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# Looking the Part: An Examination of Longitudinal Gender Presentation Among Children with Gay, Lesbian, and Heterosexual Adoptive Parents

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Looking the Part: An Examination of Longitudinal Gender Presentation Among Children with  
Gay, Lesbian, and Heterosexual Adoptive Parents

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THESIS

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science  
in the College of Arts and Sciences at the University of Kentucky

By

Samuel T. Bruun

Lexington, Kentucky

Director: Rachel H. Farr, Professor of Psychology

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2018

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## ABSTRACT OF THESIS

### LOOKING THE PART: AN EXAMINATION OF LONGITUDINAL GENDER PRESENTATION AMONG CHILDREN WITH GAY, LESBIAN, AND HETEROSEXUAL ADOPTIVE PARENTS

Gender presentation, appearing in a way that fits social expectations of one's gender role, represents one of the most obvious ways in which one's gender identity becomes salient to others. This quality is especially relevant to note given the continued controversy surrounding children's gender role development when raised by non-heterosexual parents. The current study is an examination of how gender presentation develops in adopted children with lesbian, gay, and heterosexual parents across two time points (Wave 1:  $N = 106$ ,  $M_{age} = 36.07$  months; Wave 2:  $N = 90$ ,  $M_{age} = 8.34$ ). Children's gender presentation was analyzed using a novel coding scheme, consisting of several variables meant to target the presence of gender typed clothing. These elements of appearance were compared with several measures of child outcomes. It was found that children generally adhere to presentation elements of their assigned gender and there were limited differences by parental sexual orientation in any of the gender presentation variables. Additionally, there was no association found between conformity in gender presentation and children's self-perception or parent or child gender-typical attitudes. The results of this initial study may prove to be useful in ongoing research surrounding children's gender typicality.

**KEYWORDS:** Gender Typicality, Gender Performativity, Gender Presentation, LGBT Families, Adoptive Families

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4/7/18

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## TABLE OF CONTENTS

List of Tables.....	iv
List of Figures.....	v
Introduction.....	1
Gender Presentation.....	2
Outcomes Associated with Gender Presentation.....	5
Children’s Acquisition of Gender Roles and Gender Presentation.....	6
Lesbian and Gay (LG) Parents.....	9
Current Study.....	11
Research Questions and Hypotheses.....	12
Method.....	15
Participants.....	15
Materials and Procedures.....	16
Gender Presentation Observational Scale (GPOS).....	17
Child Gender Typical Behaviors at Wave 1.....	20
Children’s Sense of Self Worth at Wave 2.....	21
Children’s Gender Typical Attitudes at Wave 2.....	22
Parent’s Gender Typical Attitudes at Wave 2.....	23
Analysis Plan.....	25
Preliminary Power Analyses.....	27
Results.....	27
Exploratory Factor Analysis of the GPOS.....	29
Descriptive Characteristics of GPOS Variables.....	33
Correlations Among Observational Items.....	33
Associations Among GPOS Variables and Other Measures.....	37
Presentation Differences by Family Type.....	37
Associations of Performativity Between Waves.....	40
Discussion.....	40
Appendices.....	49
Appendix A: Gender Presentation Observation Scheme.....	49
Appendix B Model Summary for Hypotheses 2 & 3.....	56
References.....	57
Vita.....	63

## LIST OF TABLES

Table 1, <i>Number of Participants Who Completed Each Measure by Family Type</i> .....	17
Table 2, <i>Cronbach's Alpha for COAT-AM and OAT-AM by Family Type</i> .....	24
Table 3, <i>Descriptive Information for COAT-AM, OAT-AM, HSSP and CBCL</i> .....	28
Table 4, <i>Factor Loadings for GPOS EFA Wave 1</i> .....	30
Table 5, <i>Factor Loadings for GPOS EFA Wave 2</i> .....	30
Table 6, <i>Descriptive Information of GPOS Observational Variables in Wave 1</i> .....	34
Table 7, <i>Descriptive Information of GPOS by Gender of Child W2</i> .....	35
Table 8, <i>Correlations between GPOS items</i> .....	36
Table 9, <i>Descriptive Information of GPOS by Family Type (Wave 1)</i> .....	38
Table 10, <i>Descriptive Information of GPOS by Family Type (Wave 2)</i> .....	39

## LIST OF FIGURES

Figure 1, <i>Scree plot for GPOS EFA Wave 1</i> .....	31
Figure 2, <i>Scree plot for GPOS EFA Wave 2</i> .....	32



## Looking the Part: An Examination of Longitudinal Gender Presentation Among Children with Gay, Lesbian, and Heterosexual Adoptive Parents

Lesbian and gay (LG) couples face a number of hurdles in their attempts to become parents. Medical professionals are commonly biased in favor of heterosexual patients, the adoption process can be biased against them at any number of stages, and once they have a child, there are frequently concerns about their ability to effectively parent. One common bias is reflected in the idea that children in LG parent families will not be able to properly understand their gender roles, and thus will be socially disadvantaged (Biblarz & Stacey, 2010), despite the growing body of research that children of LG parents do not display negative developmental outcomes (Farr & Patterson, 2013; Fedewa, Black, & Ahn, 2015). Particularly relevant to this controversy is the notion of gender presentation, that is, dressing and moving in ways that are considered culturally appropriate for one's gender (Butler, 1990). Gender presentation is one element of children's gender role development that has been understudied in general; rather, it has been more often studied among adults, especially in corporate or professional settings (Kelan, 2013; Sczesny & Kuhnen, 2004). Given that many other elements of gender acquisition have been investigated among children at quite young ages, and gender role behavior tends to appear early in childhood (Li & Wong, 2016; Moller & Serbin, 1996; Weisgram, Fulcher & Dinella, 2014), it is surprising that there is so little on how and when gender presentation first begins to develop.

In this study, I used observational, self-report, and parent-report methods to examine children's gender presentation and its associations with other measures of gendered beliefs, behaviors, and self-worth from early to middle childhood among a sample of children and their lesbian, gay, and heterosexual adoptive parents. Observational methods were used to assess

elements that may characterize young children's gender presentation, and these measures were compared with several parent-report and self-report surveys to examine other related variables, such as gender-typical beliefs and children's feelings of self-worth.

I begin my review of the literature by discussing gender presentation and how it has been previously studied, as well as its impact on the performance and acceptance of adults and adolescents in a variety of contexts. After this I move into an examination of how children adopt gender roles in early to middle childhood, with a focus on social learning theory and to what degree parents appear to influence the acquisition of gender roles based on recent research. I then discuss the challenges faced by LG parents and what is currently understood regarding the outcomes of children raised in these families, with a focus on the continued controversy that surrounds these children's acquisition of gender role behavior. Finally, I describe the objectives of the current study.

### **Gender Presentation**

Within this study, I examined gender as an identity that is performed in social contexts rather than being comprised of immutable characteristics. This idea, more commonly known as "doing" or "performing" gender, has already existed in the literature of the philosophy of gender (Butler, 1990) and sociology (West & Fenstermaker, 1995) for quite some time, but only recently has begun to be applied to psychology (Lagaert, Houtte, & Roose, 2017). Under this lens gender is seen as a distinct set of behaviors which define how one interacts with the world, with these behaviors being in turn defined by the cultural context in which the individual exists. Gender is performed differently under different contexts and, as a result, what constitutes conforming or transgressive gender performance will similarly vary. There are a variety of ways in which gender can be performed, but I primarily focus on how gender comes to be performed

bodily by children. In a modern western context, these markers may be that through culturally significant symbols such as popular media characters, colors associated with a particular gender over another, or display of decorative accessories such as jewelry, hats, or sunglasses.

Gender can be displayed in a variety of ways, but typically, all revolve around making one's physical body an emblem of social expectations of one's gender role, which could include how one dresses, speaks, or subtle elements of one's posture (Butler, 1990). While the importance of these emblems or symbols is understood from a theoretical standpoint, there is very little solid understanding of what particular elements of presentation constitute masculine or feminine appearance in our local cultural context. This is particularly true when considering the appearance of children. Commonly when researchers have examined the impact of gender presentation in either adults or children, they have utilized self-report measures of how or to what degree the individual in question believes that they would be viewed as typically or atypically presenting (Wylie, Corliss, Boulanger, Prokop & Austin, 2010). Measures such as this have already provided useful information, but they leave out many of the nuances of performativity. By shifting our focus to observational measures of presentation, we would be able to answer questions of what signifiers contribute most<sup>2</sup> to these outside perceptions of gender typicality or atypicality. That being said, across several studies, some elements of gender presentation, such as displays of color, have emerged as noteworthy constructs. For example, certain colors, such as pink or purple, as well as colorful outfits in general (i.e., being brighter in hue or displaying more colors,) tend to be seen as more feminine in children's toys and clothing, (LoBue & DeLoache, 2011). Continuing to expand work such as this could reveal other related elements of masculine or feminine presentation.

While most existing research on gender presentation in psychology focuses on adolescents or adults (Haferkamp, Eimler, & Papadikas, 2012; Ocampo, 2012), the most well-researched topic under the umbrella of gender-influenced display in psychology among children is almost certainly the sexualization of girls' clothing at ever younger ages (APA, 2008). While it is a broad topic in itself, sexualization represents one obvious way in which the expectations associated with gender roles become associated with how one presents their body. Sexualized elements in clothing (e.g., clothing that places emphasis on sexual characteristics of the body, or contains text with sexual undertones like "Lady killer") are nearly universally considered feminine, even in virtual or imaginary spaces, and these elements are appearing at younger ages (Behm-Morawitz & Schipper, 2016; Slater & Tiggermann, 2016). A part of the expected feminine gender role is to appear physically desirable to men, and this may not only be internalized with feelings of objectification and heavy self-monitoring, but also be embodied by wearing more revealing clothing and displaying more provocative posturing (Kapidzic & Herring, 2015; Tiggerman & Slater, 2001). While there has been relatively limited research on how sexualization may be displayed among men or boys, there is some merit to the idea that, if sexualization appears in both men and women, men would display the concept differently from women given that differential expectations of masculine and feminine gender roles related to sexuality (Vandenbrosch & Eggermont, 2013). Additionally, the sexualization literature primarily focuses on research examining presentation in girls, but there is a dearth of research examining gender presentation in boys at any age.

One element that makes children's clothing distinct from those of adults, especially in regards to displaying gender, is the relatively greater presence of characters, icons, and text appearing on children's outfits (Cook, 2004). Characters from children's media in particular have

been demonstrated to have a notable impact on children's gender role beliefs and their experience of self-objectification, among other effects (Pennell & Behm-Morawitz, 2015); the presence of characters from children's media in clothing serve as reminders of what those characters represent to both the wearer of the messages and other children (Roberto, Baik, Harris, & Brownell, 2010). Simply through their own appearance, characters display to children what it means to appear as boy or a girl, as seen in the work by Murnen, Greenfield, Younger, and Boyd (2015). This research demonstrates that female characters in children's media are frequently depicted wearing clothing that is decorative and often revealing, while male characters are depicted as wearing more functional clothing and generally more covered (i.e., less revealing). These trends are similarly seen in gender-typical adult professional clothing (Eicher & Roach, 1992). Relatedly, the presence of a "beauty premium", attaching self-worth to physical attractiveness, is observable in girls as young as age four, and with this valuing of physical appearance comes a focus on ensuring that one's appearance is neat and orderly (Blakemore, 2003; Phares, Steinberg, & Thomson, 2004). All of these social expectations on children's and adults' appearance have several implications for individual outcomes.

**Outcomes associated with gender presentation.** When gender presentation tends to reflect stronger or more rigid adherence to typical gender roles, several negative outcomes have been demonstrated among adults, particularly among women (or rather, those who appear feminine) in professional settings. For example, a meta-analysis conducted by Leaper and Robnett (2011) to examine women's use of tentative language across multiple studies found that women tended to use hedging and questioning speech patterns more often than did men. The authors came to the conclusion that this is in part due to the fact that more emphasis is placed on women than men to be understanding and considerate of the emotions of others. While this sort

of speech pattern may serve prosocial purposes for women, it has also been shown to be limiting to women's success in fields that are commonly associated with more aggressive, or agentic, styles of communication. For instance, Hahn and Clayton (1996) demonstrated that either male or female attorneys presenting in the more reserved (i.e., feminine) way described by Leaper and Robnett (2011) were seen as less credible than those presenting more aggressively. When presenting more aggressively (i.e., as more masculine), however, women were still seen as less credible than men, which is a trend that is consistently seen in situations in which an agentic style of interaction is demonstrated by women (Eagly, Makhijani, & Klonsky, 1992). Appearing feminine similarly erodes one's credibility, particularly as related to expertise in the sciences (Hetsroni & Lowenstein, 2014).

