role of language, appearance, and culture in children's social category-based induction. *Child Development*, 77(3), 539-553.
- Duany, J. (2008). Quisqueya on the Hudson: The transnational identity of Dominicans in Washington Heights. New York: CUNY Dominican Studies Institute.
- Eccles, J., Barber, B., Jozefowicz, D., Malenchuk, O., & Vida, M. (1999). Self-evaluations of competence, task values, and self-esteem. In N. G. Johnson, M. C. Roberts & J. Worell (Eds.), (pp. 53-83). Washington, DC, US: American Psychological Association.

- Egan, S. K., & Perry, D. G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology*, *37*(4), 451-463.
- Fabes, R. A., Martin, C. L., & Hanish, L. D. (2004). The next 50 years: Considering gender as a context for understanding young children's peer relationships. *Merrill-Palmer Quarterly*, *50*(3), 260-273.
- Fagot, B. I., & Leinbach, M. D. (1989). The young child's gender schema: Environmental input, internal organization. *Child Development*, 60(3), 663-672.
- Fagot, B. I., Leinbach, M. D., & O'Boyle, C. (1992). Gender labeling, gender stereotyping, and parenting behaviors. *Developmental Psychology*, 28(2), 225-230.
- Fagot, B. I., Rodgers, C. S., & Leinbach, M. D. (2000). Theories of gender socialization. In T.Eckes, & H. M. Trautner (Eds.), *The developmental social psychology of gender*, (pp. 65-89).New York, NY: Psychology Press.
- Fang, G. G. (2000). Exploration of filial piety of Confucianism. In D. Q. Wang (Ed.), *Research* on the oriental morality (pp. 34 44). Beijing: China Business Association Press.
- Fredrickson, B. L., Roberts, T., Noll, S. M., Quinn, D. M., & Twenge, J. M. (1998). That swimsuit becomes you: Sex differences in self-objectification, restrained eating, and math performance. *Journal of Personality and Social Psychology*, 75(1), 269-284.
- Gapinski, K. D., Brownell, K. D., & LaFrance, M. (2003). Body objectification and 'fat talk': Effects on emotion, motivation, and cognitive performance. *Sex Roles*, 48(9-10), 377-388.
- Gelman, S. A., & Taylor, M. G. (2000). Gender essentialism in cognitive development. In P. H. Miller, & E. Kofsky Scholnick (Eds.), (pp. 169-190). Florence, KY, US: Taylor & Frances/Routledge.

- Gonzalez, C. M., Zosuls, K. M., & Ruble, D. N. (2010). Traits as dimensions or categories? developmental change in the understanding of trait terms. *Developmental Psychology*, 46(5), 1078-1088.
- Guilamos-Ramos, V., Dittus, P. Jaccard, J., Johansson, M., Bouris, A., & Acosta, N. (2007).

  Parenting practices among Dominican and Puerto Rican mothers. *Social Work*, *52*, 17-30.
- Halim, M. L. (2012). Gender rigidity and flexibility in young children's gender-typed behaviors, identity, and attitudes: A cognitive theories of gender development perspective (Doctoral dissertation). New York: New York University.
- Halim, M. L., & Bryant, D. (in preparation). Gender and sexual development and health in children. In Korin, M. (Ed.), *Handbook for Health Promotion for Children and Adolescents*.New York, NY: Springer Publishing.
- Halim, M. L., Martin, C. L., Ruble, D. N., Zosuls, K. M., & Andrews, N. (in preparation).

  Affective felt gender attitudes and consequences for friendships with other-gender children.
- Halim, M. L., & Ruble, D. (2010). Gender identity and stereotyping in early and middle childhood. In J. C. Chrisler, & D. R. McCreary (Eds.), (pp. 495-525). New York, NY US: Springer Science + Business Media.
- Halim, M. L., Ruble, D. N., & Amodio, D. M. (2011). From pink frilly dresses to 'one of the boys': A social-cognitive analysis of gender identity development and gender bias. *Social and Personality Psychology Compass*, 5(11), 933-949. doi:10.1111/j.1751-9004.2011.00399.x
- Halim, M. L., Ruble, D. N., & Tamis-LeMonda, C. (2013). Four-year-olds' beliefs about how others regard males and females. *British Journal of Developmental Psychology*, *31*(1), 128-135. doi:10.1111/j.2044-835X.2012.02084.x

