

Young Children's Reasoning about Gender: Stereotypes or Essences?

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Introduction

We investigated the influence of gender-stereotyped information on young children's use of gender versus appearance for making inductive generalizations.

Background

Social cognitive theorists have proposed that children and adults essentialize social categories (Rothbart & Taylor, 1990; Bigler & Liben, 2007). Accordingly, children should assume that category members share an unseen essence that gives rise to visible characteristics, and should expect distinct groups to possess different qualities. Thus, children should infer that males and females differ in inherent, unseen properties as well as visible features.

Previous studies have reported that children make gender-stereotyped social judgments (e.g., Martin, 1989; Taylor, 1996) and category-based inductive inferences (e.g., Gelman & Markman, 1986).

Gelman, Collman, & Maccoby (1986) reported that 4-year-olds generalized biological and behavioral properties on the basis of gender rather than similarity in appearance. However, their items were a mix of novel biological properties and familiar behavioral stereotypes. We sought to examine the effects of gender stereotypes and gender as social category on children's reasoning.

Goals

The goals of this study were:

- Investigate the influence of gender stereotypes and gender category membership on children's inductive generalizations by comparing children's generalizations by comparing performance in the presence of stereotyped information and neutral information.
- Compare inductions concerning biological properties and behaviors.

Method

Participants

- 20 3 year olds: mean age 3 years, 8 months age range 3 years, two months to 3 years, 11 months; 9 girls and 11 boys
- 24 4 year olds: mean age 4 years, 7 months; age range 4 years, 2 months to 4 years, 11 months; 12 girls and 12 boys
- 24 5 year olds: mean age 5 years, 4 months; age range 5 years to 5 years, 9 months; 11 girls and 13 boys

Materials

- Eight triads of pictures were used.
- The pictures were computer generated images of children.
- In each triad, two pictures were presented on top.
- The third picture resembled one of the first two pictures and was presented below them.

- One of the two top pictures was verbally labeled as a girl and the other was labeled as boy.
- If the third picture resembled the boy, it was labeled as a girl.
- If the third picture resembled the girl, it was labeled as a boy (as in example below).



Procedure

- Children began with a brief warm-up that involved pointing to a picture of girl and picture of a boy, and pointing to a pair of pictures that looked similar and a pair that looked different.
- For each triad children were taught either a biological or behavioral property of the boy and the girl in top pictures.
- Children were asked if the third child had the same property as the boy or the same property as the girl.

Conditions

- Children participated in either the Stereotype condition or the Neutral condition.
- Stereotype condition: The behavior items corresponded to familiar stereotypes, e.g. "This girl plays with dolls. This boy plays with trucks."
- Neutral condition: The behavior items were novel actions or preferences denoted with nonsense words, e.g., "This girl plays with samas. This boy plays with noyas."
- Both conditions: The biological items were novel, e.g., "This boy has fibro in his blood. This girl has neutros in her blood."

Test Question

- Biological trials: e.g., "What does this boy have in his blood? Does he have fibro in his blood like this boy? Or does he have neutros in his blood like this girl?"
- Behavior trials: e.g., "What does this girl do? Does she play with dolls like this girl? Or does she play with trucks like this boy?"

Trials

- 4 Biological and 4 behavioral trials were presented in alternating pairs of either two biological trials followed by two behavioral trials, or vice versa, with order counterbalanced.
- For half of the trials of each type, the target picture was a girl and for the other half the target was boy.

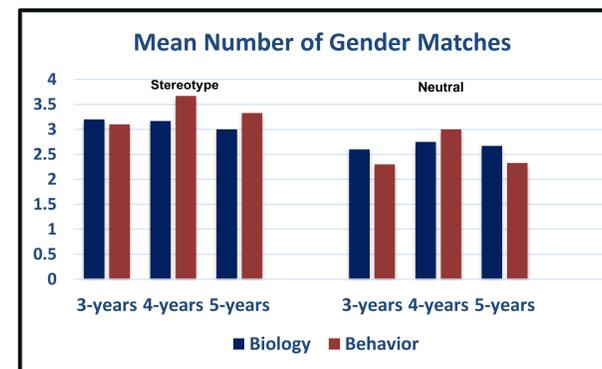
Results

Scoring

- Each child was given a score from 0-4 for biological trials and a score from 0-4 for behavioral trials
- Scores corresponded to the number of trials on which the child gave a gender-match response (i.e., responded that the third child (Child C) would have the same trait as the member of the first pair who was of the same gender).

Analysis

- A 3 x 2 x 2 (Age x Condition x Trait) ANOVA with Trait as a repeated measures factor yielded a significant main effect of Condition.
- Children's scores were higher in the Stereotype condition than in the Neutral condition.
- In the Stereotype condition all three age groups attributed both biological and behavioral traits on the basis of similarity in gender significantly more often than would be expected by chance.
- In the Neutral condition performance differed from chance only for the 4-year-olds on behavior trials.



Summary

- All age groups made gender-based inductions more often in the Stereotype condition than in the Neutral condition, and children performed above chance in the Stereotype condition.
- Presenting examples of stereotyped behaviors and preferences led to increased gender-based generalizations about biological properties, even though the biological properties were novel.
- Exposure to gender-stereotyped information appears to promote gender-based reasoning during early childhood.

Conclusion

Young children's tendency to make gender-based inductions appears to be variable.

The present results can be interpreted from either an essentialist perspective or a similarity perspective.

Essentialist Perspective

- From the essentialist stance, category-based induction is a manifestation of essentialist thought.
- However, the lack of consistent category-based induction in the Neutral condition indicates that children may not always engage in essentialist reasoning.
- For young children essentialism may be a possible mode of thought rather than a pervasive habit of mind.
- Exposure to gender-stereotyped information seemed to elicit gender essentialism.

Similarity Perspective

- From a similarity perspective, young children's generalizations are considered to be based on global similarity rather than category membership (Sloutsky & Fisher, 2004).
- Gender labels could be features contributing to global similarity.
- Familiar gender stereotypes also may function as salient features.
- Presenting stereotyped behaviors may have enhanced the perceived similarity between individuals of the same gender.

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