Overall, it is clear that how one performs gender bodily has a significant impact on how one is perceived, and on a variety of personal and professional outcomes as a result. These results appear consistent even when the research surrounding these topics involves differing definitions or operationalization of masculine and feminine gender presentation (see differences in defining presentation in Moore, 2006 and Schilt & Westbrook, 2009). Moreover, some research also demonstrates that these associations between gender presentation and negative outcomes are seen among adolescents as well as adults (Sczensy & Kuhn, 2004). Failure to adhere to gender norms in adolescence has a demonstrable negative effect on their mental health outcomes, likely as a result of teasing from peers (Jewell & Brown, 2014). Lowered feelings of self-worth that adolescents experience as a result of this teasing and other poor peer interactions is of particular relevance to the current study, as I directly examined the association between typicality of gender appearance and children's self-worth among preadolescent children.

### **Children's Acquisition of Gender Roles and Gender Presentation**

Given that gender presentation has been more sparsely studied among children as compared to adolescents and adults, I discuss some of what we do understand about children's gender role acquisition broadly, including gender presentation when research is available. To provide context for discussing children's development of gendered attitudes and behaviors, I primarily use the framework of social learning theory (Bandura & Walters, 1977). This framework predicts that children will observe gendered behavior and norms present in their environments, then attempt to enact norms that appear to lead to positive outcomes. An example of such a successful norm could be seeing that superheroes are rewarded for solving their problems with violence. Peers and authority figures then react to the usage of the children's behavior, supporting or attempting to censure it. If the behavior is approved, then the child may adopt it as a regular method of interacting with the world.

Children will also learn to associate gender roles with observed behaviors as well, making note of who is punished for enacting certain behaviors and who is rewarded (Coyne, Linder, Rasmussen, Nelson, & Collier, 2014), which can lead children to pay more close attention to behaviors that adhere to their own gender identity (see Liben & Bigler's 2002 attitudinal pathway model for a more detailed analysis of how this connection forms). To continue from the superhero example above, a male child may notice that most superheroes present as male, and thus may be more likely to emulate the violent conflict resolution styles that are displayed in superhero media, in comparison to girls of the same age. In accordance with social learning theory, boys are more likely to draw guidance from superheroes than are girls because boys are more likely to share a social category (i.e., gender) with these superheroes. Given that children are aware of their belonging to a social group (e.g., gender) from an early age

(Halim et al., 2014), these adopted behaviors frequently become associated with the gender category to which the child belongs.

Thus, within this social learning framework, whether the adopted gender role behaviors are accepted or denied by authority figures and peers is thus crucial to how children develop their understanding of social roles, and represents a potent vector by which parents may have an impact on their children's gender development (Bandura & Walters, 1977; Witt 1997). The way in which heterosexual parents deal with gender-transgressive behavior is well documented. Parents tend to organize children's environments to support typical gender role ideas through purchasing gender-typical toys, providing role-typical bedroom decorations, and otherwise providing physical artifacts (e.g., clothing, jewelry, hats, etc.) of culturally enforced gender norms from a very early age (Pomerleau, Bolduc, Malcuit, & Cossette, 1990; Witt, 1997). Fathers are more likely to censure behavior that they see as going against gender norms and encourage gender-typical play patterns than are mothers (Lindsey, Mize, & Pettit, 1997; Lytton & Romney, 1991), but gender-typicality is encouraged from many sources throughout early to middle childhood, especially through exposure to popular media (Leaper, 2002; Witt, 2000). The respective influence of parents' attitudes on children's gender typicality and the influences of other sources, such as the media or peers, has proven difficult to pull apart, but all certainly play roles in how children develop their attitudes about gender.

It is equally worthy of note, however, that children are not only passive observers during this process of gender role development. There has been substantial research demonstrating that by elementary school, there are strong associations between children's attitudes toward gender and their likelihood of participating in gender-typical activities and behaviors – e.g., when children endorse gender-typical behaviors, they are much more likely to partake in activities



associated with their gender roles, while ignoring those that diverge from expected gender behavior (Patterson, 2012). The synthesis between children's internal states and the influence of others' approval or disapproval appear to work together in contributing to how children come to understand gender roles (Bandura & Walters, 1977; Liben & Bigler 2002). As alluded to above, parental influence on gender-typical activities in children has been explored in the context of heterosexual parents (Coyne et al., 2014; Fiese & Skillman, 2000), but research on how children are impacted by parents' attitudes about gender in the context of having lesbian or gay parents is still a topic of ongoing investigation (Farr, 2017; Stacey & Biblarz, 2001).

### **Lesbian and Gay (LG) Parents**

There are estimated to be at least 2 to 3.5 million children who are currently being raised by LGBTQ parents, and with the passage of the Obergefell decision, this number is set to rise as same-sex marriages become much more common (Gates, 2015; Gates & Brown, 2015). Despite growing acceptance and visibility, LGBTQ parent families still face discrimination (Farr & Tornello, 2016). This can make the process of having children challenging, as there is evidence that heterosexual healthcare providers show implicit bias in favor of their heterosexual patients, and gay fathers describe experiencing discrimination as they attempt to work through the adoption process (Gianino, 2008). Once parents actually have a child, they must then contend with societal suspicions that their parenting will somehow damage the child's development (Biblarz & Stacey, 2010).

Despite these challenges, children raised by LG parents fare quite well. They display no differences in cognitive development from their peers raised by heterosexual parents, nor do they display more behavioral problems (Farr, Forssell, & Patterson, 2010; Lavner, Waterman, & Paplau, 2012). The literature in general has found that relationships between members of the

family are far more predictive of children's outcomes than is the sexuality of their parents (Farr & Patterson, 2013; Goldberg & Smith, 2013) Assuming that children are provided for and there is sufficient support for both parents and children, there do not appear to be dramatic differences in child outcomes based on parent sexuality (Biblarz & Stacy, 2010).

The question of whether children raised by LG parents display typical gender outcomes, however, is one that has yet to have a definitive answer. While several recent studies have attempted to address this concern, the research has thus far demonstrated mixed findings. Farr et al. (2010) indicated that preschool-age children adopted by LG parents do not demonstrate differences in gender-typical behaviors from their peers adopted by heterosexual parents, while Goldberg, Kashy, and Smith (2012) showed that adopted children from 2 to 4 years old with LG parents participate in less gender-typical play behavior than their peers with heterosexual parents. Of note is that both of these studies involved parent-report measures of children's gender role behavior. Moreover, Bos and Sandfort (2010) found that older children, around 10 years old, raised by lesbian mothers demonstrate a host of more flexible gender attitudes than their peers with heterosexual parents, such as being less likely to believe that their own gender was superior, and feeling less pressure from their parents to be gender-conforming as compared to children with heterosexual parents. Lesbian mothers themselves also tend to demonstrate more flexible gender role ideologies, which could be related to some of these differences in child outcomes (Fulcher, Sutfin, & Patterson, 2008; Goldberg et al., 2012). On another note, Goldberg and Garcia (2016) found that while children in early childhood raised by lesbian mothers did display less gender-differentiated behavior at 2 years old than did children adopted by gay or heterosexual parents, children in all of these family types developed more gender-conforming than nonconforming behaviors throughout early childhood. One factor that may contribute to

these differential findings in the literature on children's gender development as a function of parental sexual orientation is that there has yet to be a study which incorporates not only parent-report or child-report data, but also observational variables when examining children's gender attitudes and presentation. This is a gap that I sought to address in this study.

### **Current Study**

The present study was an exploration of how gender presentation develops in early and middle childhood among a sample of children adopted by lesbian, gay, and heterosexual parents, and of how this presentation is associated with children's and parents' gender beliefs and children's self-worth. The focus of previous research on other age groups (i.e., adolescence) has helped to further our understanding of how gender-typical presentation is enforced by peers (Jewell & Brown, 2014), but little has been done on when typical presentation appears and how it is associated with other gender role behaviors, beliefs, or broader feelings of self-worth. Additionally, the unique sample represented by the current study allows for exploration of how children adopted by LG parents may be similar or differ in their gender presentation as compared to children adopted by heterosexual parents. This has been a notable gap in the literature to date, with a majority of research on gender presentation conducted with adolescents raised by their biological, heterosexual parents (Patterson, 2012). Prior research has demonstrated that LG parents may be raising children who are less impacted by gender role pressures than children with heterosexual parents (Bos & Sandfort, 2010; Goldberg et al., 2012), but the relatively scant data on this topic are far from conclusive. Parental influence is only one of the vectors by which gender role knowledge is passed on (Liben & Bigler, 2002), but this study contributes to the literature by being able to partially isolate the influences of parental sexual orientation and children's gender-typical behavior and gender ideology (among children and parents) as related

to children's gender presentation. As little research has examined possible associations between children's gender presentation and other overall outcomes, such as feelings of self-worth, this is another potential contribution of the current study.

To accomplish the goals of this study, a novel observational coding system for gender presentation was utilized, in conjunction with standardized questionnaires. Firstly, self-report measures of gender presentation have been more closely linked to how individuals report understanding others' reaction to their appearance or mannerisms (Wylie et al., 2010). While this paradigm has proven crucial for demonstrating how adolescents in particular understand their own gender typicality or transgression (Jae, Maroney, Levitt, & Horne, 2016), it does not serve as well in investigating how transgressive or typical participants actually are from an observer's perspective. In addition, to my knowledge, there are no studies that have analyzed young children's gender presentation using a systematic observational measure, which means that the coding scheme developed here is not only useful for answering the current research questions, but it also represents a broader contribution to the field by providing a tool for other researchers to potentially use in the future.

**Research questions and hypotheses.** Based on previous research on children's gender attitudes, children's gendered behavior across contexts, and children's gender development in same-sex parent families, I addressed the following research questions and hypotheses in the proposed research study:

1. What elements of gender presentation are most closely associated with a masculine or feminine appearance? Some elements of appearance have been established as being tied to a gender role, such as the connection between sexualization and femininity (APA, 2008). Other elements have been demonstrated to be connected to masculinity and femininity as displayed by fictional

characters in children's media, such as female characters having more decorative and colorful clothing than their male counterparts (Collins, 2011). Given that children's behavior tends to be markedly influenced by the media they consume (Coyne et al., 2013), it is likely that these media markers (e.g., characters depicted on children's clothing) will translate to children's gender presentation. I predicted that certain observed elements of presentation would be associated with overall gender-typical presentation scores, regardless of the gender of the child and the time point of assessment (i.e., Waves 1 and 2). Higher scores on the sexualization, decoration and orderliness (i.e., degree to which clothing is worn cleanly and as intended) variables would be associated with higher overall feminine scores. Higher scores on masculine or feminine iconography or color presence would be associated with the corresponding gender presentation type (i.e., masculine or feminine, respectively).

2. Is gender-typical behavior in early childhood associated with children's gender presentation in early and middle childhood (Waves 1 and 2, respectively)? To explore longitudinal associations, I hypothesized that children's gender-typical behavior (parent-reported at Wave 1) would be associated with children's gender-typical presentation at Wave 1 and Wave 2, such that more gender-typical behavior will be associated with more gender-conforming presentations. Children, on average, would be expected to show more gender-conforming than gender-transgressive presentations at both time points.
3. Are children's and parents' gender attitudes associated with children's gender presentation?
  - a. Children's self-reported gender-typical attitudes in Wave 2 were expected to be associated with their gender presentation at Wave 2 such that more gender-typical attitudes would be associated with more typical gender presentation.

- b. Are parental gender attitudes associated with children's gender presentation? I predicted that associations between children's attitudes about gender and children's gender-typical presentation would be mediated by the parents' attitudes about gender at Wave 2, such that parents' more traditional gender beliefs would be associated with greater levels of gender-typical presentation in children in middle childhood (all assessed at Wave 2).
4. Does conforming to a gender-typical presentation associate with children's feelings of self-worth? Prior research has demonstrated that children who transgress from socially expected gender roles tend to be ostracized by their peers, and as a result experience a lower sense of self-worth (Blakemore, 2003). Thus, I predicted that children's gender-typical presentation at Wave 1 and Wave 2 would be associated with their feelings of self-worth in middle childhood (Wave 2), such that children who demonstrated greater gender-conforming appearance at Wave 1 and Wave 2 would demonstrate higher feelings of self-worth at Wave 2 than their peers who demonstrate non-conforming gender appearance.
5. Does parent sexual identity impact children's gender presentation? I predicted that there would be no significant differences across parental sexual orientation (i.e., lesbian, gay, and heterosexual parents) at Waves 1 or 2, given that prior research has not demonstrated significant differences between family types in children's other gender-based traits (Farr, Bruun, Doss, & Patterson, 2017; Farr et al., 2010; Bos & Sandfort, 2009).

