Like Parent, Like Child? The intergenerational transfer of gender identity

Master's thesis

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Abstract

Gender identity (a person's sense of self as a male or female) is related to a variety of mental health outcomes. Little is known about the influence of family on the gender identity of children. This study explores whether parental gender identity is related to the gender identity of the child and if the sibling gender composition moderates this relationship. The research population consisted out of 142 Dutch families with at least one child between the ages of 6 and 12 years old. Mothers, fathers and children completed a questionnaire on gender identity, in which gender identity is seen as a two-dimensional construct (i.e. same-gender similarity and other-gender similarity). Regression analyses revealed that parental same-gender similarity is a significant predictor of same-gender identity in children and parental other-gender similarity predicts the other-gender similarity of children. This is especially true for mothers. Maternal same-gender similarity was also related to other-gender similarity of the child. No effect or moderation of the presence and gender composition of siblings was found. These findings suggest that the gender identity of parents, especially of mothers, plays a meaningful role in the gender identity of a child. It implies that it is important to make parents aware of the influence of their own gender identity on the gender identity of their children.

Keywords: gender identity, same-gender similarity, other-gender similarity, sibling gender composition, children, parents

Like Parent, Like Child? The intergenerational transfer of gender identity

Recently, there has been an increasing interest in the role of gender identity in children's mental health and behaviour (Perry et al., 2019). Gender identity is defined as a person's sense of self as a male or female (Zucker & Bradley, 1995). It is suggested that if a person identifies with a social category, one can relate to others in that category and therefore gender identity serves as an aspect of social identity (Halim & Ruble, 2010). Gender identity has an important influence on self-conceptions and life courses (Bussey, 2011) and stands at the basis of the way people interact with others (Steensma et al., 2013). Moreover, gender identity is linked to mental health outcomes (Carver et al., 2003). Research suggests that children who feel compatible with their gender experience better personal and social adjustment than children who feel less congruent with their gender (Bailey & Zucker, 1995; Egan & Perry, 2001). For example, a study showed a positive relation between adolescents felt gender typicality and their feelings of self-worth (Smith & Leaper, 2006). Yet, other research emphasizes that children who see themselves as similar to both genders experience mental health advantages, such as high self-esteem, few internalizing problems, social benefits in peer relationships and few sexist beliefs (Andrews et al., 2019; Pauletti et al., 2017). Therefore it is important to research which factors relate to gender identity in children. This study will investigate whether parental gender identity and the gender identity of their child are related. Furthermore, the influence of the sibling gender composition will be examined.

Gender identity is viewed as a multidimensional construct which consists out of (1) knowledge of a person's own gender group, (2) felt compatibility to this group (i.e. gender typicality), (3) felt pressure for gender conformality and (4) attitudes towards different gender groups (Egan & Perry, 2001). Martin et al. (2002) suggest that gender identity starts to develop between 18 and 24 months. In a study from Bennett et al. (2000) children aged 7-8, spontaneously categorized people by gender. Middle childhood (ages 6 – 12) seems a key period for the development of a more complex gender identity (Halim & Ruble, 2010). Early research viewed gender typicality as one dimensional (Egan & Perry, 2001), whereas others have suggested to conceptualize gender typicality as a two-dimensional (i.e. both own-gender and other-gender similarity) construct to be able to capture the complexity of gender identity (Endendijk et al., 2019; Martin et al., 2017). In this research the latter conception is followed.

There seems to be evidence that gender identity and gender typicality are partially influenced by innate factors, such as genes (Burri et al., 2011; Polderman et al., 2018). In

addition, Bussey (2011) mentions social and personal factors to be important in the development of gender identity. However, little is known about the influence of parental gender identity. Social learning theories indicate that the social context plays an important role in gender development (Bandura, 1977; Bussey & Bandura, 1999). These theories suggest that children learn about their gender through observational learning and imitation of role models. Gender identity is associated with preoccupation with appearance (Halim et al., 2018), career interests (Dinella et al., 2014; Oliveira et al., 2020), gender stereotype endorsement, gender-typical interests and attributes (Patterson, 2012) and personality traits (Carver et al., 2003), which can all be modelled from parents. Thus, in a family context it seems plausible that parents are role models for the gender identity of their children. In addition, gender identity can be seen as a type of gender schema (Bussey, 2011). A gender schema is seen as a cognitive structure that organizes gender-based information and link them to the self-concept of a child and is, according to the gender schema theory, associated between parents and children (Bem, 1981). Indeed, in a meta-analysis Tenenbaum and Leaper (2002) found that parents with more gender-typical schemas were more likely to have children with gender-typical cognitions about themselves and others. This could especially be true for same-sex dyads (e.g. father and son), because same-sex models show what are suitable behaviours and cognitions for one's own gender (Bandura, 1977; Cunningham, 2001).