- Halim, M. L., Ruble, D., Tamis-LeMonda, C., & Shrout, P. E. (2013). Rigidity in gender-typed behaviors in early childhood: A longitudinal study of ethnic minority children. *Child Development*, 84(4), 1269-1284.
- Halim, M. L., Ruble, D. N., Tamis-Lemonda, C. S., Shrout, P. E., & Amodio, D. M. (2014,
  October). Gender attitudes among ethnic minority children: Consequences for intergroup behavior and social cognitive antecedents. Poster presented at the Gender Development
  Research Conference, San Francisco, CA.
- Halim, M. L., Ruble, D. N., Tamis-LeMonda, C., Zosuls, K. M., Lurye, L. E., & Greulich, F. K. (2014). Pink frilly dresses and the avoidance of all things "girly": Children's appearance rigidity and cognitive theories of gender development. *Developmental Psychology*, 50(4), 1091-1101. doi:10.1037/a0034906; 10.1037/a0034906.supp (Supplemental)
- Hapkiewicz, W. G. (1979). Children's reactions to cartoon violence. *Journal of Clinical Child Psychology*, 8(1), 30-34.
- Hendricks, G. (1974). *The Dominican diaspora: From the Dominican Republic to New York City* villagers in transition. Teachers College Press: New York.
- Heyman, G. D. (2001). Children's interpretation of ambiguous behavior: Evidence for a 'boys are bad' bias. *Social Development*, 10(2), 230-247.
- Heyman, G. D., & Gelman, S. A. (1999). The use of trait labels in making psychological inferences. *Child Development*, 70, 604-619.
- Heyman, G. D., & Gelman, S. A. (2000). Beliefs about the origins of human psychological traits. *Developmental Psychology*, *36*, 663-678.
- Hill, S. A. (2002). Teaching and doing gender in African American families. *Sex Roles*, 47(11-12), 493-506.

- Hines, M. (2010). Sex-related variation in human behavior and the brain. *Trends in Cognitive Sciences*, *14*(10), 448-456.
- Hines, M. (2010). Sex-related variation in human behavior and the brain. *Trends in Cognitive Sciences*, *14*(10), 448-456.
- Hofstede, F. (1980). Culture's consequences. London: Sage.
- Hyde, J. S., Rosenberg, B. G., & Behrman, J. A. (1977). Tomboyism. *Psychology of Women Quarterly*, 2(1), 73-75.
- Hyde, J. S., Mezulis, A. H., & Abramson, L. Y. (2008). The ABCs of depression: Integrating affective, biological, and cognitive models to explain the emergence of the gender difference in depression. *Psychological Review*, 115(2), 291-313.
- Huston, A. C. (1983). Sex-typing. In E. M. Hetherington (Ed.), P. H. Mussen (Series Ed.),Handbook of child psychology: Vol. 4. Socialization, personality, and social development(pp. 387-467). New York: Wiley.
- Jarrett, R. L., Roy, K. M., & Burton, L. M. (2002). Fathers in the "hood": Insights from qualitative research on low-income African-American men. *Handbook of father involvement:*Multidisciplinary perspectives, 211-248.
- Kessels, U. (2005). Fitting into the stereotype: How gender-stereotyped perceptions of prototypic peers relate to liking for school subjects. *European Journal of Psychology of Education*, 20(3), 309-323.
- Kiefer, A., Sekaquaptewa, D., & Barczyk, A. (2006). When appearance concerns make women look bad: Solo status and body image concerns diminish women's academic performance. *Journal of Experimental Social Psychology*, 42(1), 78-86.