In addition to the above research questions and hypotheses, the current study also includes one exploratory research question:

6. Do relative levels of gender presentation remain constant throughout early to middle childhood? Given the lack of research surrounding gender presentation longitudinally,

and the complexities surrounding development of children's gender-typical attitudes in LG parent families, as described in my literature review, it is difficult to make claims about whether children's gender presentation levels will remain stable throughout development, especially when examining these variables from an observational lens. Based upon how other gender-typical traits develop, it could be that adherence to gender-typical presentation will increase as children age from preschool (Wave 1) to school-age (Wave 2; Fagot & Leinbach, 1993; Galambos, 2004), but this is still speculation.

## **Method**

### **Participants**

The participants for this study were gathered from an ongoing longitudinal study examining the experiences and outcomes of children adopted by lesbian, gay, and heterosexual parents (Farr, 2017; Farr & Patterson, 2013). All the children in this sample were adopted in infancy from one of five different adoption agencies which had a record of supporting adoption by lesbian, gay, and heterosexual parents. None of the children had prior placements, and all families were initially invited to participate in the study through their adoption agency.

Currently, participating families have completed data collection at two time points. At Wave 1, participants included 56 children from same-sex parent families (29 gay father families, and 27 lesbian mother families) and 50 children from heterosexual parent families. When multiple children were present, the target child was the eldest adopted child between the ages of 1 and 5 years old upon first contact with the family. At the time of Wave 1, the children's ages ranged from 13 to 72 months old ( $M = 36.07$ ) and parents ranged from 30 to 60 years ( $M = 41.69$ ,  $SD = 5.51$ ) old. Children were 41% White, 32% Black, 23% Multiethnic or Biracial, and 4% other racial groups, with 42% of parents adopting transracially. Yearly income for families

was generally high (lesbian mothers,  $M = 168,000$ ,  $SD = 77,000$ ; gay fathers,  $M = 190,000$ ,  $SD = 130,000$ ; heterosexual parents,  $M = 150,000$ ,  $SD = 89,000$ ), and did not significantly differ among family types. Families also gave permission to be re-contacted for future participation opportunities. Approximately five years later at Wave 2, when children were 8.34 years old on average ( $SD = 1.65$ , range = 5 to 12 years), families were contacted again to participate in a second wave of data collection.

For the purposes of the current study, 106 children (53 girls, 53 boys) were included at Wave 1. These 106 children represented 11 boys and 16 girls from lesbian mother families, 18 boys and 11 girls from gay father families, and 24 boys and 26 girls from heterosexual parent families. The Wave 1 sample also included 212 parents: 54 lesbian mothers, 58 gay fathers, and 100 heterosexual parents. In Wave 2, 96 children were represented: 16 girls and 10 boys from lesbian mother families, 11 girls and 18 boys from gay father families, and 22 girls and 19 boys from heterosexual parent families. Wave 2 also contained a sample of 182 parents, with 47 lesbian mothers, 54 gay fathers, and 81 heterosexual parents. A full breakdown of the number of participants who completed each individual measure by family type can be found in Table 1.

### **Materials and Procedure**

At both waves, researchers involved with the ongoing longitudinal project visited the families in their homes (Farr, 2017; Farr et al., 2010). At Wave 1, the families participated in a video-recorded observational task and parents completed a standardized measure of children's gender-typed behavior (all measures described below). The families confirmed their willingness to continue the study, and were contacted again about five years later for the second wave of data collection. At Wave 2, children and parents completed several standardized questionnaires and video-recorded observations were collected of the families completing a series of tasks and



Table 1.

*Number of Participants Who Completed Each Measure by Family Type*

Measure	Lesbian	Gay	Heterosexual	Total
Wave 1:				
PSAI	54	58	99	211
Observational videos	21	24	36	81
Wave 2:				
Observational videos	23	26	41	90
COAT-AM	25	27	39	89
OAT-AM	43	52	81	176
HSSP	25	29	40	94

*Note.* Parent-report measures include the PSAI at W1 and the OAT-AM at W2. Child-report measures include the COAT-AM at W2. The observational data reflect the number of child participants represented across videos of whole family interactions (parents and child) at W1 and W2, as well as an individual child interview at W2.

interviews (measures are described below). Families were debriefed about their involvement in the study at the conclusion of data collection at both time points; no financial compensation was provided. The study was approved by the Institutional Review Boards of the University of Virginia, University of Massachusetts Amherst, and University of Kentucky.

**Gender presentation observational scale (GPOS).** At both time points, children were recorded participating in a series of observational tasks; it is from these recordings that observational ratings of children's gender presentation were made for the current study. For Wave 1, the coders used recordings of children's play behaviors to determine children's ratings on the observed variables. In this task, parents and children were invited to participate in an unstructured play session using toys provided by the researchers – these toys included common gender-typical and gender-neutral toys appropriate for the children's age group. In Wave 2, a trio of tasks were recorded. The first of these tasks, which were the primary recording used for coding the gender presentation variables, is a video-recorded individual interview with each child. In this task, the target child from each family was asked a series of open-ended questions relating to their family structure, their understanding of their family structure, and a host of other factors. The other video-recordings at Wave 2 were tasks that the family completed as a group, including a conflict resolution task and another task which involved the family planning a vacation together. Recordings of these two tasks were only be viewed if there was difficulty in assessing the target child's appearance in the child interview video or if the child interview video was absent (i.e., several children did not complete an individual interview, but family observational data were recorded).

Five undergraduate research assistants were trained to utilize these video data in order to rate the variables of interest for this study. During this training process, these five coders each

viewed and coded ten videos from Wave 2, using the observational coding scheme described below. Coders were instructed to watch the entire video to ensure that they were able to attend to all possible elements of the child's appearance. During this immersion stage (as described in Goldberg & Allen, 2015), I examined their ratings to ensure that coders understood the codes and were attaining appropriate reliability. Through this process, and during all coding afterwards, coders kept record of their individual ratings. These individual ratings were then used in group coding sessions in which all coders generated final ratings. In the event of discrepancies between raters, each coder would argue their point until the group decided upon a final rating based on the wording of the codebook. These disagreements primarily arose around numerical count codes and were quickly resolved by a review of the recording in question. Each coder was responsible for viewing approximately one third of the available videos, and were checked for appropriate reliability throughout the coding process. This process was repeated for the Wave 1 videos.

After training, coders rated all remaining videos of children represented at both waves using the process described above and rating the following variables in the coding scheme: overall perceived masculine and feminine characteristics, the sexualization of children's clothing, the orderliness of children's appearance, the number of colors present in children's clothing, masculine and feminine color presence, and the presence of masculine, feminine, and neutral iconography in children's clothing. These items were developed from reviewing the relevant literature surrounding gender presentation as described previously. The current version of the codebook is the sixth revision made to the coding scheme. The changes between versions were primarily focused upon minor changes in the wording of descriptions for coding certain variables, as well as adding several variables related to the quality of the videos themselves. The final version of the coding scheme can be found in Appendix A.

Gender presentation in the coding scheme is divided into separate ratings for overall masculine presentation and overall feminine presentation. Each asks coders to rate to what degree children's appearance contains elements traditionally associated with a masculine or feminine gender role, respectively. These two scales were applied to all children regardless of the child's gender (i.e., female children and male children were rated for both overall masculine and overall feminine appearance). This allows for the creation of two additional variables for each child: a transgressive and conforming score. The transgressive score was made from children's score overall gender presentation that does not match their assigned sex, while the conforming score was the overall gender presentation that does match their assigned sex. In addition to these two broad measures of children's overall gender presentation, the coding scheme also contains several ratings of other aspects of gender presentation, such as the presence of accessories, or the relative sexualization of the outfit. Most variables are currently rated on a 1 to 5 scale, with higher numbers indicating a greater amount of the variable in question.

**Child gender-typical behaviors at Wave 1.** The Pre-School Activities Inventory (PSAI; Golombok & Rust, 1993) was used at Wave 1 as a parent-report measure of gender-typical behavior and characteristics in preschool-age children (i.e., two-and-a-half to five years old). Items are divided into three sections: toys, activities, and characteristics. In each section, the parent is asked to rate on a five-point scale from 1 (Never) to 5 (Very often) how often the child engages with the described toy or activity or how often their child demonstrates the described characteristic. The toy section contains 7 items (e.g., Guns, Jewelry), the activities section contains 11 items (e.g., Fighting, Playing with girls), and the characteristic section contains 6 items (e.g., Likes pretty things, Likes to explore new surroundings). Higher scores indicate greater masculinity while lower scores indicate greater femininity. Very similar to the population

averages of 40.31 ( $SD = 10.52$ ) for girls and 60.36 ( $SD = 10.16$ ) for boys (Golombok & Rust, 1993), previous research with this same sample represented in the current study has demonstrated mean scores of 41.24 ( $SD = 11.05$ ) for girls and 62.15 ( $SD = 9.75$ ) for boys (Farr et al., 2010). As these descriptive data have been published, here I am primarily interested in exploring associations between PSAI scores and children's observed gender presentation at Wave 1 and Wave 2. The PSAI also has demonstrated appropriate reliability in prior research (Farr et al., 2010; Golombok & Rust, 1993). In my sample, Cronbach's alphas were for "girl" items was .89 and .83 for "boy" items. Alphas for girl items were .79, .89, and .80 for children in lesbian, gay, and heterosexual parent families, respectively. Boy items had alphas of .89 across all family types.

**Children's sense of self-worth at Wave 2.** The Harter's Scale of Self-Perception (HSSP) was used at Wave 2 as an assessment of children's sense of self-worth (Harter, 1982). This self-report measure, designed for children in middle to late childhood, examines the child's sense of competence across several domains, including cognitive, social, physical, and behavioral competence, as well as a general sense of self-worth. Each of the domains consists of seven items in a structured alternative format which asks children to rate how true one of two contrasting statements is for them. An example of this is: "Some kids forget what they learn, but other kids can remember things easily." This sentence is broken in half, separated by the word "but". The child can respond with either "really true for me" or "sort of true for me" for one of the two halves of the sentence. These responses were coded as a four-point scale, with higher numbers indicating greater feelings of self-worth (Harter, 2012). Scores are averaged within subscales to produce final ratings of children's perceptions across domains.

For the purpose of the current study, I used scores from the global self-worth subscale. This subscale contains seven items constructed in the manner described above (e.g., “Some kids are not happy with themselves, but other kids are pleased with themselves”). Prior studies have established means for the global self-worth subscale for children at the age of interest (8 years old) as 3.10 ( $SD = 0.58$ ) for girls and 3.12 ( $SD = 0.64$ ) for boys. The measure has been demonstrated to be valid and reliable, with Harter’s original sample of children in third to sixth grade (1982) demonstrating a Cronbach’s alpha level of .73 for the global self-worth subscale. The Cronbach’s alpha of the global self-worth scale for our population was .78 for lesbian mothers, .54 for gay fathers, .43 for heterosexual parents, and .56 broadly across family types.

**Children’s gender-typical attitudes at Wave 2.** The Child Occupation Activity and Trait scale (COAT; Liben & Bigler, 2002) was used in Wave 2 as an assessment of children’s adherence to, and endorsement of, gender attitudes. The COAT is comprised of two distinct measures, the attitudinal measure (COAT-AM) and the personal measure (COAT-PM). Both contain a similar structure, with the attitudinal measure assessing the degree to which the child endorses that others should follow gender-normative behavior, while the personal measure describes to what degree the child believes that they themselves follow gender norms. Both measures are broken further into three subscales, which assess occupation interest, activity interest, and trait display, respectively. Each subscale contains 25 items, divided into masculine, feminine, and gender-neutral types. Each item presents children with an occupation (e.g., librarian, plumber), activity (e.g., fix bicycles, iron clothes), or trait (e.g., be affectionate, complain), depending on the subscale being used. For this study, I focused on using the COAT-AM to assess children’s gender-typical attitudes.

