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Brief Report

Children's reasoning about gender-atypical preferences in different settings

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ABSTRACT

Two age groups of children, 5- and 6-year-olds ($n = 30$) and 8- and 9-year-olds ($n = 26$), made judgments about which of two items a character should choose: a gender-typical item or a gender-atypical item that was preferred by the character. Judgments were made about situations where the character was (a) in a familiar public setting and (b) in a country where the reversed preference was typical for that culture. At both ages and in both settings, a majority of responses endorsed the character's atypical preference. However, at both ages, endorsements of the atypical preferences were significantly less frequent in the familiar public setting that in the norm-reversed setting, and justifications indicated that there would be social consequences for defying gender norms in the familiar setting.

Introduction

Several studies have shown that by around 5 years of age, children are aware of gender norms and often have started to see gender as an inflexible essentialist category where the two sexes are seen as opposites that do not overlap (Levy, Taylor, & Gelman, 1995; Taylor, Rhodes, & Gelman, 2009). If children see gender as an essential part of identity, then they might not be aware that people adapt their gender-related behaviors to the expectations of the environment. On the other hand, some researchers suggest that even young children reason about social issues such that they may consider multiple features of situations, including personal preferences and local conventions. Domain theory researchers have shown that children sometimes prioritize conventions, especially when they are related to gender (Smetana, 1986), and they sometimes consider other issues such as personal choice. The current

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research examined the question of whether young children consider the context and personal preferences when judging whether people should adhere to gender norms.

This is an important issue for both applied and theoretical reasons. If children are unaware of the ways in which people adapt their behaviors to fit with the gender-related expectations of the environment, they may assume that gendered behaviors reflect the real preferences of most people. The application of this belief could be that they may feel more pressure to adhere to gender norms themselves, and Egan and Perry (2001) found that felt pressure to conform to gender norms has negative implications for adjustment. Theoretically, a lack of awareness of context could be a result of gender essentialism, or it could reinforce essentialist beliefs. By testing how children balance concerns with preferences and context, the current study examined the extent of their essentialism and their ability to reason about multifaceted situations.

Previous research (Berndt & Heller, 1986; Biernat, 1991) has found that young children use gender norms to predict behavior more than specific information about individuals. The current study's focus was on information about preferences and context. The question of context was examined by Taylor and colleagues in two studies (Taylor, 1996; Taylor et al., 2009) using an elegant design where a child was described as being raised only by opposite sex adults or only by same sex adults. The younger children in the study (4, 5, and 8 years of age) did not consistently acknowledge that stereotype-consistent characteristics would be more likely in the condition where the child was raised on an island populated entirely by the same sex as compared with the opposite sex island. Thus, the younger children did not acknowledge that the environment can shape a person's preferences and characteristics.

The current study examines judgments about context but it differs from Taylor and colleagues' work in that children judge what the character *should* do in different contexts, and not what they *would do*. An additional difference is that the personal preferences of the characters were made explicit, and they reflected an atypical preference in regard to gender norms (e.g., a boy is described as wanting to ride a pink bike). To test whether children are aware that the environment affects decisions regarding gender, the current study examined whether children are sensitive to the ways in which the environment pressures people to adhere to traditional gender norms rather than pressures them to behave in atypical ways for their sex (as in Taylor et al., 2009). Pressure to behave typically may be more familiar to children and may make it easier for them to consider the influence of the environment.

In the current study, children judge several situations where a hypothetical child has a preference that is counter to gender norms, for example, a girl who wants to wear a soldier costume. Participants were then asked whether the child should follow her preference in public (e.g., a Halloween celebration at school) and whether the child should follow her preference in a public situation where norms are consistent with the individual's preference (e.g., in a country where all of the girls like soldiers) to examine whether children judge that the hypothetical child should change her behaviors in different environments.

