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4-19-2012

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Rachel N. Thomas

*Bethel College - Mishawaka*, [rnkiser@gmail.com](mailto:rnkiser@gmail.com)

Judith Elaine Blakemore

*Indiana University - Purdue University Fort Wayne*, [blakemor@ipfw.edu](mailto:blakemor@ipfw.edu)

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### Opus Citation

Rachel N. Thomas and Judith Elaine Blakemore (2012). *Expected correlates and outcomes of childhood gender nonconformity*. Presented at Gender Development Research Conference, San Francisco.  
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# Expected Correlates and Outcomes of Childhood Gender Nonconformity

Rachel N. Thomas, Bethel College, and Judith E. Owen Blakemore, Indiana University - Purdue University, Fort Wayne



## Abstract

Participants were presented with one of ten vignettes describing a male or female child character who varied in gender-related interests and behaviors from strongly masculine to strongly feminine.

Participants thought masculine and feminine children would be masculine and feminine in adulthood, respectively, and that masculinity would be related to externalizing and femininity to internalizing. They thought that gender-nonconforming children would experience more pressure to change their behavior, and that they would be less likely to be exclusively heterosexual in adulthood.

## Introduction

Children who are gender nonconforming, especially boys, often have poorer relationships with parents and peers, attachment difficulties, more anxiety, and report pressure to change in line with gender-normative behavior (Alanko et al., 2009; Carver, Yunger, & Perry, 2003). Gender nonconformity in childhood is also associated with greater probability of a non-heterosexual orientation in adulthood.

If parents, other adults, and peers reject such children, it's not surprising that attachment difficulties, anxiety, or other problems of adjustment would be a result. It may well be that either nonheterosexuality or gender nonconformity (or both) are at the core of social rejection (Hegarty, 2009).

In this study we measured relationships between varying degrees of childhood gender nonconformity and predictions about 1) the continuation of such behavior in adulthood; 2) pressure to change; 3) internalizing and externalizing in childhood and adulthood; and 4) predictions about sexuality as measured by attraction, behavior, and orientation.

## Method

**Participants.** 518 (337 F; 181 M) undergraduates completed an online survey about one of the vignettes described below.

**Vignettes.** There were 10 vignettes, in which a child named either Michael or Emily was described with characteristics, behaviors, and interests previously rated as being only for boys to only for girls (Blakemore & Centers, 2005; Liben & Bigler, 2002). The boys' vignettes are below; the girls' were identical except for the name and pronouns.

### Strongly Masculine

Michael is a 6-year-old first grader. Michael is very brave, but sometimes he can be aggressive. He has many friends, all of whom are other boys. He enjoys many activities with his friends, especially building with tools and building forts. Michael's favorite toys are his G.I. Joes and his tool kit. When he grows up, he would like to be a firefighter.

### Moderately Masculine

Michael is a 6-year-old first grader. Michael is very independent, but sometimes he can be loud. He has many friends, most of whom are other boys, but some of whom are girls. He enjoys many activities with his friends, especially playing dodge ball and watching sports on television. Michael's favorite toys are his Lincoln Logs and his dinosaurs. When he grows up, he would like to work with computers.

### Neutral

Michael is a 6-year old first grader. Michael is very curious, but sometimes he can be secretive. He has many friends, about half of whom are boys, and about half of whom are girls. He enjoys many activities with his friends, especially practicing his guitar and singing. Michael's favorite toys are his Karaoke Machine and his Legos. When he grows up, he would like to be a writer.

### Moderately Feminine

Michael is a 6-year old first grader. Michael follows directions well, but sometimes he can be shy. He has many friends, most of whom are girls, but some of whom are boys. He enjoys many activities with his friends, especially jump rope and doing gymnastics. Michael's favorite toys are his toy store and his toy kitchen. When he grows up, he would like to be an elementary school teacher.

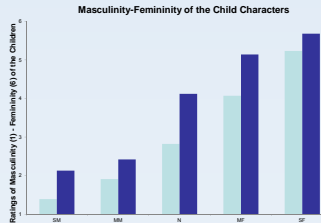
### Strongly Feminine

Michael is a 6-year-old first grader. Michael is very affectionate, but he tends to be emotional. He has many friends, all of whom are girls. He enjoys many activities with his friends, especially practicing cheerleading and playing hop scotch. Michael's favorite toys are his baby doll and his dollhouse. When he grows up, he would like to be a nurse.