The COAT-AM asks participants to rate whether they believe that the item should apply only to men/boys, only to women/girls, or to both men/boys and women/girls. Note the occupation subscale uses the phrasing of “men” and “women” given that children would likely not yet be involved with these professions, and the measure uses the phrasing of “boy” and “girl” for the activity and trait subscales. The trait items also include the option for a trait to be appropriate for “neither boys nor girls”. Scores on the COAT-AM are coded as a proportion of “both men/boys and women/girls” (or “neither boys nor girls” on the traits subscale) responses to gender-stereotypical responses (“only men/boys” and “only women/girls”). Higher scores demonstrate greater gender flexibility and final proportion scores range from 0 to 1. Population averages for children in the sixth grade on the occupation subscale of the COAT-AM, as reported by Liben and Bigler (2002) were .41 ( $SD = .27$ ) for boys, and .46 ( $SD = .27$ ) for girls. For the activities subscale, the averages were .42 ( $SD = .30$ ) and .46 ( $SD = .25$ ) for boys and girls, respectively (Liben & Bigler, 2002). Finally, means on the traits subscale were .67 ( $SD = .67$ ) and .81 ( $SD = .26$ ) for boys and girls, respectively. Cronbach’s alphas for our population can be seen in Table 2.

**Parent gender-typical attitudes at Wave 2.** To assess parents’ gender-typical attitudes, the Occupation Activities Trait scale (OAT; Liben & Bigler, 2002) was used at Wave 2. The OAT is a measure of gender-typical attitudes and preferences similar to the COAT, though the OAT is written for use in adults. The two tests are structured and scored similarly, with a few differences in the items presented to adult participants on the OAT. For example, the OAT replaces items such as “spy” or “play hide-and-seek” used on the COAT with “dietician” and “grocery shop”. In most cases, two parents within each family completed the OAT measures in our sample. For the purpose of my study, OAT scores within families (including two parents)

Table 2.

*Cronbach's Alpha for COAT-AM and OAT-AM by Family Type*

	Lesbian Mothers	Gay Fathers	Heterosexual Parents	Total
COAT-AM				
Occupation	.96	.92	.93	.93
Activities	.98	.95	.94	.95
Traits	.96	.95	.94	.94
OAT-AM				
Occupation	.47	.83	.09	.57
Activities	-.41	.83	.35	.60
Traits	.83	.70	.64	.74



will be averaged, and only scores on the attitudinal measure (OAT-AM) will be utilized. Mean scores on the OAT-AM in Liben and Bigler's (2002) original undergraduate sample were .74 ( $SD = .20$ ) for the occupation subscale, .80 ( $SD = .20$ ) for the activity subscale, and .88 ( $SD = .14$ ) for the traits subscale; higher numbers reflect more gender flexibility in attitudes (as with the COAT-AM). The measure demonstrates appropriate reliability, with Cronbach's alpha for the OAT-AM exceeding .80 for all family types, which can be seen in Table 2.

### **Analysis Plan**

To test a majority of my hypotheses, I conducted a series of simple regression and mediation models to examine hypothesized associations among variables. Diagrams for all the regression models used for Hypotheses 2, 3a, and 3b are shown in Appendix B. For the purpose of these analyses, girls' scores on feminine gender presentation and boys' scores on masculine gender presentation were collapsed and examined together as gender-conforming scores, while girls' scores on masculine gender presentation and boys' scores on feminine gender presentation were collapsed and examined together as gender-transgressing scores.

To test my first hypothesis regarding characteristics of observed gender presentation (GPOS) among children, using correlational analyses, I investigated how sexualization, gender-typed color presence, decoration, masculine iconography, feminine iconography, and orderliness scores were associated with overall feminine and overall masculine scores – both at Wave 1 and Wave 2. Moreover, an exploratory factor analysis (EFA) was conducted on the coded observational data from Wave 1 and Wave 2 in order to determine the nature of the GPOS' factor structure. From a theoretical perspective, I anticipated that if there are underlying factors at work within these data, they would either take a one- or two-factor structure. This would be a result of the GPOS representing masculine and feminine presentation styles as two distinct units,

thus supporting a two-factor solution, or the measure collecting several elements of presentation as a single general gender presentation element, which would support a one-factor solution. The alternative to either of these options is that there are no underlying factors present in the data, and the various elements of style that are present in the GPOS exist distinctly apart, without an underlying and unifying structure. The SPSS software package was used for all subsequent factor analysis.

Hypothesis 2, on the associations between gender typical behavior and gender typical presentation across time, was tested by regressing children's gender-typical behaviors at Wave 1, measured by the parent-reported PSAI, onto gender-conforming presentation in Wave 1 and Wave 2. To test Hypotheses 3a and 3b, on the potential influence of parent attitudes on children's presentation, I conducted a mediation analysis of whether children's gender-typical attitudes, as measured by the child-reported COAT-AM, were predictive of children's gender-typical presentation at Wave 2, with parent gender-typical attitudes, as measured by the parent-reported OAT-AM, serving as a potential mediator. To test Hypothesis 4, on the influence that presentation may have on children's feelings of self-worth, I conducted a regression analysis of children's gender-typical presentations at Wave 1 and Wave 2 onto children's perceived self-worth scores, as measured by the child-reported HSSP at Wave 2. Hypothesis 5 was tested by using ANOVA to compare means of children's observed gender-conformity scores and gender-transgressing scores across the three family types (lesbian, gay, and heterosexual parents) at both time points. Finally, my exploratory Hypothesis 6, regarding stability of conforming presentation across time, was tested by using separate regression analyses of gender-conforming and gender-transgressing presentation scores in Wave 1 to gender-conforming and gender-transgressing presentation scores in Wave 2. Note that the COAT-AM, OAT-AM, PSAI and HSSP results for

this sample have already been commented upon in previous research (Farr et al. 2010; Sumontha, Farr & Patterson, 2017), and as such the descriptive information for these measures will not be reinterpreted here. This information is available in Table 3 below for the convenience of the reader.

**Preliminary power analyses.** I conducted power analyses using G\*power software to determine power levels for the proposed analyses based on the sample sizes known from previously collected data at Waves 1 and 2. Alpha levels were set to .05. For the regression analyses involving the COAT-AM ( $N = 89$ ), there is sufficient power to detect medium effect sizes ( $f^2 = .25$ ) with a power of .9, but not enough to detect small effect sizes ( $f^2 = .10$ ) given the power of .75. For ANOVA comparisons, there is sufficient power to detect large effect sizes ( $f^2 = .40$ ), but insufficient power to detect more moderate effect sizes ( $f^2 = .25$ ). While this lack of power is a limitation, given the larger effects found regarding gender differences in gender-typical behavior in prior research (Liben & Bigler, 2002; Weisgram, Dinella & Fulcher, 2010), this study is similarly sufficiently powered to detect large and some medium effect sizes.

## Results

The report of the results of this experiment are broken up into five distinct segments, each addressing a different research question. Firstly, I examine the nature of the GPOS itself. Given the infancy of the GPOS, an exploratory factor analysis (EFA) was conducted to investigate whether the data support a factor solution. The purpose of this analysis was to determine if items on the GPOS are in reality connected by one or more central, underlying variables, or factors. After this analysis, I will move onto an examination of Hypothesis 1. For this purpose, I first report on how items within the GPOS correlate with each other. After reporting the descriptive characteristics of the GPOS, I then demonstrate how the GPOS relates to established measures of

Table 3

*Descriptive Information for COAT-AM, OAT-AM, HSSP and CBCL*

	Lesbian Mothers	Gay Fathers	Heterosexual Parents
COAT-AM	.77 (.31)	.69 (.31)	.94 (.08)
OAT-AM	.99 (.01)	.91 (.08)	.89 (.12)
HSSP	3.65 (.48)	3.63 (.41)	3.60 (.41)
PSAI	50.02 (13.36)	55.18 (15.45)	50.57 (13.01)

related constructs to examine Hypotheses 2, 3 and 4. To do this, I report the correlations between the observational variables of the GPOS, gender-typical attitudes among both parents and children in Wave 2, and children's gender-typical behaviors in Wave 1. Additionally, I examine if conforming presentation in Wave 2 is predictive of children's feelings of self-worth. Lastly, to test Hypothesis 5, I address if there are differences in any of the observational variables by family type in either wave. Finally, to address Hypothesis 6, I examine associations between transgressive and conforming behaviors across the two time points.

### **Exploratory Factor Analysis of the GPOS**

An EFA was conducted in Waves 1 and 2 to explore the underlying factor structure of the GPOS. The first step of my EFA is to determine what a likely factor structure might be for my data. Tables 4 and 5 lists the factor loadings of the items of the GPOS for Waves 1 and 2 respectively. For each wave, most items have a factor loading above Peterson's (2000) suggested minimum of .40, and only one factor possesses an Eigenvalue above one, a conventional cutoff point for retaining the factor. Given that this rule has proven to be overly permissive, a parallel analysis (Horne, 1965) was run as well to confirm which factor structure should be favored as the retained factor solution. The 95<sup>th</sup> percentile and mean Eigenvalues were computed and graphed onto a Scree plot for Wave 1 and Wave 2 data (Figures 1 and 2 respectively). Those factors which demonstrated actual values above the 95<sup>th</sup> percentile were retained. This, in addition to a visual inspection of the Scree plot, leads me to retain a one factor solution in both waves. This factor accounted for 51.49 percent of the variance in items in Wave 1 and 25.76 percent of the variance in the items in Wave 2.

Table 4.

*Factor Loadings for GPOS EFA Wave 1*

Item	Factor 1
Overall Masculine	-.92
Overall Feminine	.98
Masculine Colors	-.87
Feminine Colors	.93
Masculine	-.38
Iconography	
Feminine	.51
Iconography	
Sexualization	.26
Orderliness	.44

Table 5.

*Factor Loadings for GPOS EFA Wave 2*

Item	Factor 1
Overall Masculine	.91
Overall Feminine	-.58
Masculine colors	.41
Feminine Colors	-.30
Masculine	.62
Iconography	
Feminine	-.44
Iconography	
Sexualization	-
Orderliness	-

*Note.* Empty cells indicate variables which did not achieve significant loading on given factor