Evidence suggests that young children experience social pressures from the environment that may encourage them to conform to gender norms. These social pressures come from multiple sources. Several studies also show that children are exposed to sexism from parents (Leaper, 2000) and teachers (Good, Sikes, & Brophy, 1973; Jones & Wheatley, 1990). Older children are more aware of sexism than are younger children (Neff, Cooper, & Woodruff, 2007; Spears-Brown & Bigler, 2004). In addition, some research (Damon, 1977) finds that young children are less capable of considering multiple features of situations. Given that past research shows that young children are concerned both with adherence to gender norms (e.g., Taylor, 1996) and with personal preferences (e.g., Conry-Murray & Turiel, 2012), the investigation into age differences was exploratory. However, even young children may be aware that defying gender norms can have social consequences. In the familiar setting described to children in the current study, we expected that children would be able to appreciate the social pressures felt in some contexts and that they would change their judgments depending on the setting (i.e., endorsing atypical behaviors in a setting with nontraditional gender norms more than in a setting with tradition gender norms).

Young children learn about personal preferences early (Wellman & Liu, 2004), and preferences may be very salient information for children. Conry-Murray and Turiel (2012) found that even children as young as 4 years endorse counter-norm choices when a preference is explicitly stated (e.g., if Johnny

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wants the ballet costume more than his sister does, then the parents should give it to Johnny). Thus, a second hypothesis of the current study was that children would frequently endorse the specific preference of the characters even though the preferences described were counter to traditional gender norms.

Previous research (Terwogt & Rieffe, 2003) has indicated that children find it harder to attribute a counter-gender norm belief even at 4 and 5 of age when standard theory of mind appears to be secure. Based on this research, we also investigated whether children could correctly attribute a counter-gender norm choice. Because accepting unusual preferences is a prerequisite for making judgments about these preferences, these findings are presented first.

Finally, several studies have shown that children reason that female norms are more flexible than male norms (e.g., Levy et al., 1995; Taylor et al., 2009). Therefore, we examined whether judgments of boys who wish to defy norms differ from judgments of girls who wish to defy norms.

Method

Participants were 30 children in a younger group, the 5- and 6-year-old age group (17 girls and 13 boys), and 26 children in an older group, the 8- and 9-year-old age group (12 girls and 14 boys), for a total sample size of 56. The 5- and 6-year-olds were between 4.75 and 6.83 years (M = 5.31 years, SD = 0.57). The 8- and 9-year-olds were between 7.50 and 9.67 years (M = 8.98 years, SD = 0.50). These ages were selected because they represent the age when children are most inflexible about gender (the 5- and 6-year-olds) and less inflexible about gender (8- and 9-year-olds), based on recent research (Conry-Murray & Turiel, 2012). Children were recruited from their elementary school or their preschool in middle-class areas. Among the participants, 95% were White and 5% were African American.

Children were interviewed individually. The interviews were audio-recorded and later transcribed for coding. The interviews consisted of four stories, regarding a child who has a choice between a gender norm-consistent object and a gender norm-inconsistent object, that were presented in different orders to the participants. There were two stories involving boys who prefer a feminine object to a masculine object (a pink bike over a blue bike and a book about making necklaces over a book about baseball) and two stories about girls who prefer a masculine object to a feminine object (a soldier costume over a ballet costume and a truck over a doll). Objects were chosen for having counterparts for norms for both sexes and for being easily incorporated into different settings. All participants heard all four stories.

Participants were assessed in terms of their own preference (e.g., "Janie is in her basement playing dress-up. She sees two costumes: a ballet costume and a soldier costume. Which costume would you choose?") and their knowledge of gender norms (e.g. "Which do girls usually choose?"). Next, two questions assessed children's understanding that the character has a gender norm-inconsistent preference (e.g., "Actually, Janie's favorite is the soldier costume. Which costume is Janie's favorite? If no one sees Janie in her basement and she really likes the soldier costume, then which costume will she choose?").