- Kite, M. E., Deaux, K., & Haines, E. L. (2008). Gender stereotypes. In F. L. Denmark, & M. A. Paludi (Eds.), (pp. 205-236). Westport, CT, US: Praeger Publishers/Greenwood Publishing Group.
- Kohlberg, L. (1966). A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E. E. Maccoby (Ed.) *The Development of Sex Differences* (pp. 82-173). Stanford, CA: Stanford University Press.
- Liben, L. S., Bigler, R. S., & Krogh, H. R. (2001). Pink and blue collar jobs: Children's judgments of job status and job aspirations in relation to sex of worker. *Journal of Experimental Child Psychology*, 79, 346–363. doi:10.1006/jecp.2000.2611
- Liben, L. S., & Signorella, M. L. (1980). Gender-related schemata and constructive memory in children. *Child Development*, *51*(1), 11-18.
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521-548.
- Lobel, T. E., Slone, M., & Winch, G. (1997). Masculinity, popularity, and self-esteem among israeli preadolescent girls. *Sex Roles*, *36*(5-6), 395-408.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA, US: Belknap Press/Harvard University Press.
- Maccoby, E. E., & Jacklin, C. N. (1987). Gender segregation in childhood. In H. W. Reese (Ed.), (pp. 239-287). San Diego, CA, US: Academic Press.
- Marantz, S. A., & Mansfield, A. F. (1977). Maternal employment and the development of sexrole stereotyping in five- to eleven-year-old girls. *Child Development*, 48(2), 668-673.
- Martin, C. L. (1989). Children's use of gender-related information in making social judgments. *Developmental Psychology*, 25(1), 80-88.

- Martin, C. L., Andrews, N., England, D., Zosuls, K., & Ruble, D. (manuscript under review).

  Androgyny revisited: The development and consequences of a dual-identity view of gender typicality.
- Martin, C. L., Wood, C. H., & Little, J. K. (1990). The development of gender stereotype components. *Child Development*, *61*(6), 1891-1904.
- Martin, C. L., & Dinella, L. M. (2012). Congruence between gender stereotypes and activity preference in self-identified tomboys and non-tomboys. *Archives of Sexual Behavior*, 41(3), 599-610.
- Martin, C. L., & Fabes, R. A. (2001). The stability and consequences of young children's samesex peer interactions. *Developmental Psychology*, *37*(3), 431-446.
- Martin, C. L., Fabes, R. A., Evans, S. M., & Wyman, H. (1999). Social cognition on the playground: Children's beliefs about playing with girls versus boys and their relations to sex segregated play. *Journal of Social and Personal Relationships*, *16*(6), 751-771.
- Martin, C. L., & Ruble, D. (2004). Children's search for gender cues: Cognitive perspectives on gender development. *Current Directions in Psychological Science*, *13*(2), 67-70.
- Martin, C. L., Ruble, D. N., & Szkrybalo, J. (2004). Recognizing the centrality of gender identity and stereotype knowledge in gender development and moving toward theoretical integration:

  Reply to bandura and bussey (2004). *Psychological Bulletin*, *130*(5), 702-710.
- Martin, C. L., Ruble, D. N., & Szkrybalo, J. (2004). Recognizing the centrality of gender identity and stereotype knowledge in gender development and moving toward theoretical integration: Reply to bandura and bussey (2004). *Psychological Bulletin*, *130*(5), 702-710.

- McHale, S. M., Shanahan, L., Updegraff, K. A., Crouter, A. C., & Booth, A. (2004).

  Developmental and individual differences in girls' sex-typed activities in middle childhood and adolescence. *Child Development*, 75, 1575-1593.
- Miller, C. F., Lurye, L. E., Zosuls, K. M., & Ruble, D. N. (2009). Accessibility of gender stereotype domains: Developmental and gender differences in children. *Sex Roles*, 60(11-12), 870-881.
- Miller, C. F., Trautner, H. M., & Ruble, D. N. (2006). The role of gender stereotypes in children's preferences and behavior. In L. Balter, & C. S. Tamis-LeMonda (Eds.), (pp. 293-323). New York, NY, US: Psychology Press.
- Morgan, B. L. (1998). A three generational study of tomboy behavior. *Sex Roles, 39*(9-10), 787-800.
- O'Brien, M., Peyton, V., Mistry, R., Hruda, L., Jacobs, A., Caldera, Y., ... Roy, C. (2000).