Figure 1:  
*Scree plot for GPOS EFA Wave 1*

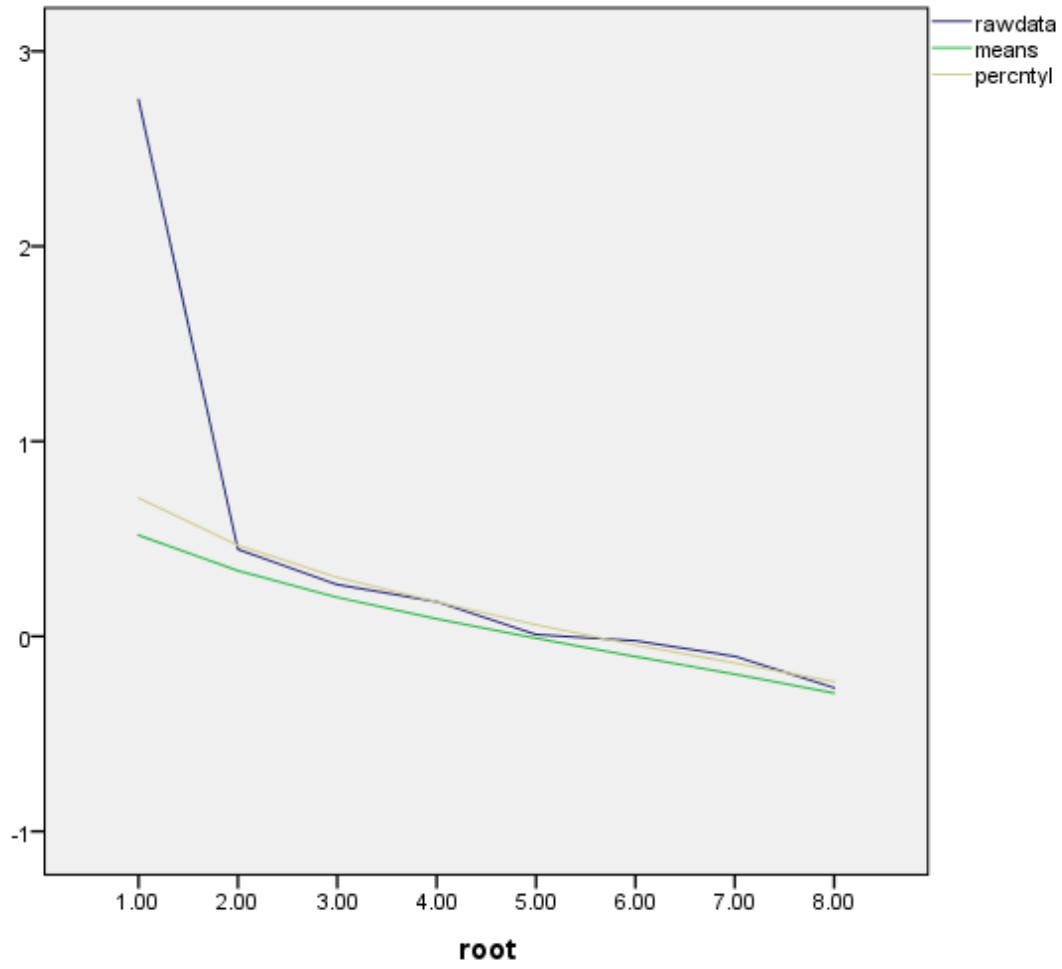
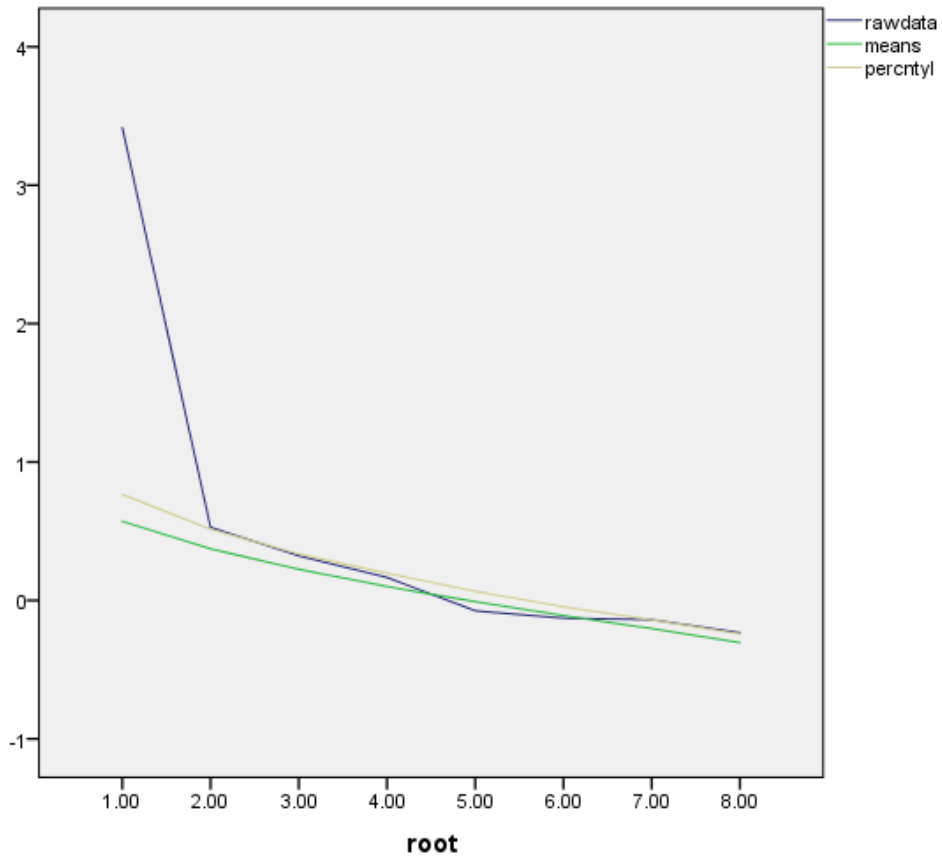


Figure 2:  
*Scree plot for GPOS EFA Wave 2*





## **Descriptive Characteristics of GPOS Variables**

Tables 6 and 7 show the means, standard deviations of all the observational items by the gender of the child, along with values for the overall sample for Waves 1 and 2 respectively. Generally, children presented in gender-typical ways, in accordance with my first hypothesis. Boys at both waves demonstrated higher levels of overall masculine presentation than girls, and girls demonstrated higher levels of feminine presentation than boys. Of equal significance children across all groups demonstrated low levels of transgressive presentation. This was similarly true for all the masculine or feminine iconography and color variables. A series of *t*-tests were conducted to determine if there were significant differences in the observational variables based by gender of the target child. There was not a significance between boys and girls in conforming or transgressing gender presentation. Expected differences were found by child gender. Overall Masculine Presentation, Masculine Color and Masculine Iconography were all higher for boys than girls across both waves, just as Feminine Presentation, Sexualization, Feminine Color and Iconography were all higher for girls than boys across both waves.

## **Correlations among Observational Items**

A series of correlations were run between items on the GPOS to examine if the expected associations among variables existed. The full table of correlations can be seen in Table 8, but in general, items were correlated as expected, with feminine items being correlated with the overall feminine presentation, and masculine items being associated with the overall masculine presentation.

Table 6

*Descriptive Information of GPOS Observational Variables in Wave 1*

	Girls (SD)	Boys (SD)	Total (SD)	<i>t</i> -test
Overall	3.89 (1.03)	1.11 (.37)	2.82 (1.65)	8.28**
Feminine				
Overall	1.41 (.74)	4.31 (.72)	2.53 (1.62)	-11.38**
Masculine				
Orderliness	3.26 (.88)	2.91 (.74)	3.17 (.84)	.84
Decoration	.47 (.78)	.02 (.14)	.31 (.68)	5.38**
Count				
Iconography	.76 (.82)	.61 (.82)	.66 (.78)	-.64
Count				
Feminine	1.63 (.82)	.98 (.15)	1.29 (.66)	5.77**
Iconography				
Masculine	1 (0)	1.38 (.74)	1.21 (.54)	-4.63**
Iconography				
Color Count	2.93 (1.08)	3.28 (.95)	3.03 (1.02)	.974
Feminine Color	3.5 (1.27)	1.17 (.56)	2.36 (1.53)	7.11**
Masculine Color	1.67 (.87)	3.82 (.92)	2.72 (1.40)	-7.64**
Sexualization	1.06 (.25)	1 (0)	1.04 (.22)	-.43
Conforming	3.89 (1.03)	4.31 (.72)	4.11 (.91)	.59
Transgressing	1.41 (.74)	1.11 (.37)	1.26 (.60)	.20

*Note.* \* =  $p < .05$ ; \*\* =  $p < .001$

Table 7

*Descriptive Information of GPOS by Gender of Child W2*

	Girls (SD)	Boys (SD)	Total (SD)	<i>t</i> -test
Overall Feminine	3.65 (2.04)	1.16 (.37)	2.46 (1.94)	8.28**
Overall	1.43 (.95)	3.42 (.70)	2.38 (1.30)	-11.38**
Masculine				
Orderliness	2.93 (.74)	2.80 (.67)	2.87 (.70)	.84
Decoration Count	2 (2.07)	.31 (.71)	1.19 (1.17)	5.38**
Iconography	1.63 (1.69)	1.90 (2.39)	1.76 (2.05)	-.64
Count				
Feminine	2 (1.09)	1.04 (.31)	1.54 (.94)	5.77**
Iconography				
Masculine	1.17 (.56)	2.11 (1.21)	1.62 (1.04)	-4.63**
Iconography				
Color Count	4.32 (2.01)	4.28 (1.50)	4.31 (1.77)	.974
Feminine Color	3.55 (1.45)	1.68 (1.02)	2.64 (1.54)	7.11**
Masculine Color	2.12 (1.26)	4.02 (1.08)	3.04 (1.57)	-7.64**
Sexualization	1.89 (.92)	1.38 (.90)	1.64 (.94)	2.52 *
Conforming	3.65 (2.04)	3.42 (.70)	3.54 (1.55)	.67
Transgressing	1.43 (.95)	1.16 (.37)	1.31 (.75)	1.70

*Note.* \* =  $p < .05$ ; \*\* =  $p < .001$

Table 8  
*Correlations between GPOS items*

	1	2	3	4	5	6	7	8	9	10	11	12	
1. Overall	-	-	-	-.11	.19	.62**	-	.13	-.58	.61**	-.24*	-.15	.29**
Masculine		.68**	.11			.54**		**					
2. Overall	-	-	.03	.03	-.06	-	.47**	-.06	.60**	-	.34**	.74**	-.12
Feminine						.42**			.55**				
3. Orderliness	-	-	-	.25*	.26*	.11	.21	.13	.16	-.12	-.20	-.06	.01
4. Decoration	-	-	-	-	.12	-.11	.37**	.26*	.28**	-	.18	.05	.12
Count									.27**				
5. Iconography	-	-	-	-	-	.67**	.34**	.58**	.01	.13	-.09	.10	-.03
Count													
6. Masculine	-	-	-	-	-	-	.39**	-	.46**	-.11	-.06	.12	
Iconography							.32**	.36**					
7. Feminine	-	-	-	-	-	-	-	.27*	.54**	-	.07	.21*	-.16
Iconography									.48**				
8. Color Count	-	-	-	-	-	-	-	-	.06	.01	-.07	-.07	.205
9. Feminine	-	-	-	-	-	-	-	-	-	.26*	.28**	-.04	
Color									.82**				
10. Masculine	-	-	-	-	-	-	-	-	-	-	-.19	-.14	-.07
Color													
11. Sexualization	-	-	-	-	-	-	-	-	-	-	-	.22*	.01
12. Conforming	-	-	-	-	-	-	-	-	-	-	-	-	-.39**
13. Transgressing	-	-	-	-	-	-	-	-	-	-	-	-	-

## **Associations among GPOS Variables and Other Measures**

A series of simple regression models were run to determine if there were any significant associations between elements of the GPOS and the results of other measures of interest. First, I tested the ability to the PSAI to predict conforming behaviors across both waves. Children's Wave 1 behaviors did not serve as a significant predictor of their gender typical presentation in Wave 1 ( $F(1, 86) = .448, p = .50$ ) or in Wave 2 ( $F(1, 90) = 1.27, p = .26$ ). This leads me to reject Hypothesis 2. Next a model was tested (see Appendix B) in which children's gender-typical attitudes would serve as a mediator between parents' gender-typical attitudes and children's gender-typical presentation. Ultimately, since the association between children's gender-typical attitudes and their gender-typical appearance was not significant at Wave 2,  $F(1, 81) = .16, p = .69$ , the model was inoperable. Similarly, at Wave 2, there was not a significant association between parents' gender-typical attitudes and their children's gender-typical presentation,  $F(1, 83) = .40, p = .53$ , leading to a rejection of hypothesis 3. One final test was run to see if children's gender-conforming presentation in Wave 2 was predictive of their sense of self-worth (also at Wave 2). This model proved to be nonsignificant,  $F(1, 84) = .23, p = .63$ , leading to a rejection of hypothesis 4.

## **Presentation Differences by Family Type**

Largely, presentation elements did not differ by family type in either wave, as can be seen in Tables 9 and 10, in support of hypothesis 5. The only exception was Overall Feminine Presentation at Wave 2. Children in lesbian mother families demonstrated more feminine presentation elements than did children in either gay father families or heterosexual parent families. It is also worth noting that there was not a difference in overall gender-transgressive or gender-conforming presentation scores among any of the family types in either wave.