There is only limited research to be found on the influence of siblings in relation to gender identity of a child. Some research found no effect of the sibling gender composition on gender identity (Vroegh, 1971) or other gender schemas such as implicit gender stereotypes (Endendijk et al., 2013). However, other studies indicate that siblings do seem to have an effect on gender socialization and gender-typical behaviour (McHale et al., 1999; Rust et al., 2000). For example, an early study revealed that having siblings increases stereotyping in children (Barry, 1980). Results of studies examining whether sibling gender composition acts as a gender neutralizer or a gender intensifier differ in their outcomes (Endendijk et al., 2018a). Some research suggest that having other-sex siblings has a gender-neutralizing effect. Boys with older sisters for example engaged in more female activities and showed more feminine behaviour compared to boys with an older brother and vice versa for girls (Rust et al., 2000; Stoneman et al. 1986). This might a consequence of modelling, observational learning and interaction (Bandura, 1977; Rust et al., 2000). In contrary, another study found that other-sex siblings have a gender-intensifying effect. This study showed that mixed-sex siblings were more gender-typical than children with other sibling gender compositions

(McHale et al., 1999). This might be due to gender-differentiated parenting or modelling gender-differentiated behaviour which could lead to greater gender-typicality (Chaplin et al., 2010; Fulcher et al., 2008; McHale et al., 1999). Other-sex siblings might either intensify or neutralize gender-typical behaviour in siblings and might have an influence on their gender identity as well, but the direction of the effect remains unclear.

Parental gender identity and sibling gender composition might also interact. Since children seem to learn about their gender through observation and imitation (Bandura, 1977; Bussey & Bandura, 1999) and most people (adults as well as children) have a gender-typical identity (Egan & Perry, 2001; Endendijk et al., 2019), it seems reasonable that a parental gender-typical identity and the presence of same-gender siblings both provide gender-typical role models for the gender identity of children, and that in such a context children will develop the most typical gender identity.

This study will investigate whether parental gender identity and the gender identity of their child are related. In addition, the influence of siblings on the gender identity of a child will be examined. Moreover, it will be examined whether the sibling gender composition has possible moderating effects on the relationship between parental gender identity and the gender identity of the child. The following hypotheses are tested:

1) A more gender-typical identity of a parent relates to a more gender-typical identity of their child.

2) Children with mixed-sex siblings could both have a less gender-typical identity than children with same-sex siblings or have a more gender-typical identity than children with a same-sex sibling.

3) The relationship between parental gender-typical identity and the gender identity of their child is stronger when same-sex siblings are present, than in the presence of mixed-sex siblings or absence of siblings.

Finally, these hypotheses will be tested in relation to both mother and father so that a comparison can be made between both parents. In the literature differing views exist about the influence of fathers and mothers on the gender identity of their child. McHale and colleagues (1999) state that fathers' attitudes were more closely linked to children's gender typing than mothers'. In contrast, Cunningham (2001) found gender role attitudes of mothers to be related to attitudes in children. Accordingly, Tenenbaum and Leaper (2002) found that the impact of mothers on children's gender schema development was somewhat stronger than the impact of fathers. Children are most likely to observe and imitate from models with the same gender

(Bandura, 1977; Cunningham, 2001), which could account for differences in results. However, Carlson and Knoester (2011) found that parent-child gender heterogeneity (e.g. mother and son) related to higher gender ideology similarity. The possible differences in the results between both parents will be tested explorative by looking at variations in the strengths of the associations.

Method

Participants

Data for this research were collected by student assistants from Utrecht University between September 2018 and June 2021. The research population consisted out of families with at least one child between the ages of 6 and 12 years old. The students assistants used convenience sampling to recruit families. Families that could not understand or read Dutch were excluded from participation. Participants received information letters in-person or via e-mail. A total of 142 families ($N = 142$) participated in this study. From 106 families (74,6 %) both parents participated and from 36 families (25,4 %) one parent participated, which led to a research population of 138 mothers and 108 fathers. 142 children in the target range of 6 – 12 years ($M = 10,31$, $SD = 1,42$) participated in this study. From this group, 57% were girls ($n = 81$) and 43% were boys ($n = 61$). Table 1 shows the mother- and father-reported number of children of the participating families.