**Measures.** Measures included demographics, and ratings of masculinity-femininity, pressure to change, adjustment in terms of internalizing and externalizing, and predicted sexual orientation.

## Results

Dependent measures were analyzed with 2 (child character sex) X 5 (child gender-role interests and behavior) X 2 (participant sex) ANOVAs. When necessary, post hoc tests were conducted using Scheffé.



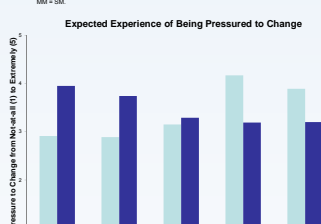
Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

Main effects of child sex, and child interests, and the interaction were significant,  $p < .001$  in all cases.  $SF > MF > N > MM > SM$ .  $SF > g > SF > g > MF > b > N > g$ .



Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

Main effects of child sex and child interests were significant,  $p < .001$  in both cases.  $SF = MF > N > MM > SM$ .



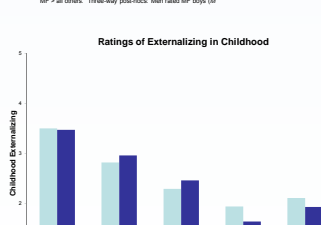
Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

Significant interaction between child sex and child behavior,  $p < .001$ .  $SF > b = MF > a = SM > g = MM > b = N > b = SF > g = MF > g$ .



Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

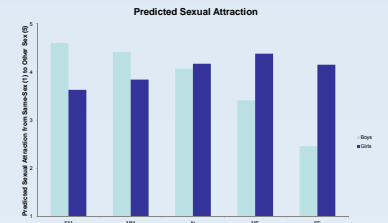
Main effects of child interests ( $p < .001$ ) and the 3-way interaction ( $p < .007$ ) were significant.  $SF > MF > all others$ . Three-way post-hoc:  $MM > all MF > boys > g$ .



Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

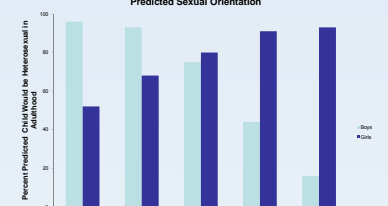
Main effect of child interests,  $p < .001$ .  $SM = MM = all others; N > MF$ .

Predictions about adult internalizing and externalizing were similar, although SF boys were thought the most likely to internalize as adults.



Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

Main effects of child sex ( $p < .007$ ), child interests ( $p < .001$ ), and the interaction between child sex and interests ( $p < .001$ ).  $SF > all others; SF > b = MF > a = SM$ .



Child Interests and Behavior Ranging from Strongly Masculine (SM) to Strongly Feminine (SF)

Analysed with logistic regression. Child sex, child behavior, and interaction significant,  $p < .001$ . Greater gender nonconformity associated with lower perceived.

## Impact of AWS and Participant Sex

For the most part, the responses of men and women were similar. Participant sex was not a significant main effect in any analysis, and there was one 3-way interaction involving it (childhood internalizing). Gender-related attitudes, as measured by the AWS, were not related to any outcomes.

## Conclusions

Participants found our descriptions to be associated with masculinity and femininity as expected. They expected masculinity and femininity to be reasonably stable to adulthood.

Participants thought that gender-nonconforming children would experience more pressure to change their behavior than would gender-conforming children.

Participants thought that masculine children (whether boys or girls) would tend to engage in externalizing more than others in both childhood and adulthood. Conversely, they thought that feminine children would be more likely to experience internalizing symptoms, but also that SF boys would be most likely to have problems of internalization as adults.

Childhood gender nonconformity was thought predictive of adult sexual orientation. This was a linear relationship for both sexes, but exaggerated for boys.

Poster presented at the Gender Development Research Conference, San Francisco, April 19<sup>th</sup> – 20<sup>th</sup>, 2012.