Table 9

*Descriptive Information of GPOS by Family Type (Wave 1)*

	Lesbian Mothers (SD)	Gay Fathers (SD)	Heterosexual Parent (SD)	Total (SD)	<i>F</i> ( <i>df</i> )
Overall	2.69 (1.59)	2.14 (1.52)	2.67 (1.66)	2.53 (1.61)	1.91 (104)
Feminine					
Overall	2.50 (1.55)	3.31 (1.67)	2.71 (1.66)	2.82 (1.65)	1.19 (104)
Masculine					
Orderliness	3.07 (.74)	3.24 (.83)	3.17 (.90)	3.17 (.84)	.260 (104)
Decoration	.31 (.73)	.13 (.44)	.40 (.74)	.31 (.67)	1.44 (104)
Count					
Iconography	.69 (.73)	.41 (.56)	.78 (.89)	.66 (.78)	2.17 (104)
Count					
Feminine	1.31 (.54)	1.14 (.63)	1.38 (.71)	1.29 (.66)	1.30 (104)
Iconography					
Masculine	1.23 (.51)	1.14 (.64)	1.23 (.54)	1.21 (.54)	.30 (104)
Iconography					
Color Count	2.76 (.86)	3.38 (.90)	2.96 (1.12)	3.03 (1.02)	2.77 (104)
Feminine Color					.41 (104)
Masculine Color	2.50 (1.42)	3.24 (1.41)	2.53 (1.34)	2.71 (1.39)	2.86 (104)
Sexualization	1.00 (0)	1.07 (.26)	1.05 (.22)	1.04 (.21)	.84 (104)
Conforming	3.78 (1.13)	4.27 (.79)	4.17 (.83)	4.10 (.91)	2.10 (104)
Transgressing	1.39 (.78)	1.17 (.46)	1.26 (.58)	1.25 (.61)	.85 (104)

*Note.* \* =  $p < .05$ ; \*\* =  $p < .001$

Table 10

*Descriptive Information of GPOS by Family Type (Wave 2)*

	Lesbian Mothers (SD)	Gay Fathers (SD)	Heterosexual Parent (SD)	Total (SD)	<i>F</i> ( <i>df</i> )
Overall	2.78 (1.44)	2.34 (2.89)	2.40 (1.37)	2.48 (1.94)	3.61 (86)*
Feminine					
Overall	1.89 (1.01)	2.84 (1.25)	2.35 (1.40)	2.37 (1.38)	.369 (86)
Masculine					
Orderliness	3.04 (.63)	2.76 (.71)	2.85 (.70)	2.87 (.70)	.97 (86)
Decoration	1.74 (2.45)	.96 (1.28)	1.12 (1.68)	1.23 (1.82)	1.25 (86)
Count					
Iconography	1.26 (1.38)	2.00 (2.49)	1.87 (2.02)	1.75 (2.04)	.52 (86)
Count					
Feminine	1.73 (1.05)	1.43 (.89)	1.52 (.90)	1.55 (.94)	.71 (86)
Iconography					
Masculine	1.43 (.89)	1.73 (.1.00)	1.65 (1.04)	1.61 (1.03)	.92 (86)
Iconography					
Color Count	4.47 (1.95)	4.38 (1.57)	4.12 (1.81)	4.29 (1.77)	.33 (86)
Feminine Color	2.91 (1.52)	2.25 (1.63)	2.78 (1.52)	2.66 (1.57)	2.27 (89)
Masculine Color	2.66 (1.46)	3.51 (1.55)	2.92 (1.45)	3.03 (1.50)	1.32 (89)
Sexualization	1.65 (.88)	1.42 (.55)	1.77 (1.14)	1.64 (.94)	1.09 (86)
Conforming	3.30 (1.06)	3.81 (2.44)	3.55 (.91)	3.54 (1.55)	.65 (85)
Transgressing	1.34 (.64)	1.38 (1.02)	1.23 (.58)	1.30 (.74)	.37 (85)

*Note.* \* =  $p < .05$ ; \*\* =  $p < .001$

### **Associations of Performativity Between Waves**

A simple linear regression was conducted to predict the influence of conforming presentation as measured by the GPOS in Wave 1 on conforming presentation in Wave 2 in response to research question 6. This association proved to be nonsignificant ( $F(1, 84) = .683, p = .41$ ), indicating that conforming behaviors in early childhood were not associated with conforming behaviors in middle childhood. Transgressive behavior from Wave 1 was a significant predictor of transgressing behavior in Wave 2 however, ( $F(1, 84) = 9.58, p = .003$ ) with an  $R^2$  of .10.

### **Discussion**

This pilot of the GPOS has proven successful in that it has demonstrated that there are observable and quantifiable differences in the way that children are dressed, and that these differences are at least in part based on stereotypical gender roles. While this is not a grand revelation in itself, given that the literature has already provided numerous examples of gender typicality being tied to appearance, (Haferkamp et al. 2012, Patterson, 2012) the observational nature of the GPOS provides a new dimension about gender presentation to this discussion that did not previously exist. We see that children are adopting many of the presentation styles which were anticipated by the previous literature, such as girls demonstrating sexualized appearance more than boys, as well as a divide in color preference between genders (Behm-Morawitz & Schipper, 2016; Pennell & Behm-Morawitz, 2015). What is perhaps of greater importance is the fact that children did not differ by the sexuality of their parent in these markers of gender-typed appearance, and that overall, children presented as more gender-conforming than transgressive.

In many ways, this first pilot is encouraging in that the findings conform to our initial expectations of which elements of presentation would be most closely associated with gender-



based presentation styles. Firstly, I found significant correlations between an overall feminine presentation style and decoration count, sexualization, and feminine-typed color and iconography. Masculine presentation style was ultimately only positively associated with masculine-coded iconography and color presence, but was negatively coded with all the femininely coded markers, sexualization, and decoration count. These findings suggest that the use of accessories or sexualized elements of clothing are seen as distinctly feminine, apart from the masculine style altogether. This would be in line with the presentation narratives gathered from older populations (Moore, 2006). Previous commentators have noted that adolescent boys have demonstrated an active awareness of fashion, but an active rejection of it in their own appearance (Bakewell, Mitchell, & Rothwell, 2013). While Bakewell and colleagues propose that this is a part of the adolescent definition of masculinity for these boys, the results of the GPOS with seven to nine-year-old children suggest that the rejection of fashionable items may come online much earlier. This may of course be due to the kinds of clothes that children's parents are purchasing rather than active style decisions on part of the child, as parents do seem to have greater influence on clothing purchasing decisions than do children at the ages in this study (Harper, Dewar & Daick, 2003). Even so, if this is the case, it could potentially imply that the rejection of fashion as the realm of the feminine in adolescence is set up from early childhood. This rejection of the presentational aspects of gender at this stage in life is interesting given that children at this age have a tendency to perform similar rejection of gender non-conforming toys (Weisgram et al. 2014; Todd, Barry & Thommessen, 2017). Given that both clothing and toy choices are very overt emblems of performative gender, the rejection of both at the same time lends some credence to the idea that these rejections might work off of a similar mechanism, possibly as a social learning phenomenon (Bandura & Walters, 1977).

At a broad descriptive level, the children in this sample appeared to be primarily adhering to gendered expectations of appearance, as anticipated in hypothesis 1. Boys presented in a more masculine manner than did girls across both waves, while girls presented more femininely. This was true for the overall presentation style, and for the color and iconography variables as well. That being said, there were interesting trends that appear across the Waves. These included the distinct drop in boys' gender-conforming presentational style from Wave 1 to Wave 2, and girls seeing a similarly large drop in orderliness between the two waves. In general, while children continue to differ across waves, the elements that carry the greatest difference vary a great deal as they age. Iconography is almost not present in Wave 1, while suddenly becoming a source of great gender differentiation in Wave 2. These differences between waves also helps to explain the apparent lack of influence that conforming behaviors from Wave 1 have on Wave 2.

Of course, we have also sought to understand the structure of the GPOS data in addition than simply interpreting them via correlational analyses. The results of the exploratory factor analyses across both waves indicate that the masculine and feminine items all represent a central underlying factor. This is an encouraging result in that it seems to point to the idea that these items on the measure are capturing an underlying "gender presentation" variable, rather than just a collection of disjointed variables. Given the distributions of positive and negative loadings between the feminine and masculine items respectively, I would claim that the underlying construct present in these data represents a dichotomous interpretation of gender presentation. That is to say, the data represent an interpretation of gender such that a greater presence of masculinity necessitates a reduction in femininity. This quirk of the scale is of interest, given that the items themselves did not contain any such limitation. It would appear that children do not mix gender signifiers in their appearance, but adhere to one over the other. Given the relatively

high conformity scores across both waves, it is likely that this chosen form of presentation is the one which matches their sex assigned at birth. Of course, while this is an appealing interpretation, it is worth noting that our sample is somewhat small in comparison to 150 subject minimum suggested by Hutchedson and Sofroniou (1999) or even the more liberal suggestion of 100 subjects (Kline, 1979). This means that, while an interesting exercise which may point towards future directions, the results of this analysis must be taken with a grain of salt at best.

Associations between elements of gender typical presentation as measured by the GPOS and other related measures, including the those of parent and child gender typical attitudes and those of children's feelings of self-worth proved to be non-significant. This leads to a rejection of hypotheses three and four. The matter of feelings of self-worth is almost to be expected, given the rather low reliability within the HSSP, and the fact that most of the children in our sample demonstrated very high self-worth. While this is an encouraging result in itself, it does render the results much more murky. I believe that lack of association between parental and child attitudes and child presentation may prove to be more theoretically significant. Taken at face value, this lack of relationship may imply that presentation style among children in this sample is not stemming from their own or their parents' gender-typical attitudes. This is not an entirely improbable claim, given that it has already been reported that children's preference for gender-typical clothing persists in middle childhood regardless of parental preference (Halim, et al., 2014). While we do have information as to the gender typical attitudes of the children's parents, we do not know if these parents have made any sort of active effort to encourage or discourage gender typical behaviors in their children. This is noteworthy, as the social learning framework (Bandura & Walters, 1977) would suggest that children at this age would likely still be looking towards their parents as a source of information on standard behavior. In the future it would be

profitable to see if parent's levels of gender typical presentation have a greater influence than their attitudes over the presentation style of their children.

It is worth addressing the difference in feminine presentation that developed between family types. This is a somewhat surprising finding, given that previous reports of this sample and similar groups have indicated that there have been no differences by family type in children's or parents' gender-typed attitudes (Farr et al., 2017). It is especially puzzling given that children raised by lesbian mothers did not display greater gender transgressing or conforming scores than do children from any of the other family types. Some of this could be answered by the findings of other researchers, noting that daughters of same-sex couples have a tendency to develop more flexible attitudes than do daughters of heterosexual parents (Sumontha, Farr, & Patterson, 2017) or that children of lesbian mothers tend to be less gender differentiated than those with gay or heterosexual parents (Goldberg & Garcia, 2017). Given this, it would likely mean that the relatively larger amount of feminine presentation in lesbian mother families is driven by boys who are able to more freely participate in feminine presentation styles than other groups. In any case, more work in the future will be required to determine if the difference seen here is driven by parental influence, some other element, or is simply a spurious statistical result.

There are of course several limitations that must be taken into consideration when interpreting these findings, especially given the novelty and infancy of the GPOS. From a simple methodological perspective, this sample is significantly more affluent, on average, than the average household headed by LG parents (Gates, 2013). Given the fact that the target children's clothing is likely primarily purchased by their parents, the wealth of the parents will presumably have an impact in the possible gender expression present in my sample. This is especially

relevant in regards to the orderliness and decoration count variables. Those families who have more resources at their disposal would reasonably have more ability to make their appearance more orderly, especially when they are aware that a guest would be entering the home. This could help to explain why the orderliness variable of the GPOS appeared to be less variable than any of the others. It would be fruitful in the future for the GPOS to be applied to more spontaneous settings such as in the classroom or possibly taking clothing directly from children's wardrobes. These samples could also better represent a wider range of the LG parent families.

A more fundamental concern of the most recent incarnation of the GPOS is the current inability to determine how often gender-neutral elements appear in children's clothing. The current incarnation of the GPOS allows us to see how much masculine or feminine elements are present in children's appearance, but because these are rated independently, it does not provide information as to of what the rest of the children's appearance is comprised. A rating such as neutral iconography or an overall non-gendered appearance rating could help to provide information about what proportion of children's clothing is made up of gendered elements. This in turn could serve later research into the impact that relative presence of gender neutral to gender typical elements may have in outsider's perceptions of an individual's gender typicality or examining if the usage of gender typical appearance elements tends to preclude the usage of gender neutral appearance elements.

In addition to this question of content, we must also be concerned with the question of the applicability of the results of the GPOS; essentially, for how long and in what domains these results may remain relevant. A fundamental tenant of the gender performativity framework is that gender presentation is culturally bound, and thus will change with the culture that it inhabits (Butler, 1990). This makes any attempt to understand the particulars of presentation fraught with

difficulty as changes in tastes, styles, and cultural capital will dramatically change how group membership is performed across time. The only remedy to this is to attempt to understand where these boundaries lie, and look for places in which our assumptions no longer hold. For this purpose, I would propose that the GPOS may serve as a potential solution to this problem rather than being limited by it. Being able to have a consistent measure which can be used to compare changes in presentation across groups and generations will help to ensure the field against these shifts in cultural presentation. The GPOS could serve as a measure able to identify when these differences occur.

### **Potential Contributions and Future Directions**

This research holds the potential to make a number of useful contributions to the literature surrounding children's gender-typical behavior and their overall social development. Firstly, the GPOS provides a direct measure of how children embody their gender and may provide a glimpse into how gender presentation impacts their development. Adolescents in middle and high school report frequent harassment due to perceived deviations from their assigned gender norms (Jewell & Brown, 2014). The GPOS, or some future derivation of the scale, may serve to identify what elements of presentation are most likely to trigger this sort of hostile response. It could also help identify what elements of conformity relate most strongly to negative outcomes. While it has been demonstrated that gender typicality can serve a protective function against peer aggression (Jewell & Brown, 2014), holding allegiance to gender-conforming ideals can also lead young people to limit themselves in a number of ways, from young women losing interest in STEM fields (Leaper, Farkas, & Brown, 2012) to young children demonstrating greater endorsement of stereotypical gender roles in others (Patterson, 2012). With the observational coding scheme developed for this study, intended to measure a salient

element of gender identity (i.e., gender presentation), future research may be able to better isolate when some aspects of gender presentation appear and determine what elements of gender-typical presentation are most common among children.