Table 1

Reported Number of Children

Number of Children	Mothers (n = 138)		Fathers (n = 108)	
	n	*%*	*n*	*%*
1	16	11,3%	9	6,3%
2	71	50,0%	57	40,1%
3	39	27,5%	30	21,2%
4	9	6,3%	7	4,9%
5	3	2,1%	5	3,5%

Procedure

The Ethics Committee of the Faculty of Social Sciences at Utrecht University approved the study (number FETC18-097). Families provided written informed consent at the start of their participation. The families were visited at their home by the student assistant who recruited them. Each participating family member completed questionnaires and a

computer task via LimeSurvey on a laptop or desktop. Parents completed the questionnaires and computer task independently by following the instructions in the LimeSurvey environment. Children completed the questionnaires and computer task using verbal instructions given by the student assistant. It took each family member approximately 15 minutes to fill in the questionnaires and complete the computer task. The participants received no compensation for participation. The data collected from the computer task was not used in this study.

Instruments

Gender identity

The gender identity of the child and parent was measured using a Dutch translation of a dual gender identity questionnaire developed by Martin and colleagues (2017). This questionnaire consists of 10 questions regarding their felt similarity with both boys (5 questions) and girls (5 questions) (e.g. "How much do you like to hang out with boys/girls?"). To measure parental gender identity the same questionnaire was used, but boys and girls were replaced by men and women. Participants answered choosing one of the five graphical answer options, indicating how much similar they feel to boys and girls. The closer the circles are to each other, the more the participant feels similar to that gender. Responses ranged from 0 (circles farthest apart) to 4 (overlapping circles). Responses on the five own-gender and five other-gender items were averaged, leading to two scales. Higher scores on these scales indicate more similarity to own-gender or other-gender respectively. Reliability of the two scales is good, with Cronbach's $\alpha = .85$ for same-gender and $\alpha = .82$ for other-gender similarity (Endendijk & Portengen, 2022).

Sibling gender composition

To determine the sibling gender composition of the participating child, the background questions out of the parent questionnaire were used. Parents indicated how many children they have and whether they have only sons, only daughters or both sons and daughters. The latter needed to be compared to the gender of the participating child to find out whether (s)he has same-sex or mixed-sex siblings. In this research three categories were included: child has same-sex siblings (1), child has mixed-sex siblings (2) and child has no siblings (3). Two dummy variables were created to include these categories in the analysis.

Analysis plan

The data were checked for outliers, linearity, homoscedasticity, multicollinearity and normality. The main research question was answered using a hierarchical multiple regression analysis. In step 1 of this analysis the main effects for parental gender identity and the sibling

gender composition were included. In addition, the interaction effects between parental gender identity and the sibling-categories were added to the model in step 2. This will point out whether the presence of same-sex, mixed-sex or the absence of siblings is a moderator for the relationship between parental gender identity and the gender identity of the child, as well as direct associations between parental gender identity, sibling gender composition, and gender identity of the child. Given the two-dimensional take on gender identity, the regression analyses were conducted for both same-gender similarity of the child and other-gender similarity of the child. In addition, the analyses were done separately for both maternal and paternal gender identity to explore differences in associations for fathers and mothers.

Results

Data inspection and assumptions

After creating dummy variables conflicting data on the variables 'number of children' and 'child sex composition' between parents of the same family was deleted, as they were considered errors. The assumptions regarding linearity, outliers, homoscedasticity and multicollinearity were met. Left skewed distributions were found for same-gender similarity of the child. Right skewed distributions were found for other-gender similarity of the child. This was expected since children are more likely to feel similarity to their own gender. In large sample sizes ($N > 10$ per variable) violations of the normality assumption often does not lead to significant differences in results (Schmidt & Finan, 2018).

Descriptive statistics

The means and standard deviations of gender similarity are reported in table 2. The mean scores on same-gender similarity did not differ significantly ($t (139) = -1.47, p = .143$) between boys and girls. Girls had a significantly higher score ($t (140) = 2.31, p = .022$) on other-gender similarity, than boys. This means that girls, on average, feel more similar to the other gender, than boys. A paired samples t-test showed that fathers scored significantly higher ($t (102) = -3.41, p < .001$) on same-gender similarity, than mothers. Fathers scored significantly lower ($t (102) = 6.51, p < .001$) on other-gender similarity, than mothers. Fathers generally feel more similar to their own gender and less similar to the other gender, than mothers.