  Gender-role cognition in three-year-old boys and girls. *Sex Roles*, 42(11-12), 1007-1025.
- Paek, H., Nelson, M. R., & Vilela, A. M. (2011). Examination of gender-role portrayals in television advertising across seven countries. *Sex Roles*, *64*(3-4), 192-207.
- Pelligrini, A. D., & Smith, P. K. (1998). Physical activity play: The nature and function of a neglected aspect of play. *Child Development*, 69(3), 577-598.
- Piaget, J. (1965). The child's conception of number. Oxford, England: W. W. Norton & Co.
- Plumb, P., & Cowan, G. (1984). A developmental study of destereotyping and androgynous activity preferences of tomboys, nontomboys, and males. *Sex Roles, 10*(9-10), 703-712.
- Powlishta, K. K. (1995). Intergroup processes in childhood: Social categorization and sex role development. *Developmental Psychology*, *31*(5), 781-788.

- Powlishta, K. K., Serbin, L. A., Doyle, A., & White, D. R. (1994). Gender, ethnic, and body type biases: The generality of prejudice in childhood. *Developmental Psychology*, 30(4), 526-536.
- Quinn, P. C., Yahr, J., Kuhn, A., Slater, A. M., & Pascalis, O. (2002). Representation of the gender of human faces by infants: A preference for female. *Perception*, *31*(9), 1109-1121.
- Rivadeneyra, R. (2011). Gender and race portrayals on spanish-language television. *Sex Roles*, 65(3-4), 208-222.
- Ruble, D. N. (1994). A phase model of transitions: Cognitive and motivational consequences. InM. P. Zanna (Ed.), (pp. 163-214). San Diego, CA, US: Academic Press.
- Ruble, D. N., & Dweck, C. S. (1995). Self-perceptions, person conceptions, and their development. In N. Eisenberg (Ed.), (pp. 109-139). Thousand Oaks, CA, US: Sage Publications, Inc.
- Ruble, D. N., Lurye, L. E., & Zosuls, K. M. (2007). Pink frilly dresses (PFD) and early gender identity. *Princeton Report on Knowledge (P-ROK)*, *2*(2).
- Ruble, D. N., & Martin, C. L. (1998). Gender development. In W. Damon, & N. Eisenberg (Eds.), *Handbook of child psychology, 5th ed.: Vol 3. social, emotional, and personality development.* (pp. 933-1016). Hoboken, NJ, US: John Wiley & Sons Inc.
- Ruble, D. N., Martin, C. L., & Berenbaum, S. A. (2006). Gender development. In N. Eisenberg, W. Damon & R. M. Lerner (Eds.), (pp. 858-932). Hoboken, NJ, US: John Wiley & Sons Inc.
- Ruble, D. N., Taylor, L. J., Cyphers, L., Greulich, F. K., Lurye, L. E., & Shrout, P. E. (2007).

  The role of gender constancy in early gender development. *Child Development*, 78(4), 1121-1136.
- Saghir, M. T., & Robins, E. (1973). *Male and female homosexuality: A comprehensive investigation*. Oxford, England: Williams & Wilkins.

- Saghir, M. T., & Robins, E. (1973). *Male and female homosexuality: A comprehensive investigation*. Oxford, England: Williams & Wilkins.
- Serbin, L. A., Poulin-Dubois, D., Colburne, K. A., Sen, M. G., & Eichstedt, J. A. (2001). Gender stereotyping in infancy: Visual preferences for and knowledge of gender-stereotyped toys in the second year. *International Journal of Behavioral Development*, 25(1), 7-15.
- Serbin, L. A., Powlishta, K. K., & Gulko, J. (1993). Sex roles, status, and the need for social change. *Monographs of the Society for Research in Child Development*, *58*(2), 93-95.
- Servin, A., Bohlin, G., & Berlin, L. (1999). Sex differences in 1-, 3-, and 5-year-olds' toy-choice in a structured play-session. *Scandinavian Journal of Psychology*, 40(1), 43-48.
- Signorella, M. L., Bigler, R. S., & Liben, L. S. (1993). Developmental differences in children's gender schemata about others: A meta-analytic review. *Developmental Review*, *13*(2), 147-183.
- Signorielli, N. (2012). Television's gender-role images and contribution to stereotyping: Past, present, future. In D. G. Singer, & J. L. Singer (Eds.), (pp. 321-339). Thousand Oaks, CA, US: Sage Publications, Inc.
- Suárez-Orozco, C., & Qin, D. B. (2006). Gendered perspectives in psychology: Immigrant origin youth. *International Migration Review*, 40(1), 165-198.
- Stanback, M. H. (1985). Language and Black woman's place: Evidence from the Black middle class. In P. A. Treichler, C. Kramarae, & B. Stafford (Eds.), *For alma mater: Theory and practice in feminist scholarship* (pp. 177-193). Urbana: University of Illinois Press.
- Susskind, J. E. (2007). Preadolescents' categorization of gender and ethnicity at the subgroup level in memory. *British Journal of Developmental Psychology*, *25*(2), 213-225.