On that note, this study serves to inform the ongoing discussion surrounding children's gender role development in LG parent families. Given that children do not appear to majorly differ by family type, these results serve as an indication that children do not necessarily require a parent role model of their own gender in order to understand how to perform in a gender-typical manner. This runs counter to common arguments made against the validity of LG parents (e.g., two mothers are not capable of properly socializing a male child without additional male role models; Biblarz & Stacy, 2010), and also has interesting implications for how gender-typical presentation arises in children. Interviews conducted by Berkowitz and Ryan (2011) with LG parents reveal that these parents face pressures to ensure that their children present as gender-typically as possible, or to at least avoid allowing their children to transgress too dramatically. LG parents speak of fears that children's transgressions against gender norms could validate heterosexist concerns in the broader culture that LG parents are somehow indoctrinating their children in atypical ways (Berkowitz & Ryan, 2011). Finding no such differences between family types indicates that they have likely succeeded, for better or worse.

Future research with the GPOS will attempt to make use of it in a wider variety of environments. Ideally the GPOS will be used in more informal settings in the future in an attempt to acquire more naturalistic data of children's appearance patterns. Expanding out to older adolescence as well could allow future research to identify how gender transgression and conformity is impacted by a developing sexuality. The immediate results of this study point towards other questions that have been left unanswered as well. Given that LG parents do not

appear to dramatically differ from their heterosexual peers in dressing their children, do both groups share similar motivations when dressing their children, or are LG parents actively dressing with the intention of providing their children with the protection of conformity? Does the lack of impact of parental gender flexibility on children's gender presentation mean that parents have limited say in their children's gender performance, or is their role being driven by other factors? These questions and more will require more strenuous research into the ways in which clothing and other markers of appearance are understood and utilized by children and parents of many different ages and backgrounds.



## Appendix A

### **Gender Presentation Observation Scheme** **[VERSION 6, DATE LAST MODIFIED: 7/04/17]**

#### **Overall Masculine Score**

In a general sense, to what degree does the child's clothing adhere to the expectation of the masculine gender norm? Aspects impacting this rating could include the iconography present in the clothing, how it is worn, what material the clothing is made of, among other elements. Note that the presence of masculine elements does not eliminate the possibility for feminine elements to be present. In this scale masculine and feminine elements of presentation are meant to be viewed separately. Appearance elements that may be considered masculine could include clothing made for exercise or featuring sporty iconography, clothing with text referencing masculine themes, or masculine coded hair styles.

-1. Child's clothing does not at all reference the masculine gender norm. This could be due to many factors including the clothing being so plain that it is effectively neutral, or due to another theme being so present as to be the dominating impression.

-3. Child's clothing contains some references to the masculine gender role or gender typical clothing styles, but this theme is not overpowering.

-5. The child's clothing is extremely masculine typed. Any other themes present in the clothing are muted to the point of being nearly unnoticeable, and the outfit is plainly constructed with conveying masculinity.

## **Overall Feminine Score**

In a general sense, to what degree does the child's clothing adhere to the expectation of the feminine gender norm? Aspects impacting this rating could include the iconography present in the clothing, how it is worn, what material the clothing is made of, among other elements. Note that the presence of feminine elements does not eliminate the possibility for masculine elements to be present. In this scale masculine and feminine elements of presentation are meant to be viewed separately. Appearance elements that may be considered feminine could include clothing containing sexualized elements, the use of feminine colors such as pinks or pastels, or feminine coded hairstyles.

-1. Child's clothing does not at all reference the feminine gender norms. This could be due to many factors including the clothing being so plain that it is effectively neutral, or due to another theme being so present as to be the dominating impression.

-3. Child's clothing contains some references to the feminine gender role or gender typical clothing styles, but this theme is not overpowering or the only theme present.

-5. The child's clothing is extremely feminine typed. Any other themes present in the clothing are muted to the point of being nearly unnoticeable, and the outfit is plainly constructed with conveying femininity.

## **Orderliness**

This code focuses on how organized and clean the child's outfit is in general. This includes things such as stains on the clothes, coordination between individual pieces of the outfit, and wearing all the pieces correctly, such as buttons being undone, belts being loose, etc.. If it looks

as though the child has dressed themselves, they would likely have a low score on this rating. This rating does not deal with the formality or quality of the children's clothing. A child can be clean and put together while wearing relatively simple clothing, and it is also possible for a child to be wearing very nice clothing that is dirty or worn incorrectly.

-1. Child's appearance is entirely disorderly or slovenly. Items of clothing are worn incorrectly i.e. shirts on backwards or inside out; clothes are obviously dirty

- 3. Child's appearance is neither disorderly nor is there remarkable effort put in to making it appealing. This is a baseline average for most cases.

- 5. There is an active attempt to coordinate the child's clothing, and the clothing is obviously worn with care.

## **Decorations**

Take a number count of the number of accessories that the child is wearing, including things such as glasses, hair ties, hats, jewelry, tattoos etc.

## **Iconography**

What kinds of icons are present in the child's clothing? Printed t-shirts, shoes, and other articles of clothing can make a gendered impression. This category also includes text that appears on a child's clothing. Rate each child on each of the three following categories.

### Masculine

Masculine items could include male characters, weapons, or other items that could be considered part of the masculine stereotype.

- 1. Child's clothing contains no masculine iconography, either in pictures or in text
- 3. Child's clothing contains 2-3 pieces of masculine iconography
- 5. Child's clothing contains 5 or more pieces of masculine iconography

#### Feminine

Feminine items could include female characters, themes of passivity, or other items that fall under the traditional feminine stereotype.

- 1. Child's clothing contains no feminine iconography, either in pictures or in text
- 3. Child's clothing contains 2-3 pieces of feminine iconography
- 5. Child's clothing contains 5 or more pieces of feminine iconography

#### Overall Iconography

In addition to the above count of gendered pieces of iconography make a count of the number of pieces of iconography present in the child's clothing overall, including the gendered icons counted for above.

### **Colors present in outfit**

Count the number of distinct colors present in the child's outfit. These can be relatively broad categories, i.e. we are looking for Red vs. green vs. yellow rather than fuchsia vs. magenta

## **Masculine Color Themes**

How prevalent are masculine typed colors in the child's outfit? Masculine colors could include deep reds, camo, or blue. Only make note of colors that are primary features of the article of clothing in question, i.e. not just a small part of a piece of iconography, etc.

- 1. Child's outfit does not contain masculine colors or patterns at all.
- 3. Child's outfit is approximately halfway comprised of masculine colors or patterns.
- 5. Child's outfit is comprised entirely of masculine colors or patterns.

## **Feminine Color Themes**

How prevalent are feminine typed colors in the child's outfit? Feminine colors could include pinks, purples, and most pastels. Only make note of colors that are primary features of the article of clothing in question, i.e. not just a small part of a piece of iconography, etc.

- 1. Child's outfit does not contain feminine colors or patterns at all.
- 3. Child's outfit is approximately halfway comprised of feminine colors or patterns.
- 5. Child's outfit is comprised entirely of feminine colors or patterns.

## **Sexualization**

To what degree is the child being sexualized or portrayed as a sexual being. When considering the signs of this it is important to consider the age of the child in question. Several indicators of traditional sexualization still apply, such as tight or revealing clothing, but these may not be as

immediately evident as they are with adults or adolescents. Raters should look for other signs of enforced sexuality, such as text on clothing that indicates some romantic/sexual proclivity, such as “Daddy’s little heartbreaker”. Accessories could also be a consideration that may not be immediately apparent. Wearing high heels could be an example of this, as could the presence of makeup in many cases.

-1. Outfit demonstrates no sexualized characteristics. Clothing may be chosen for utility, or for simplicity.

- 3. Outfit has sexualized elements, but is not overall sexualized. Examples could include wearing clothing that contains sexualized iconography, but is otherwise not noteworthy. Clothing that is tight or accentuates features could be included here

- 5. Outfit is obviously sexualized. At this stage it may appear inappropriate for a child to be wearing this outfit. The child will be objectified to some level at this stage, perhaps wearing clothing that inhibits normal play for the sake of appearance.

## **Videos Viewed**

Make a note of which videos you have used when coding the children. Input a 1 if you have just watched the child interview, and a 2 if you have used others.

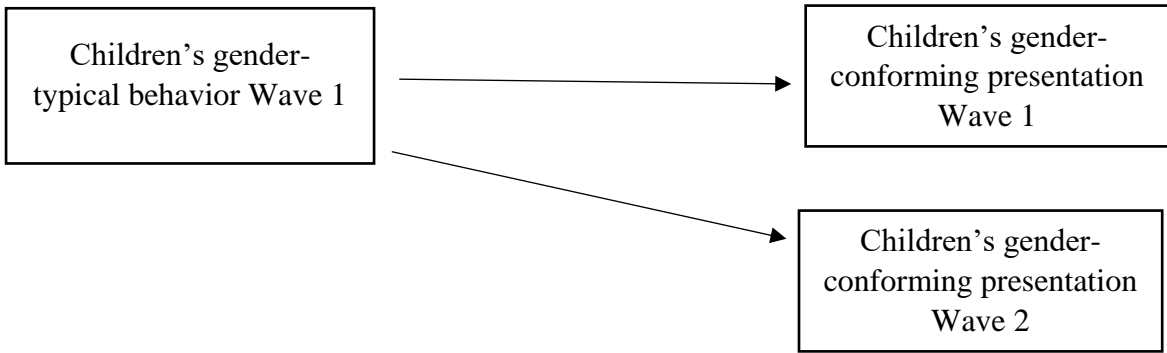
## **Video Quality**

How visible are details in the video? Is the video itself grainy? Does it have poor lighting? The focus of this code is to rate how easy it is to see details of appearance in the individual videos themselves.

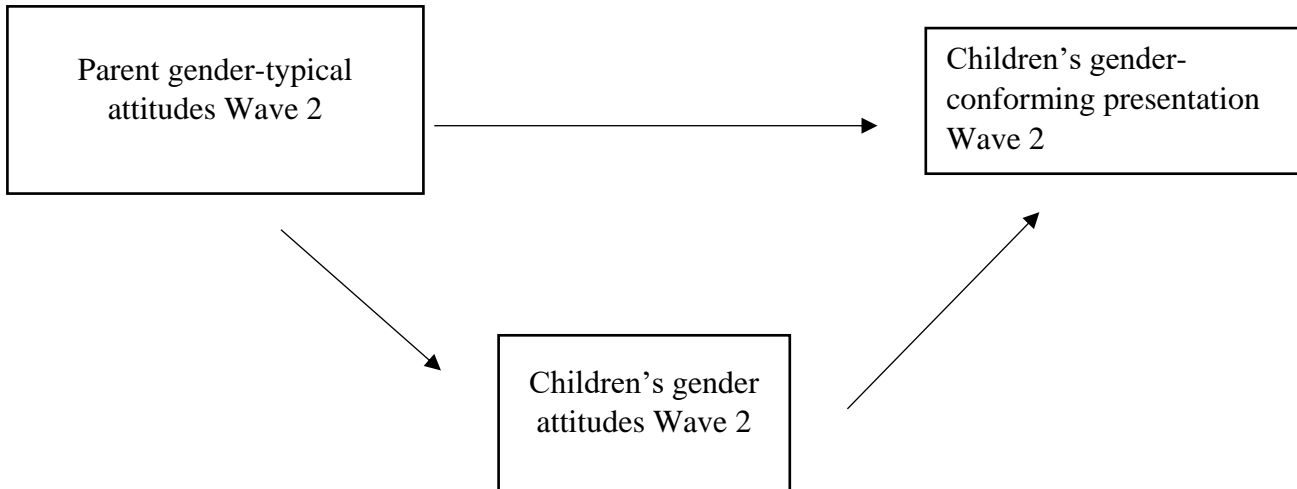
- 1- It is very difficult or impossible to see details of appearance in this video. The lighting could be extremely poor, the picture may be grainy, or the person could be consistently blocked from the camera by something in the shot. At this level the problems with the video are bad enough that it cannot be used for rating appearance.
  
- 3- There are some visibility concerns with the video that make it difficult to pick out details, but these problems can be worked around. If we were going to display the videos at a presentation this would be the minimal acceptable rating
  
- 5- There are no problems with the video quality. All details can be seen without difficulty and people move enough throughout the video that all important aspects of their appearance can be seen easily. The gold standard of videos in both quality and content.