Correlations

Table 3 shows the correlation coefficients of same-gender and other-gender similarity between mother, father and child. Same-gender and other-gender similarity of children had a strong correlation ($r = -.53, p < .001$), indicating that stronger felt similarity to his/her own

Table 2

Means and SDs Gender Similarity

Variables	Mothers (n = 138)	Fathers (n = 107)	Boys (n = 61)	Girls (n = 81)
	M (SD)	M (SD)	M (SD)	M (SD)
Same-gender similarity	3.68 (0.74)	3.99 (0.68)	4.22 (0.72)	4.03 (0.84)
Other-gender similarity	2.61 (0.60)	2.25 (0.56)	1.94 (0.78)	2.22 (0.69)

Note. M = Mean; SD = standard deviation. Means in this table differ slightly from the means used in the paired samples t-test.

gender was associated with less felt similarity to the other gender. The same-gender similarity of both parents was positively related to the same-gender similarity of the child, which means that more same-gender similarity in either of the parents relates to higher same-gender similarity in the child. The same is true for other-gender similarity, where higher other-gender similarity of one or both parents was associated with higher other-gender similarity of the child. However, both relationships appeared stronger in relation to mothers. Furthermore, same-gender and other-gender similarity between mothers and fathers were positively related. This was especially true for other-gender similarity. Multiple one-way ANOVAs were done to test whether there were significant differences in same-gender and other-gender similarity of a child, depending on the presence and sex composition of sibling. No significant differences were found.

Table 3

Correlation Coefficients Study Variables

Variables	1	2	3	4	5	6
1. SG similarity child	-					
2. OG similarity child	-.53**	-				
3. SG similarity mother	.23**	-.16	-			
4. OG similarity mother	-.13	.32**	-.02	-		
5. SG similarity father	.21*	-.00	.20*	-.09	-	
6. OG similarity father	-.08	.20*	.01	.38**	-.13	-

Note. SG = same-gender; OG = other-gender. $* p < .05$ (two-tailed). $** p < .01$ (two-tailed).

Maternal gender identity, sibling gender composition and child's gender identity

Table 4 shows the results of a hierarchical regression analyses of the relation between maternal gender identity, sibling gender composition and the gender identity of the child. The

gender identity of mothers and the sibling gender composition (model 1) explained 8.1 percent ($F(4,132) = 2.93$, $p = .023$) of the variance in same-gender similarity of children and 13.2 percent ($F(4,133) = 5.06$, $p < .001$) of the variance in other-gender similarity. Maternal same-gender identity was a significant predictor of the same-gender identity of the child. A higher same-gender similarity of mothers was related to higher same-gender similarity of the child. Both same-gender similarity and other-gender similarity of mothers were significant predictors of other-gender similarity of the child. Higher scores on same-gender similarity of mothers related to lower scores of other-gender similarity of children. Mothers with higher other-gender similarity scores were associated with higher other-gender similarity scores of the child. Sibling gender composition predicted neither same-gender nor other-gender similarity in children. When the interaction variables were added to the model (model 2), no significant increase in percentage of explained variance in gender similarity was found ($\Delta R^2 = .030$, $F(4.128) = 1.09$ for same-gender similarity and $p = .362$ and $\Delta R^2 = .018$, $F(4.129) = .67$, $p = .612$ for other-gender similarity). The interaction variables did not predict same- or other-gender similarity in children.

Paternal gender identity, sibling gender composition and child's gender identity

Table 5 reports the results of a hierarchical regression analyses of paternal gender identity, sibling gender composition and the gender identity of the child. The gender identity of fathers and the sibling gender composition (model 1) explained 7.2 percent ($F(4,101) = 1.97$, $p = .105$) of the variance in same-gender similarity and 6.4 percent ($F(4,102) = 1.75$, $p = .144$) of the variance in other-gender similarity. None of the predictors were significant. However, when only the gender identity of father is taken into account, same-gender similarity of father was found to be a significant predictor of same-gender similarity of the child ($\beta = .20$, $t(103) = 2.06$, $p = .042$). Fathers who felt similar to their own gender were associated with higher scores of same-gender similarity in children. Paternal other-gender similarity was positively related to other-gender similarity in children ($\beta = .20$, $t(104) = 2.06$, $p = .042$), indicating that higher scores of other-gender similarity in fathers related to a higher other-gender similarity in the child. When the interaction variables were added to the model (model 2), no significant increase in percentage of explained variance in gender similarity was found ($\Delta R^2 = .099$, $F(4.97) = .71$, $p = .589$ for same-gender similarity and $\Delta R^2 = .099$, $F(4.98) = .95$, $p = .437$ for other-gender similarity). None of the variables concerning father were significant predictors of the gender identity of the child in this model.