Finally, there were two assessments of children's judgments about whether the character should change his or her behavior based on the environment. First, children were asked about whether the character should choose the item in a familiar public setting, and this was followed by a request for a justification (e.g., "Janie likes the soldier costume so much that she wants to wear it to school for Halloween. Should she wear the soldier costume to school? Why or why not?"). The second assessment of a different setting described a country where gender norms are the reverse of those familiar to these participants. Children were asked whether the child should engage in the activity in public in this other country (e.g., "Actually, Janie goes to school in another country where all the girls love soldiers and fighting. It's Costume Day at Janie's school in this other country, and Janie wants to wear her soldier costume. Should she wear it to school? Why or why not?"). The order presented here was the same order in which participants heard the questions for each story.

Judgments of participants' own preferences and gender norm knowledge were coded as 1 (consistent with traditional gender norms) or 0 (inconsistent with traditional gender norms). Understanding of the gender norm-inconsistent choice and the prediction of the character's choice in private were

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coded as 1 (consistent with the character's atypical preferences) or 0 (inconsistent with the character's preference but consistent with traditional gender norms). Judgments of the choice in the different public settings were coded as 0 (unacceptable) or 1 (acceptable).

Justifications were coded using categories derived from previous research (Davidson, Turiel, & Black, 1983; Turiel, 1983) and adapted to responses from this study. The justification categories and brief examples of responses are listed in Table 1. Justifications used in less than 5% of responses were not included in analyses. Justifications were coded as 0 (did not use the justification) or 1 (did use the justification). Up to two justifications were coded for each response, and when participants used multiple justifications, proportional coding was used so that each of the two responses to the same question was coded as 0.5.

Trained research assistants coded all interviews. Interrater reliability was calculated for ratings of the evaluations from 14% of interviews. Cohen's kappa for evaluations was 1.00. In addition, 30% of justifications were used to calculate interrater reliability for justifications, and Cohen's kappa for justifications was .85.

Results

Beginning with the assessments of children's own preferences, most children (83%) chose the item that was consistent with traditional gender norms. There were no sex of participant or item type effects. However, to investigate whether the items in the stories with boy protagonists were comparable to those in the stories with girl protagonists, the individual items were averaged for within two conditions and a 2 (Sex) × 2 (Age) × 2 (Gender of Character) repeated measures analysis of variance (ANOVA) was conducted with gender of the character as a repeated measure. There was main effect for the gender of the character, $F(1,51) = 6.87$, $p = .012$, $\eta^2 = .12$, indicating that the items in the boy protagonist stories (bikes and books) were seen as more flexible than the items in the girl protagonist stories (toys and costumes) ($M = .77$, $SD = .32$ and $M = .89$, $SD = .25$, respectively).

Two 2 (Sex) × 2 (Age) × 2 (Gender of Character) × 2 (Items) repeated measures ANOVAs were conducted with gender of the character and stories as repeated measures for both knowledge of gender norms and predictions of the item that would be chosen in private. Across both ages, children showed that they knew the gender norm about who usually uses each item 96% of the time. Children also showed that they understood that the characters would choose items based on their preferences when they were in private 96% of the time. There were no age, sex of participant, or gender of character effects for either of these questions.

Table 1
Justification categories.

Justification	Definition and examples
Gender	References to traditional gender norms and preferences based on traditional norms. *Examples:* "Everyone wants girls to be babysitters". "Boys wear soldier costumes more". "Boys don't want that anyway"
Moral fairness/ equity	A comparison implying equality or very similar treatment/opportunities/abilities. *Examples:* "It's not fair if he does not get to try it out". "We're all the same"
Choice	Personal preferences. Individuals should be able to choose about this issue. Gender-related preferences that are not based on norms. The issue is not legitimately regulated *Examples:* "It's up the child to choose what they want to do". "Even boys like dolls". "No one will tease him"
Culture	Culture-specific norms that could change. Traditions that are tied to a specific location or context *Examples:* "Boys probably do some things there and girls do different things there". "Because they are in a different culture"
Authority	Authorities make rules and they should be followed *Example:* "It's okay because it's the rule"
Social pressure	Concerns with teasing, losing friends, aggression, embarrassment *Examples:* "He shouldn't wear that or kids will call him names." "If a girl plays trucks, the kids will call her a boy and the other girls won't play with her"
Unelaborated	Uncodable and missing responses