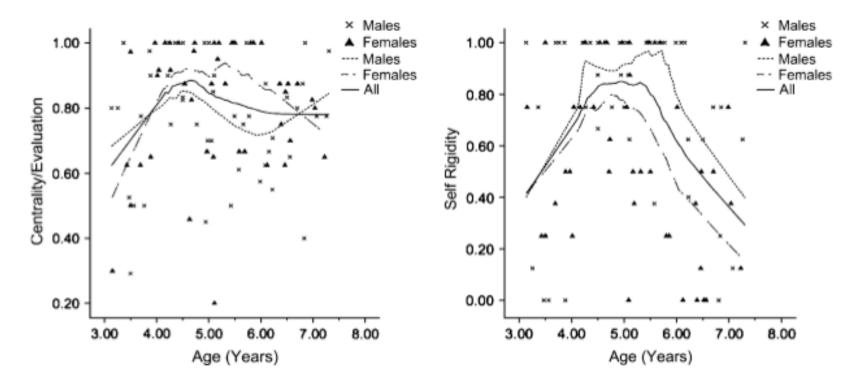
- Susskind, J. E., & Hodges, C. (2007). Decoupling children's gender-based in-group positivity from out-group negativity. *Sex Roles*, *56*(11-12), 707-716.
- Szkrybalo, J., & Ruble, D. N. (1999). 'God made me a girl': Sex-category constancy judgments and explanations revisited. *Developmental Psychology*, *35*(2), 392-402.
- Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In J. T. Jost, & J. Sidanius (Eds.), (pp. 276-293). New York, NY, US: Psychology Press.
- Taylor, M. G., Rhodes, M., & Gelman, S. A. (2009). Boys will be boys; cows will be cows: Children's essentialist reasoning about gender categories and animal species. *Child Development*, 80(2), 461-481.
- Tenenbaum, H. R., & Leaper, C. (2002). Are parents' gender schemas related to their children's gender-related cognitions? A meta-analysis. *Developmental Psychology*, *38*(4), 615-630.
- Thorne, B. (1993). *Gender play: Girls and boys in school*. Piscataway, NJ, US: Rutgers University Press.
- Tobin, D. D., Menon, M., Menon, M., Spatta, B. C., Hodges, E. V. E., & Perry, D. G. (2010). The intrapsychics of gender: A model of self-socialization. *Psychological Review*, *117*(2), 601-622.
- Trautner, H.M., Ruble, D.N., Cyphers, L., Kirsten, B., Behrendt, R., & Hartmann, P. (2005).Rigidity and flexibility of gender stereotypes in childhood: Developmental or differential.*Infant and Child Development*, 14, 365-380.
- Urberg, K. A. (1982). The development of the concepts of masculinity and femininity in young children. *Sex Roles*, 8(6), 659-668.
- U.S. Census Bureau. (May 17, 2012). Most children younger than age 1 are minorities, Census Bureau reports. *Newsroom*. Retrieved from