Table 4

Hierarchical Regression Analyses of Gender Identity Mother-Child

Variables	SG similarity child				OG similarity child			
	R^2	ΔR^2	B	β	R^2	ΔR^2	B	β
				Mother				
Model 1	.081	.081*			.132	.132**		
SG similarity			.23	.21*			-.16	-.16*
OG similarity			-.16	-.12			.39	.32**
Same-gender vs. No siblings			.04	.02			-.11	-.07
Mixed-gender vs. No siblings			.22	.14			-.01	-.01
Model 2	.112	.030			.150	.018		
SG similarity			.21	.20			-.27	-.27
OG similarity			-.86	-.65*			.72	.59*
Same-gender vs. No siblings			-2.37	-1.36			-.01	-.01
Mixed-gender vs. No siblings			-1.85	-1.15			.69	.46
SG similarity x Same-gender vs. No siblings			.08	.17			.09	.20
SG similarity x Mixed-gender vs. No siblings			.01	.03			.13	.34
OG similarity x Same-gender vs. No siblings			.80	1.25			-.16	-.26
OG similarity x Mixed-gender vs. No siblings			.77	1.30			-.44	-.81

Note. $N = 138$; SG = same-gender; OG = other-gender. * $p < .05$. ** $p < .01$.

Discussion

This study was conducted to examine whether parental gender identity and sibling gender composition were associated with the gender identity of the child. In addition, a possible moderating effect of the sibling gender composition on the relationship between parental gender identity and the gender identity of the child was examined. This was done separately for mothers and fathers to enable a comparison between both parents. The results show that parental gender identity is related to the gender identity of the child. For both mothers and fathers, same-gender similarity was associated with same-gender similarity of the child and other-gender similarity was associated with other-gender similarity of the child. Maternal same-gender similarity was also associated with the other-gender similarity of the

Table 5

Hierarchical Regression Analyses of Gender Identity Father-Child

Variables	SG similarity child				OG similarity child			
	R^2	ΔR^2	B	β	R^2	ΔR^2	B	β
				Father				
Model 1	.072	.072			.064	.064		
SG similarity			.22	.17			.05	.05
OG similarity			-.05	-.03			.24	.18
Same-gender vs. No siblings			-.49	-.26			.44	.27
Mixed-gender vs. No siblings			-.23	-.13			.43	.28
Model 2	.099	.026			.099	.035		
SG similarity			.46	.36			-.17	-.16
OG similarity			.05	.03			-.09	-.07
Same-gender vs. No siblings			1.80	.96			-2.31	-1.41
Mixed-gender vs. No siblings			.49	.28			-.57	-.37
SG similarity x Same-gender vs. No siblings			-.33	-.69			.53	1.27
SG similarity x Mixed-gender vs. No siblings			-.21	-.49			.08	.23
OG similarity x Same-gender vs. No siblings			-.40	-.53			.31	.46
OG similarity x Mixed-gender vs. No siblings			.07	.10			.30	.48

Note. N = 107; SG = same-gender; OG = other-gender. * $p < .05$. ** $p < .01$.

child. Additionally, the results indicate that the presence or gender composition of siblings is not related to the gender identity of a child, and is also not a moderator in the relation between parental gender identity and the gender identity of their children.

In this study we found that same-gender similarity of parents related to same-gender similarity of the child and that other-gender similarity of parents related to other-gender similarity of the child, supporting social learning theories (Bandura, 1977; Bussey & Bandura, 1999). This is in line with previous research which found that gender identity relates to a variety of traits and characteristics (Carver et al., 2003; Dinella et al., 2014; Halim et al., 2018; Oliveira et al., 2020; Patterson, 2012), that can all be modelled from parents. In

addition, gender identity is seen as a gender scheme (Bem, 1981) from which research suggests that gender-typicality in parents is related to gender-typicality in their children (Tenenbaum & Leaper, 2002). However, the same-gender similarity of mothers also related to the other-gender similarity in children, which was not the case for fathers. The more mothers felt similar to their own gender, the more their children felt similar to their own gender and the less the children felt similar to the other-gender. Moreover, the gender identity of mothers related in every analysis to the gender identity of the child, while the gender identity of fathers only related to the gender identity of the child when solely parental gender identity was being considered. This indicates that associations with mothers' gender identity are more robust compared to fathers. This is in line with earlier research (Cunningham, 2001; Tenenbaum & Leaper, 2002). A possible explanation is that mothers traditionally spent more time on child care than fathers (Endendijk et al., 2018b) and therefore might have a bigger influence on their child's gender development. Another explanation could be that this study did not account for same-sex or mixed-sex dyads and children are more likely to imitate models with the same gender (Bandura, 1977; Cunningham, 2001). Future research could investigate whether the relation between parental gender identity and the gender identity of the child is different for same-sex dyads (e.g. mother and daughter), than for mixed-sex dyads (e.g. mother and son).

