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Culture and children's reasoning about preferences and gender norms



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ABSTRACT

To examine how children and young adults in two cultures think about gender norms, participants evaluated preferences that were inconsistent with gender norms. Participants (N = 200) included 53 children aged 5 years, 49 children aged 7 years, and 49 children aged 9 years, and 49 young adults from Korea and the United States. Both Koreans and Americans reasoned about violations of gender norms primarily as matters of personal choice in both public and private, with some conventional concerns in public settings. In both cultures, participants rejected the idea that an authority could have jurisdiction over gender-norm-related choices, and both groups suggested that being unable to express those preferences in public has a negative impact on individuals.

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Introduction

Gender norms can provide a powerful set of instructions for how boys and girls should behave that can create pressure to conform. When children do not conform to gender norms, atypicality can be associated with negative outcomes such as lower peer acceptance (Lee & Troop-Gordon, 2011) and a lower sense of well-being (Yunger, Carver, & Perry, 2004). However, gender norms are not the same across all cultures or even in different settings within cultures. Are children aware that gender norms vary depending on the setting? The development of conceptions of gender-related norms has been

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studied extensively in the United States but much less so in other cultures where gender norms might be less flexible. The current study examined how children reason about gender norm violations in private and in public in two cultures with different levels of gender norm flexibility.

Theoretical foundation: Social domain theory

Understanding children's reasoning about gender norms provides information regarding the development of their social cognition. Social norms, including gender norms, are often considered social conventions (Stoddart & Turiel, 1985) and can differ in different cultures and different settings. A long line of research in social domain theory (e.g., Smetana, 2013; Turiel, 1983, 2002, 2015) finds that children and adults reason about social conventions differently from moral principles, a distinction that can be seen using criterion judgments (Turiel, 1983). Criterion judgments include judgments that conventions, but not moral principles, vary in different social contexts and that they are contingent on rules and authority dictates (for recent reviews, see Smetana, 2013; Turiel, 2015). For example, across cultures, people judge that authorities such as teachers have jurisdiction to alter social conventions like the dress code at school, but teachers do not make the rules at home (in Korea, see Kim & Turiel, 1996; in the United States, see Laupa & Turiel, 1993). In contrast, issues in the moral domain are not judged to be contingent on existing rules or authority dictates and are judged to apply across social contexts. For example, young children judge that harming others is wrong even when they are told there is a rule that allows it (e.g., Conry-Murray, 2013b; Turiel, 1983). Finally, personal domain issues are those that are not regulated and are judged to be matters of individual choice (e.g., Nucci, 1981).

Children's judgments about gender

Judgments of gender-related activities can include all three domains. Gender-based unfairness is often judged in the moral domain, whereas gender norms can be a matter of personal choice or can be dictated by the conventional norms of the situation. In addition, some gender-related issues are complex enough that they can be interpreted differently, depending on whether children attend to the moral, conventional, or personal features of situations.

It is important to note whether children judge gender norms to be moral, conventional, or personal because these designations have different implications for the enforcement of gender norms. Research on exclusion shows that children often use conventional norms as justifications for excluding others who do not meet those norms (e.g., Killen, Elenbaas, & Rizzo, 2018; Rutland & Killen, 2015). However, this line of research also finds that children sometimes reject unfair exclusion. In fact, children prefer an out-group member who advocates for fairness over an in-group member who advocates for unfairness even when the unfairness will help the in-group (Mulvey, Hitti, Rutland, Abrams, & Killen, 2014). Moreover, if gender norms are seen as primarily personal, gender norm violations would be at the discretion of the individual child (Nucci, 1981). Therefore, the implications of gender norm violations may be different depending on whether children attend to the moral, conventional, or personal features of situations.

Differences across age

A common finding is that young children from about 4 to 7 years of age judge gender norms to be inflexible, whereas older children judge gender norms to be flexible (which some refer to as *gender essentialism*). The findings that young children judge gender norms to be inflexible or unchangeable might suggest that they regard adherence to gender-related activities as moral imperatives. This view is in contrast to the social domain theory view. Research has indicated that young children conceive of gender-related activities as fixed due to biological and psychological features (Levy, Taylor, & Gelman, 1995; Taylor, 1996; Taylor, Rhodes, & Gelman, 2009) and not as due to harm- or justice-based moral consequences. However, the question of whether young children consider gender-based conventions as well as personal choice in regard to gender is an important one. Do children, even at an age when children tend to be inflexible about gender, consider gender norms to be a matter of personal choice?