- https://www.census.gov/newsroom/releases/archives/population/cb12-90.html
- U.S. Census Bureau. (July 30, 2013). Profile American facts for features: Hispanic Heritage Moth 2013: September 15 – October 15. Newsroom. Retrieved from https://www.census.gov/newsroom/releases/archives/facts\_for\_features\_special\_editions/cb1 3-ff19.html
- Verkuyten, M. (1995). Symbols and social representations. *Journal for the Theory of Social Behaviour*, 25(3), 263-284.
- Weinraub, M., Clemens, L. P., Sockloff, A., Ethridge, T., Gracely, E., & Myers, B. (1984). The development of sex role stereotypes in the third year: Relationships to gender labeling, gender identity, sex-typed toy preference, and family characteristics. *Child Development*, 55(4), 1493-1503.
- Yee, M., & Brown, R. (1994). The development of gender differentiation in young children. *British Journal of Social Psychology*, *33*(2), 183-196.
- Yoshikawa, H. (2011). *Immigrants raising citizens: Undocumented parents and their children*. New York: Russell Sage Foundation.
- Zelazo, P. D. (2006). The dimensional change card sort (DCCS): A method of assessing executive function in children. *Nature Protocols*, *I*(1), 297-301.
- Zosuls, K. M. (2008). Gender development in African American, Dominican, and Mexican immigrant toddlers: Self socialization in three cultural contexts (Doctoral dissertation). New York University, New York, NY.
- Zosuls, K. M., Field, R. D., Martin, C. L., Andrews, N. C., & England, D. E. (2013). Gender Based Relationship Efficacy: Children's Self Perceptions in Intergroup Contexts. *Child Development*, 85, 1663-1676.

- Zosuls, K. M., Martin, C. L., Ruble, D. N., Miller, C. F., Gaertner, B. M., England, D. E., & Hill, A. P. (2011). 'It's not that we hate you': Understanding children's gender attitudes and expectancies about peer relationships. *British Journal of Developmental Psychology, 29*(2), 288-304.
- Zosuls, K. M., Ruble, D. N., Tamis-LeMonda, C. S. (2014). Self-socialization of gender in African American, Dominican immigrant, and Mexican immigrant toddlers. *Child Development*, 85, 2202-2217.
- Zosuls, K. M., Ruble, D. N., Tamis-LeMonda, C. S., Shrout, P. E., Bornstein, M. H., & Greulich, F. K. (2009). The acquisition of gender labels in infancy: Implications for gender-typed play. *Developmental Psychology*, *45*(3), 688-701.
- Zucker, K. J. (1990). Psychosocial and erotic development in cross-gender identified children. *The Canadian Journal of Psychiatry / La Revue Canadienne De Psychiatrie*, *35*(6), 487-495.
- Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York, NY, US: Guilford Press.

Figure 1

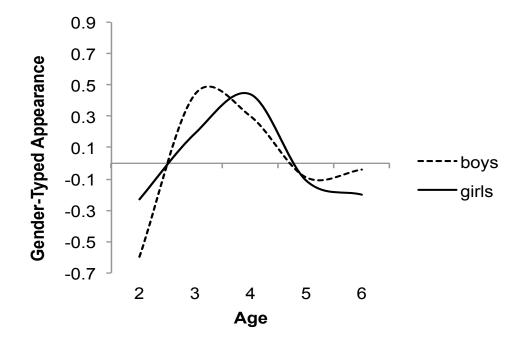
Loess smoothed plots (full sample and within sex) of gender identification (left) and rejection of gender-norm violations (right)



*Note.* Reprinted from Ruble, D. N., Taylor, L. J., Cyphers, L., Greulich, F. K., Lurye, L. E., O& Shrout, P. E. (2007). The role of gender constancy in early gender development. *Child Development*, 78, 1121-1136.

Figure 2

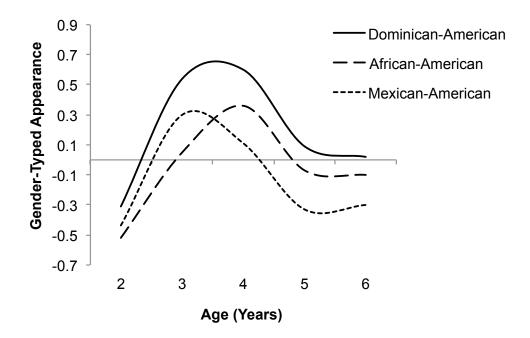
Longitudinal Look at Gender-Typed Appearance from Age 2 to 6 by Gender



*Note*. Gender-typed appearance was calculated as a *z*-score within gender. Lines have been smoothed.

Figure 3

Longitudinal Look at Gender-Typed Appearance from Age 2 to 6 by Ethnicity



*Note*. Gender-typed appearance was calculated as a *z*-score within gender. Lines have been smoothed.