Unexpectedly, this study did not find support for the hypothesis that the presence or gender composition of siblings is associated with the gender identity of the child, contradicting earlier findings which stated that siblings seem to have an effect on gender-socialization and gender-typical behaviour (McHale et al., 1999; Rust et al., 2000). Wong et al. (2010) found that siblings identify more with visible behaviour than intrinsic behaviour (such as gender identity), which could explain why no relation was found between the sibling gender composition and the gender identity of the child. Another explanation could be that birth order was not considered in this study. Research suggests that secondborns behave in a way similar to firstborns, and firstborns behave in a way to differentiate themselves from their siblings (McHale et al., 2001). In addition, older siblings seem to be more influential models (McHale et al., 2012). Taking into account the birth order and genders of the child and older sibling, the sibling could either have a gender-intensifying (e.g. a girl second-born with an older sister) or gender-neutralizing effect (e.g. a firstborn girl with a younger sister). Future research should aim to include birth order in their study to better capture influence of siblings on children's gender identity.

No evidence was found that the sibling gender composition had an influence on the

relationship between parental gender identity and the gender identity of the child. This was not expected since most people (including parents) seem to have a gender-typical identity (Egan & Perry, 2001; Endendijk et al., 2019) and children seem to observe and imitate their parents (Bandura, 1977; Bussey & Bandura, 1999). At the same time, this might be an explanation for why no effect of the sibling gender composition was found. McHale and colleagues (2001) found that parents had a bigger influence on gender development of children than siblings. If children only look at their parents as role models for their gender development, the sibling gender composition has less opportunity to be of influence on this relationship. However, more research into the possible effect of the sibling gender composition on the relationship between parental gender identity and the gender identity of the child needs to be conducted to confirm the results of this research.

As with all research this study has some limitations. First, due to the correlational nature of this study, no causal statements can be made. Longitudinal studies researching gender identity from childhood to adulthood could give more insight in the direction of the found relationships in this study. Second, the study sample was composed from a convenience sample, which could have negative consequences for the generalizability of the found results. More research with randomized samples should be conducted in order to draw conclusions with more certainty about the associations between parental gender identity and gender identity of the child. Third, since the data for mothers and fathers was collected out of the same families, there is interdependency between variables. This could influence the results. Future research could make use of multilevel analyses to counter this.

Since gender identity is linked to mental health outcomes (Carver et al., 2003), is it relevant to know which factors relate to it. However, only little research is done into the relations between parental gender identity, sibling gender composition and gender identity of the child. This study provides an explorative contribution to this topic. Another strength of this study is that both the gender identity of mother and father were examined, which makes it possible to make a comparison between both parents. Future research could aim to further explore these differences. Since children who feel discontent with their gender experience considerable distress (Perry et al., 2019), it is important that children can develop their gender identity without being influenced or pressured by their environment. Therefore it seems meaningful that parents, pre-eminently mothers, are to be made aware of their role in the development of gender identity in their children.

References

Andrews, N. C. Z., Martin, C. L., Cook, R. E., Field, R. D., & England, D. E. (2019). Exploring dual gender typicality among young adults in the United States. *International Journal of Behavioral Development*, *43*(4), 314–321. https://doi.org/10.1177/0165025418811125

Bailey, J. M., & Zucker, K. J. (1995). Childhood sex-typed behavior and sexual orientation: A conceptual analysis and quantitative review. *Developmental Psychology*, *31*(1), 43–55. https://doi.org/10.1037/0012-1649.31.1.43

Bandura, A. (1977). *Social Learning Theory*. Englewood Cliffs, NJ: Prentice Hall.