Research has shown that there are limits to children's inflexibility about gender norms. Several studies have shown that children in the United States as young as 4 years judge that gender norms cannot be enforced by authorities (e.g., Conry-Murray & Turiel, 2012). In still another study, children gave priority to preferences for a norm-inconsistent item over adherence to gender norms when dividing up gender-related stickers (Conry-Murray, 2017). However, it is unclear whether children from a culture that might be more traditional with regard to gender would also see gender as a matter of personal choice even when that choice is to violate gender norms.

In the current study, we examined the judgments of children aged 5–9 years because this range includes a period when children judge gender norms as fixed and inflexible (Taylor, 1996; Taylor et al., 2009). During this age period, children judge that gender norms are non-overlapping and that gender bestows qualities that cannot be changed. Research has found differences in the timing of this phase and whether culture can be associated with its length (Conry-Murray, Kim, & Turiel, 2015; Rhodes & Gelman, 2009). However, in suburban and urban areas of the United States, the phase appears to be approximately from 4 to 8 years of age, with some research showing increasing flexibility starting around 7 or 8 years (Conry-Murray & Turiel, 2012). Conry-Murray et al. (2015) found that in Korea it was not until later, at 8 or 9 years of age, that the majority of children endorsed violations of gender norms. Young adults were included to examine whether cultural differences exist beyond the period of childhood and to provide a comparison with adults whose development is much further along. Therefore, the current research examined whether the age differences found in the United States and Korea in past research are paralleled in judgments about gender norm violations in different settings.

Judgments of gender in public versus private

Thinking about the personal and social conventional aspects of violations of or adherence to gender norms and their potential conflicts can be brought to the fore by contrasting such activities in private and public settings. Reasoning about gendered behavior in public and private requires children to balance concerns with individual agency and norm-enforcing responses from others. In addition, variations in judgments about adherence to gender norms in private and public settings would further indicate that they are not seen as moral imperatives.

Two studies conducted in the United States have shown that children judge gender norms to be stronger in public settings than in private settings (Conry-Murray, 2013a, 2017). In these studies, children in middle childhood judged a choice between a masculine object and a feminine object when the children were alone (e.g., in a bedroom) and in public with other children around (e.g., at show-and-tell, at a school parade). Children as young as 5 years judged that an atypical choice (i.e., a boy preferring a feminine object or a girl preferring a masculine object) is more acceptable in private.

In the current study, we assessed evaluations and judgments about atypical gender preferences in private (i.e., while alone in one's room) and in public (i.e., in a classroom presentation). If, indeed, children judge gender norms to have both personal and conventional features, we would expect them to distinguish between their manifestations in private and public settings. Insofar as gender norms are conceptualized as conventional, we would also expect individuals to accept an authority's jurisdiction to enforce gender norms in a public institutional setting. However, if gender norms are conceptualized as mainly entailing personal choices, we would expect there to be a rejection of an authority's jurisdiction to regulate the actions. For these reasons, we also assessed judgments as to whether a person in a position of authority (i.e., a teacher) can legitimately dictate gender norms.

Differences across cultures

Conventional norms are enforced to different degrees in different cultures, with some accepting more variability in the degree to which gender norms are followed (Conry-Murray et al., 2015; Turiel, 2002). Considerations of the personal and conventional features of judgments about gender norms raise questions about how children in different cultures develop in their thinking about gender norms (e.g., Lobel, Gruber, Govrin, & Mashraki-Pedhatzur, 2001; Rhodes & Gelman, 2009). To address

the questions of culture and development, we conducted research in the United States and South Korea with children and young adults.

Korean traditional culture, characterized by Confucian ideology, emphasizes patriarchal hierarchy, gender distinction, and preference for boys (Cho, 2007). The extent to which Confucian values are incorporated by individuals into their development is open to question (see Turiel, 2002; Turiel & Wainryb, 1994). However, it may be that some of this ideology is translated into cultural practices that render gender norms as strong conventions rather than as personal choice. Indeed, South Korea is lower than the United States on the United Nation's (2017) Gender Development Index (a ratio of female to male empowerment, including health, schooling, and income; the United States is .99 and ranked 13th among 164 countries, whereas Korea is .93 and ranked 22nd), indicating that the genders are less equal in Korea. In addition, past research has shown that children from South Korea are more accepting of gender norms than children from the United States (Conry-Murray et al., 2015).