Appendix B: Model Summary for Hypotheses 2 & 3

Hypothesis 2:



Hypothesis 3a and 3b:





## References

- American Psychological Association, Task Force on the Sexualization of Girls. (2007). Report of the APA Task Force on the Sexualization of Girls. Washington, DC: American Psychological Association. Retrieved from [www.apa.org/pi/wpo/sexualization.html](http://www.apa.org/pi/wpo/sexualization.html)
- Bakewell, C., Mitchell, V., & Rothwell, M. (2013). *Journal of Fashion Marketing and Management: An International Journal* 10(2), 169-180. doi:10.1108/1261202610667487
- Bandura, A., & Walters, R. H. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Behm-Morawitz, E., & Schipper, S. (2016). Sexing the avatar: Gender, sexualization, and cyber-harassment in a virtual world. *Journal of Media Psychology: Theories, Methods, And Applications*, 28(4), 161-174. doi:10.1027/1864-1105/a000152
- Berkowitz, D., & Ryan, M. (2011). Bathrooms, baseball, and bra shopping: Lesbian and gay parents talk about engendering their children. *Sociological Perspectives*, 54(3), 329-350. doi:10.1525/sop.2011.54.3.329
- Biblarz, T. J., & Stacey, J. (2010). How does the gender of parents matter? *Journal of Marriage and Family*, 72(1), 3-22. doi:10.1111/j.1741-3737.2009.00678.x
- Butler, J. (1990). *Gender trouble: Feminism and the subversion of gender*. Routledge.
- Collins, R. L. (2011). Content Analysis of Gender Roles in Media: Where Are We Now and Where Should We Go? *Sex Roles*, 64(3-4), 290-298.
- Cook, D. T. (2004). *The commodification of childhood: The children's clothing industry and the rise of the child consumer*. Duke University Press.

- Costello, A.B. & Osborne, J.W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation, 10*, 1-9.
- Coyne, S. M., Linder, J. R., Rasmussen, E. E., Nelson, D. A., & Collier, K. M. (2014). It's a bird! It's a plane! It's a gender stereotype!: Longitudinal associations between superhero viewing and gender stereotyped play. *Sex Roles, 70*(9-10), 416-430. doi:10.1007/s11199-014-0374-8
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 111*(1), 3-22. doi:10.1037/0033-2909.111.1.3
- Farr, R. H. (2017). Does parental sexual orientation matter? A longitudinal follow-up of adoptive families with school-age children. *Developmental psychology, 53*(2), 252-264. doi: 10.1373/dev0000228
- Farr, R. H., Bruun, S. T., Doss, K. M., Patterson, C. J. (Under review). Children's Gender-Typed Behavior from Early to Middle Childhood in Adoptive Families with Lesbian, Gay, and Heterosexual Parents.
- Farr, R. H., Forssell, S. E., & Patterson, C. J. (2010), Parenting and Child Development in Adoptive Families: Does Parental Sexual Orientation Matter? *Applied Developmental Science, 3*, 164 – 178. doi: 10.1080/10888691.2010500958
- Farr, R. H., & Patterson, C. J. (2013). Coparenting among lesbian, gay, and heterosexual couples: Associations with adopted children's outcomes. *Child Development, 84*(4), 1226-1240. doi: 10.1111/cdev.12046

- Fedewa, A., Black, W., & Ahn, S. (2015). Children and Adolescents With Same-Gender Parents: a Meta-Analytic Approach in Assessing Outcomes. *Journal of GLBT Family Studies*, *11*(1): 1-34. doi: 10.1080/1550428X.2013.869486
- Haferkamp, N., Eimler, S. C., Papadakis, A., & Kruck, J. V. (2012). Men are from Mars, women are from Venus? Examining gender differences in self-presentation on social networking sites. *Cyberpsychology, Behavior, and Social Networking*, *15*(2), 91-98.  
doi:10.1089/cyber.2011.0151
- Hahn, P. W., & S. D. Clayton (1996). The effects of attorney presentation style, attorney gender, and juror gender on juror decisions. *Law and Human Behavior*, *20*(5), 533-554.
- Halim, M. L., Ruble, D. N., Tamis-LeMonda, C. S., 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.
- Harper, S. J., Dewar, P. J., & Diack, B. A. (2003). The purchase of children’s clothing—who has the upper hand?. *Journal of Fashion Marketing and Management: An International Journal*, *7*(2), 196-206.
- Harter, S. (1982). The Perceived Competence Scale for Children. *Child Development*, *53*(1), 87-97. doi:10.2307/1129640
- Hetsroni, A., & H. Lowenstein (2014). Is she an expert or just a woman? Gender differences in the presentation of experts in TV talk shows. *Sex Roles*, *70*(9-10), 376-386.
- Jewell, J. A., & Brown, C. S. (2014). Relations among gender typicality, peer relations, and mental health during early adolescence. *Social Development*, *23*(1), 137-156.  
doi:10.1111/sode.12042

- Kane, E. W. (2006). No Way My Boys Are Going to Be Like That!": Parents' Responses to Children's Gender Nonconformity. *Gender & Society*, 20(2), 149-176.
- Kapidzic, S., & Herring, S. C. (2015). Race, gender, and self-presentation in teen profile photographs. *New Media & Society*, 17(6), 958-976.
- Kelan, E. K. (2013). The becoming of business bodies: Gender, appearance, and leadership development. *Management Learning*, 44(1), 45-61. doi:10.1177/1350507612469009
- Kreiger, T. C. & B. Kochenderfer-Ladd (2013). Gender behaviors as predictors of peer acceptance and victimization. *Personal Relationships* 20(4): 619-634.
- Lagaert, S., Van Houtte, M., & Roose, H. (2017). Engendering culture: The relationship of gender identity and pressure for gender conformity with adolescents' interests in the arts and literature. *Sex Roles*, doi:10.1007/s11199-017-0738-y
- Leaper, C., & Robnett, R. D. (2011). Women are more likely than men to use tentative language, aren't they? A meta-analysis testing for gender differences and moderators. *Psychology Of Women Quarterly*, 35(1), 129-142. doi:10.1177/0361684310392728
- Li, R. H., & Wong, W. I. (2016). Gender-typed play and social abilities in boys and girls: Are they related? *Sex Roles*, 74(9-10), 399-410. doi:10.1007/s11199-016-0580-7
- Lindsey, E. W., Mize, J., & Pettit, G. S. (1997). Mutuality in parent-child play: Consequences for children's peer competence. *Journal of Social And Personal Relationships*, 14(4), 523-538. doi:10.1177/0265407597144007
- LoBue, V., & DeLoache, J. S. (2011). Pretty in pink: The early development of gender-stereotyped colour preferences. *British Journal Of Developmental Psychology*, 29(3), 656-667. doi:10.1111/j.2044-835X.2011.02027.x

- Lytton, H., & Romney, D. M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin*, *109*(2), 267-296. doi:10.1037/0033-2909.109.2.267
- Moller, L. C., & Serbin, L. A. (1996). Antecedents of toddler gender segregation: Cognitive consonance, gender-typed toy preferences and behavioral compatibility. *Sex Roles*, *35*(7-8), 445-460. doi:10.1007/BF01544131
- Moore, M. R. (2006). Lipstick or Timberlands? Meanings of gender presentation in black lesbian communities. *Journal of Women in Culture and Society*, *32*(1), 113-139. doi:10.1086/505269
- Murnen, S. K., Greenfield, C., Younger, A., & Boyd, H. (2016). Boys Act and Girls Appear: A Content Analysis of Gender Stereotypes Associated with Characters in Children's Popular Culture. *Sex Roles*, *74*(1-2), 78-91.
- Ocampo, A. C. (2012). Making masculinity: Negotiations of gender presentation among Latino gay men. *Latino Studies*, *10*(4), 448-472. doi:10.1057/lst.2012.37
- Patterson, M. M. (2012). Self-perceived gender typicality, gender-typed attributes, and gender stereotype endorsement in elementary-school-aged children. *Sex roles*, *67*(7-8), 422-434.
- Pennell, H., & Behm-Morawitz, E. (2015). The empowering (super) heroine? The effects of sexualized female characters in superhero films on women. *Sex Roles*, *72*(5-6), 211-220. doi:10.1007/s11199-015-0455-3
- Phares, V., Steinberg, A. R., & Thompson, J. K. (2004). Gender differences in peer and parental influences: Body image disturbance, self-worth, and psychological functioning in preadolescent children. *Journal of Youth and Adolescence*, *33*(5), 421-429. doi:10.1023/B:JOYO.0000037634.18749.20

- Pomerleau, A., Bolduc, D., Malcuit, G., & Cossette, L. (1990). Pink or blue: Environmental gender stereotypes in the first two years of life. *Sex Roles*, 22(5-6), 359-367.  
doi:10.1007/BF00288339
- Roach-Higgins, M. E., & Eicher, J. B. (1992). Dress and identity. *Clothing & Textiles Research Journal*, 10(4), 1-8. doi:10.1177/0887302X9201000401
- Roberto, C. A., Baik, J., Harris, J. L., & Brownell, K. D. (2010). Influence of licensed characters on children's taste and snack preferences. *Pediatrics*, 126(1), 88-93.  
doi:10.1542/peds.2009-3433
- Schilt, K., & Westbrook, L. (2009). Doing gender, doing heteronormativity: 'Gender normals,' transgender people, and the social maintenance of heterosexuality. *Gender & Society*, 23(4), 440-464. doi:10.1177/0891243209340034
- Szesny, S., & Kühnen, U. (2004). Meta-cognition about biological sex and gender-stereotypic physical appearance: Consequences for the assessment of leadership competence. *Personality And Social Psychology Bulletin*, 30(1), 13-21.  
doi:10.1177/0146167203258831
- Slater, A., & Tiggemann, M. (2016). Little girls in a grown up world: Exposure to sexualized media, internalization of sexualization messages, and body image in 6–9 year-old girls. *Body Image*, 1819-22. doi:10.1016/j.bodyim.2016.04.004
- Sumontha, J., Farr, R. H., & Patterson, C. J. (2017). Children's gender development: Associations with parental sexual orientation, division of labor, and gender ideology. *Psychology Of Sexual Orientation And Gender Diversity*, 4(4), 438-450.  
doi:10.1037/sgd0000242

- 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. doi: 10.1037/0012-1649.38.4.615
- Tiggemann, M., & Slater, A. (2004). Thin ideals in music television: A source of social comparison and body dissatisfaction. *International Journal of Eating Disorders*, 35(1), 48-58. doi: 10.1002/eat.10214
- Weisgram, E. S., Dinella, L. M., & Fulcher, M. (2011). The role of masculinity/femininity, values, and occupational value affordances in shaping young men's and women's occupational choices. *Sex Roles*, 65(3-4), 243-258. doi:10.1007/s11199-011-9998-0
- Weisgram, E. S., Fulcher, M., & Dinella, L. M. (2014). Pink gives girls permission: Exploring the roles of explicit gender labels and gender-typed colors on preschool children's toy preferences. *Journal of Applied Developmental Psychology*, 35(5), 401-409. doi:10.1016/j.appdev.2014.06.004
- West, C., & Fenstermaker, S. (1995). Doing difference. *Gender & Society*, 9(1), 8-37.
- Witt, S. D. (1997). Parental influence on children's socialization to gender roles. *Adolescence*, 32(126), 253-259.
- Witt, S. D. (2000). Review of Research: The Influence of Television on Children's Gender Role Socialization. *Childhood Education*, 76(5), 322-324. doi: 10.1080/00094056.2000.10522124
- Wylie, S. A., Corliss, H. L., Boulanger, V., Prokop, L. A., & Austin, S. B. (2010). Socially assigned gender nonconformity: A brief measure for use in surveillance and investigation of health disparities. *Sex Roles*, 63(3-4), 264-276. doi:10.1007/s11199-010-9798-y

## Curriculum Vitae

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### Publications

- Weisgram, E. & **Bruun S. T.**, *Predictors of Gender-Typed Toy Purchases by Parents and Nonparents: The Role of Childhood Experiences and Gender Attitudes* (under review)
- Farr, R. H., **Bruun, S. T.**, Doss, K. M., & Patterson, C. J. (2017). Children's gender-typed behavior from early to middle childhood in adoptive families with lesbian, gay, and heterosexual parents. *Sex Roles*, doi:10.1007/s11199-017-0812-5
- Farr, R. H., Simon, K. A., & **Bruun, S. T.** (2017). LGBTQ relationships: Families of origin, same-sex couples, and parenting. In N. R. Sifton (Ed.), *Family dynamics and romantic relationships in a changing society* (pp. 110-136). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-2404-5.ch006