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For the assessment of which item should be chosen in public in the familiar setting, 66% of participants said that the character should choose the counter-norm item in public. In the foreign setting with reversed gender norms, most participants (93%) said that participating in a public event with the counter-gender norm item was acceptable. To compare judgments of a familiar setting and another country, judgments of both were included in a 2 (Sex) × 2 (Age) × 2 (Gender of Character) × 2 (Items) × 2 (Setting) repeated measures ANOVA with gender of the character, items, and setting as repeated measures. A main effect for setting, $F(1,49) = 23.31$, $p < .001$, $\eta^2 = .32$, indicated that the non-gender norm-consistent choice was judged to be significantly more acceptable in another country ($M = .93$, $SD = .16$) than in the familiar setting ($M = .66$, $SD = .37$). *t*-Tests were performed to assess whether these means differ significantly from chance (.50); the other country assessment differed from chance at $t(52) = 19.38$, $p < .001$, whereas the familiar setting differed from chance at $t(54) = 3.31$, $p = .002$, indicating that participants were generally accepting of counter-gender norm activity in both settings. *t*-Tests were also performed separately for each age group to confirm that the group judged the behaviors differently from chance. The 8- and 9-year-olds judged counter norm behaviors as acceptable in both settings different from chance [other country: $t(23) = 33.26$, $p < .001$; familiar setting: $t(25) = 2.97$, $p = .006$]. The 5- and 6-year-olds judged the other country setting differently from chance, $t(28) = 10.41$, $p < .001$, but the familiar setting was only marginally different from chance, $t(28) = 1.80$, $p = .083$. Fig. 1 shows these judgments by age.

A second main effect was found for the gender of the character, $F(1,49) = 8.07$, $p < .007$, $\eta^2 = .14$, indicating that a boy wishing to engage in a feminine activity was judged as less acceptable ($M = .75$, $SD = .25$) than a girl wishing to engage in a masculine activity ($M = .83$, $SD = .23$) across both settings. Given that the items in the boy protagonist stories were seen as more flexible than those in the girl protagonist stories when participants judged the items that they themselves preferred (see above), this effect could have been even stronger with more equivalent items. Still, most participants judged that the children in stories should follow their preferences. *t*-Tests confirmed that judgments were higher than chance for both the boy protagonist questions, $t(54) = 7.62$, $p < .001$, and the girl protagonist questions, $t(52) = 10.51$, $p < .001$. Judgments for both genders of the characters were also different from chance at both ages (5- 6-year-olds: Boy protagonist, $M = .72$, $SD = .27$; girl protagonist, $M = .79$, $SD = .26$; 8- 9-year-olds: Boy protagonist, $M = .80$, $SD = .22$; girl protagonist, $M = .88$, $SD = .18$; all different from .50 all $ps < .001$).

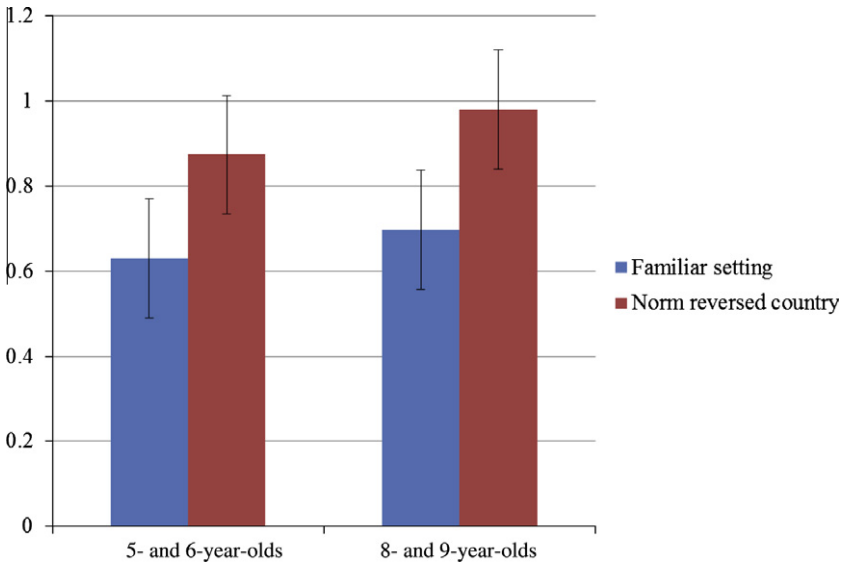

Fig. 1. Justifications (proportions) for judgments about whether the character should engage in a nontraditional gendered activity in public by age. Error bars show 95% confidence intervals.