Barry, R. J. (1980). Stereotyping of sex role in preschoolers in relation to age, family structure, and parental sexism. *Sex Roles*, *6*(6), 795–806. https://doi.org/10.1007/bf00287235

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. *Psychological Review*, *88*(4), 354–364. https://doi.org/10.1037/0033-295x.88.4.354

Bennett, M., Sani, F., Hopkins, N., Agostini, L., & Malucchi, L. (2000). Children's gender categorization: An investigation of automatic processing. *British Journal of Developmental Psychology*, *18*(1), 97–102. https://doi.org/10.1348/026151000165599

Burri, A., Cherkas, L., Spector, T., & Rahman, Q. (2011). Genetic and environmental influences on female sexual orientation, childhood gender typicality and adult gender identity. *PLoS ONE*, *6*(7), e21982. https://doi.org/10.1371/journal.pone.0021982

Bussey, K. (2011). Gender identity development. *Handbook of Identity Theory and Research*, 603–628. https://doi.org/10.1007/978-1-4419-7988-9_25

Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, *106*(4), 676–713. https://doi.org/10.1037/0033-295x.106.4.676

Carlson, D. L., & Knoester, C. (2011). Family structure and the intergenerational transmission of gender ideology. *Journal of Family Issues*, *32*(6), 709–734. https://doi.org/10.1177/0192513x10396662

Carver, P. R., Yunger, J. L., & Perry, D. G. (2003). Gender identity and adjustment in middle childhood. *Sex Roles*, *49*(3/4), 95–109. https://doi.org/10.1023/a:1024423012063

Chaplin, T. M., Casey, J., Sinha, R., & Mayes, L. C. (2010). Gender differences in caregiver emotion socialization of low-income toddlers. *New Directions for Child and Adolescent Development*, *2010*(128), 11–27. https://doi.org/10.1002/cd.266

Cunningham, M. (2001). The influence of parental attitudes and behaviors on children's attitudes toward gender and household labor in early adulthood. *Journal of Marriage and Family*, *63*(1), 111–122. https://doi.org/10.1111/j.1741-3737.2001.00111.x

Dinella, L. M., Fulcher, M., & Weisgram, E. S. (2014). Sex-typed personality traits and gender identity as predictors of young adults' career interests. *Archives of Sexual Behavior*, *43*(3), 493–504. https://doi.org/10.1007/s10508-013-0234-6

Egan, S. K., & Perry, D. G. (2001). Gender identity: A multidimensional analysis with implications for psychosocial adjustment. *Developmental Psychology*, *37*(4), 451–463. https://doi.org/10.1037/0012-1649.37.4.451

Endendijk, J. J., Andrews, N. C. Z., England, D. E., & Martin, C. L. (2019). Gender-identity typologies are related to gender-typing, friendships, and social-emotional adjustment in Dutch emerging adults. *International Journal of Behavioral Development*, *43*(4), 322–333. https://doi.org/10.1177/0165025418820686

Endendijk, J. J., Derks, B., & Mesman, J. (2018b). Does parenthood change implicit gender-role stereotypes and behaviors? *Journal of Marriage and Family*, *80*(1), 61–79. https://doi.org/10.1111/jomf.12451

Endendijk, J. J., Groeneveld, M. G., & Mesman, J. (2018a). The gendered family process

 model: An integrative framework of gender in the family. *Archives of Sexual*

 Behavior, *47*(4), 877–904. https://doi.org/10.1007/s10508-018-1185-8

Endendijk, J. J., Groeneveld, M. G., Van Berkel, S. R., Hallers-Haalboom, E. T., Mesman, J.,

 & Bakermans-Kranenburg, M. J. (2013). Gender stereotypes in the family context:

 Mothers, fathers, and siblings. *Sex Roles*, *68*(9–10), 577–590. https://doi.org/10.1007/

 s11199-013-0265-4

Endendijk, J. J., & Portengen, C. M. (2022). Children's views about their future career and

 family involvement: Associations with children's gender schemas and parents'

 involvement in work and family roles. *Frontiers in Psychology*, *12*. https://doi.org/

 10.3389/fpsyg.2021.789764

Fulcher, M., Sutfin, E. L., & Patterson, C. J. (2008). Individual differences in gender

 development: Associations with parental sexual orientation, attitudes, and division of

 labor. *Sex Roles*, *58*(5–6), 330–341. https://doi.org/10.1007/s11199-007-9348-4

Halim, M. L. D., Gutierrez, B. C., Bryant, D. N., Arredondo, M., & Takesako, K. (2018).