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Justifications for these two questions were analyzed separately in repeated measures ANOVAs. For the familiar setting, a 4 (Justification: gender norms, choice, social pressure, or unelaborated) × 2 (Sex of Protagonist) × 2 (Items) × 2 (Sex of Participant) × 2 (Age) repeated measures ANOVA with justification, sex of protagonist, and items as repeated measures was performed. A main effect for justification, $F(1,138) = 23.84$, $p < .001$, $\eta^2 = .34$, indicated that personal choice was the most frequent reason for judgments ($M = .55$, $SD = .36$), and it was used significantly more than any other justification. Justifications related to concerns with social pressure ($M = .21$, $SD = .29$) were used significantly more than references to gender norms ($M = .06$, $SD = .17$). Unelaborated justifications ($M = .14$, $SD = .25$) were common, especially among 5- and 6-year-olds. An interaction between justification and age, $F(3,138) = 3.52$, $p = .017$, $\eta^2 = .07$, indicated that 5- and 6-year-olds used unelaborated justifications more than 8- and 9-year-olds ($M = .25$, $SD = .30$ and $M = .04$, $SD = .12$, respectively). Note that patterns were similar across ages except that 5- and 6-year-olds' justifications were more likely to be unelaborated, as Fig. 2 shows.

Justifications for judgments in the other country were mixed, with 45% referencing the cultural customs and 35% indicating that it was a matter of personal choice. A 3 (Justification: choice, culture, or unelaborated) × 2 (Sex of Protagonist) × 2 (Items) × 2 (Sex of Participant) × 2 (Age) repeated measures ANOVA with justification, sex of protagonist, and items as repeated measures was performed. A Justification × Age interaction, $F(2,92) = 7.70$, $p = .002$, $\eta^2 = .14$, indicated that cultural customs was mentioned more by 8- and 9-year-olds ($M = .61$, $SD = .34$) than by 5- and 6-year-olds ($M = .29$, $SD = .32$) and that 5- and 6-year-olds again used more unelaborated justifications ($M = .24$, $SD = .31$) than 8- and 9-year-olds ($M = .05$, $SD = .10$).

Discussion

Across both settings and both ages, participants were strongly influenced by the preferences of the characters in the assessments, endorsing the atypical preferences in a majority of cases. This is despite the fact that participants had good knowledge of traditional gender norms and their own preferences were often in line with traditional norms. They also clearly understood the atypical preference that was stated, as indicated by their responses to the question about which item the child would choose

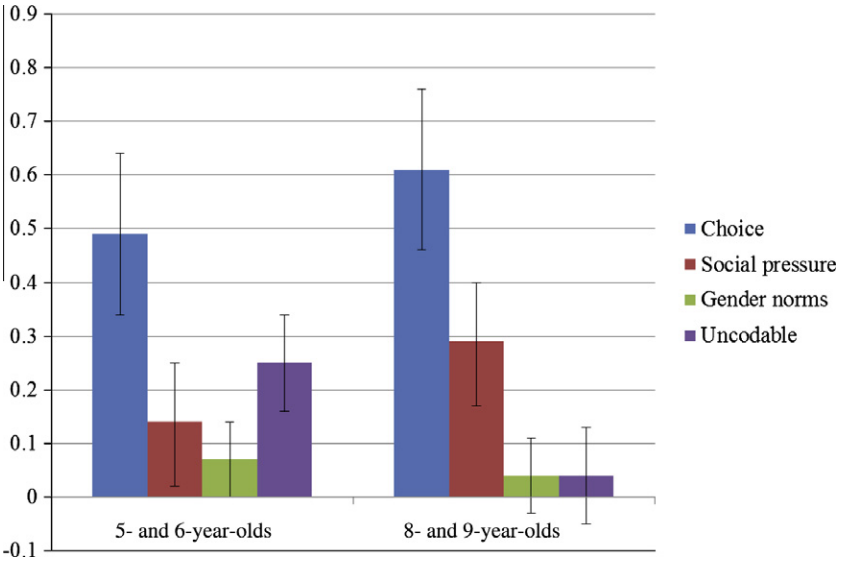

Fig. 2. Judgments (proportions) that the character should engage in a nontraditional gendered activity in different settings by age. Error bars show 95% confidence intervals.

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in private. Across both settings, participants' justifications showed that at both ages they were often concerned with personal choice. Thus, whereas previous research on gender essentialism in children (Levy et al., 1995; Taylor, 1996; Taylor et al., 2009) has identified ways in which children are strongly influenced by gender norms, the current research indicates that children are also strongly influenced by stated preferences even when they are atypical.

Still, judgments endorsing preferences were significantly more frequent in the setting without social pressure to adhere to traditional gender norms than in the setting with familiar gender norms. When the characters were in a public setting, an average of 66% of participants over both ages endorsed the personal preference of the characters even though it was counter to gender norms. In contrast, in their judgments about a culture where gender norms were reversed, participants overwhelmingly (93%) judged that the character should follow their preferences.

The justifications for each setting provide insight into why participants judged the settings differently. In the familiar setting, participants' justifications at both ages included concerns with social pressure such as teasing. On the other hand, social pressures and teasing were not mentioned in the culture where norms were reversed. Justifications for judgments in that culture were primarily focused on personal choice and the norms of the culture for both ages. Although personal preferences seemed to take priority, the setting did affect judgments, and concerns with social consequences for defying gender norms were evident even among the younger children.

Consistent with past research (Ruble, Martin, & Berenbaum, 2006), participants were less willing to endorse a male character's non-normative choice than a female character's non-normative choice. This is despite that the children judged the items in the male protagonist stories to be more flexible when they chose the item they preferred for themselves.

Overall, this research shows that children as young as 5 or 6 years reason about gender norms considering multiple features of the situations. They sometimes change their judgments about whether someone should adhere to gender norms depending on the context. But it is also clear that preferences are very salient for young children even when those preferences are not consistent with strongly held beliefs about gender. That is, the fact that children attributed so much power to these *atypical* preferences, despite the fact that many studies have shown that children have difficulty in seeing gender as flexible (e.g., Levy et al., 1995; Taylor et al., 2009), is indicative of the salience of preferences.

A limitation of the current study is the use of hypothetical dilemmas. Future research should examine how children judge non-normative gender preferences in more realistic situations and in situations involving judgments of their own behaviors to examine whether children feel social pressures to adhere to gender norms in some settings. In addition, the questions were presented to children in the same order, with the familiar setting question always followed by the other culture question, which could have led children to switch answers for questions that followed. They may have also been influenced by the fact that the questions repeatedly mentioned the atypical preferences, and so it may have been more salient. However, most children provided justifications that were consistent with their judgments, providing some evidence that their judgments were consistent with their reasoning. Still, future studies should examine these issues with a different order of questions and with less salient references to the atypical preferences to better control for possible response bias.

Future research should also explore children's assumptions related to gendered preferences given that some research shows that children do not anticipate non-normative preferences (Conry-Murray & Turiel, 2012; Schuette & Killen, 2010). Children may assume that preferences are in line with gender norms as long as they have no explicit information to the contrary. This is despite the fact that in the current study, 17% of participants preferred the nontraditional items themselves. Given that a significant minority of children held counter-norm preferences, more research should investigate whether children might not feel comfortable in expressing their preferences in some settings. Finally, future research should also investigate ways to help children to be sensitive to the variability that exists in preferences related to gender norms.

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