 Gender is what you look like: Emerging gender identities in young children and

 preoccupation with appearance. *Self and Identity*, *17*(4), 455–466. https://doi.org/

 10.1080/15298868.2017.1412344

Halim, M. L., & Ruble, D. (2010). Gender identity and stereotyping in early and middle

 childhood. *Handbook of Gender Research in Psychology*, 495–525. https://doi.org/

 10.1007/978-1-4419-1465-1_24

Martin, C. L., Andrews, N. C. Z., England, D., Zosuls, K., & Ruble, D. N. (2017). A dual

 identity approach for conceptualizing and measuring children's gender identity. *Child*

 Development, *88*(1), 167–182. https://doi.org/10.1111/cdev.12568

Martin, C. L., Ruble, D. N., & Szkrybalo, J. (2002). Cognitive theories of early gender development. *Psychological Bulletin*, *128*(6), 903–933. https://doi.org/10.1037/0033-2909.128.6.903

McHale, S. M., Crouter, A. C., & Tucker, C. J. (1999). Family context and gender role socialization in middle childhood: Comparing girls to boys and sisters to brothers. *Child Development*, *70*(4), 990–1004. https://doi.org/10.1111/1467-8624.00072

McHale, S. M., Updegraff, K. A., Helms-Erikson, H., & Crouter, A. C. (2001). Sibling influences on gender development in middle childhood and early adolescence: A longitudinal study. *Developmental Psychology*, *37*(1), 115–125. https://doi.org/10.1037/0012-1649.37.1.115

McHale, S. M., Updegraff, K. A., & Whiteman, S. D. (2012). Sibling relationships and influences in childhood and adolescence. *Journal of Marriage and Family*, *74*(5), 913–930. https://doi.org/10.1111/j.1741-3737.2012.01011.x

Oliveira, R. M., Porfeli, E. J., Céu Taveira, M., & Lee, B. (2020). Children's career expectations and parents' jobs: Intergenerational (dis)continuities. *The Career Development Quarterly*, *68*(1), 63–77. https://doi.org/10.1002/cdq.12213

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. https://doi.org/10.1007/s11199-012-0184-9

Pauletti, R. E., Menon, M., Cooper, P. J., Aults, C. D., & Perry, D. G. (2016). Psychological androgyny and children's mental health: A new look with new measures. *Sex Roles*, *76*(11–12), 705–718. https://doi.org/10.1007/s11199-016-0627-9

Perry, D. G., Pauletti, R. E., & Cooper, P. J. (2019). Gender identity in childhood: A review of the literature. *International Journal of Behavioral Development*, *43*(4), 289–304. https://doi.org/10.1177/0165025418811129

Polderman, T. J. C., Kreukels, B. P. C., Irwig, M. S., Beach, L., Chan, Y. M., Derks, E. M., Esteva, I., Ehrenfeld, J., Heijer, M. D., Posthuma, D., Raynor, L., Tishelman, A., & Davis, L. K. (2018). The biological contributions to gender identity and gender diversity: Bringing data to the table. *Behavior Genetics*, *48*(2), 95–108. https://doi.org/10.1007/s10519-018-9889-z

Rust, J., Golombok, S., Hines, M., Johnston, K., & Golding, J. (2000). The role of brothers and sisters in the gender development of preschool children. *Journal of Experimental Child Psychology*, *77*(4), 292–303. https://doi.org/10.1006/jecp.2000.2596

Schmidt, A. F., & Finan, C. (2018). Linear regression and the normality assumption. *Journal of Clinical Epidemiology*, *98*, 146–151. https://doi.org/10.1016/j.jclinepi.2017.12.006

Smith, T. E., & Leaper, C. (2006). Self-perceived gender typicality and the peer context during adolescence. *Journal of Research on Adolescence*, *16*(1), 91–104. https://doi.org/10.1111/j.1532-7795.2006.00123.x

Steensma, T. D., Kreukels, B. P., De Vries, A. L., & Cohen-Kettenis, P. T. (2013). Gender identity development in adolescence. *Hormones and Behavior*, *64*(2), 288–297. https://doi.org/10.1016/j.yhbeh.2013.02.020

Stoneman, Z., Brody, G. H., & MacKinnon, C. E. (1986). Same-sex and cross-sex siblings: Activity choices, roles, behavior, and gender stereotypes. *Sex Roles*, *15*(9–10), 495–511. https://doi.org/10.1007/bf00288227

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. https://doi.org/10.1037/0012-1649.38.4.615

Vroegh, K. (1971). The relationship of birth order and sex of siblings to gender role identity. *Developmental Psychology*, *4*(3), 407–411. https://doi.org/10.1037/h0030973

Wong, T. M., Branje, S. J., Van der Valk, I. E., Hawk, S. T., & Meeus, W. H. (2010). The role of siblings in identity development in adolescence and emerging adulthood. *Journal of Adolescence*, *33*(5), 673–682. https://doi.org/10.1016/j.adolescence.2009.11.003

Zucker, K. J., & Bradley, S. J. (1995). *Gender Identity Disorder and Psychosexual Problems in Children and Adolescents*. Guilford Publications.