Although Korea does appear to have stronger gender norms, research also shows that Korean children are critical of unfair treatment that is based on gender (Park, Lee-Kim, Killen, Park, & Kim, 2012) and that children and adults in both cultures judged that defying gender norms for a moral end (i.e., helping someone) is acceptable (Conry-Murray et al., 2015). In addition, Kim (1998), and Kim and Turiel (1996) found that Korean children judged moral issues to be independent of authority demands. Overall, the findings indicate that children in Korea may be less flexible about gender norms than American children, although not to the degree that they view gender norms as moral imperatives.

Gender differences

Gender norms can affect boys and girls differently, with boys subject to stronger penalties for defying norms (Blakemore, 2003; Lee & Troop-Gordon, 2011), even across different ethnicities (Hoffman et al., 2019). We examined reasoning about both boys and girls selecting feminine and masculine activities to determine whether boys are subject to stronger pressure to conform to norms in each culture.

Gender differences in reasoning about gender have been found only rarely; thus, we did not have any specific hypotheses about gender (e.g., Conry-Murray et al., 2015, found no gender differences in reasoning about gender norm violations). However, given its relevance to the topic, we explored whether male and female participants would judge violations of norms differently when the norms were violated by boys or girls. Some research shows that in-group members are held to higher standards than out-group members (Pinto, Marques, Levine, & Abrams, 2010), so it is possible that participants would judge same-gender protagonists differently than other-gender protagonists.

The current study

The current study examined reasoning about gender norm violations in public and private among children at 5, 7, and 9 years of age and young adults in the United States and Korea. Participants were presented with examples of boys and girls who preferred an atypical activity and were asked to judge whether these children should choose the preferred activity or the gender norm-consistent activity when alone in their room and when they must bring an item for a show-and-tell presentation in front of their class. We expected that children at 5 and 7 years of age, as well as participants in Korea, would be the most likely to judge gender norm violations as unacceptable given past research showing that children in the United States are increasingly flexible by around 10 years of age (Taylor et al., 2009) but that children in more gender-conservative cultures are inflexible for a longer time (Conry-Murray et al., 2015; Rhodes & Gelman, 2009). Because norms are especially strong in public, we expected that norm violations would be seen as less acceptable across cultures and ages when the violations take place in public. If this were the case, it would provide evidence that gender norms are seen as context dependent and, therefore, as conventional and not moral (Smetana, 2013; Turiel, 2015). Justifications were examined to further elucidate how participants reasoned about private and public gender norm violations.

Participants were also asked to judge whether a teacher could enforce a rule that children must engage only in the gender norm-consistent activities. Because authorities can determine and sometimes enforce social conventions (Smetana, 2013; Turiel, 2015), acceptability of this rule would indicate that gender norms are judged to be under the jurisdiction of teachers. If the rule were judged to be unacceptable, it would provide support for the proposition that gender norms can also be judged to be a matter of personal choice. We expected that participants of all ages and in both cultures would negatively evaluate a rule enforcing gender norms. Justifications were assessed to determine the reasons held for these judgments.

Finally, participants were asked to judge how a child would feel if he or she were unable to present the preferred item in class. This question was designed to examine whether participants expected negative repercussions in how a child would feel about not being able to express individual preferences even when preferences are counter to expected norms. We expected that participants of all ages and in both cultures would judge that being unable to express preferences would affect the child negatively.

Because past research has rarely found gender differences in reasoning about gender norm violations (e.g., Conry-Murray et al., 2015), we did not expect participant gender differences and did not include participant gender in our specific hypotheses. However, gender differences and differences based on whether a boy or a girl violated a gender norm were exploratory. They were included because they may shed light on whether in-group bias affects judgments of gender norm violations.

Method

Participants

Before beginning data collection, we obtained ethics review approval from Saint Joseph's University (Protocol No. 873005-6, titled "Reasoning About Personal Choice"). Participants were recruited from elementary schools in and around Philadelphia (United States) and Seoul (Korea). In both cultures, participants were recruited from middle-class communities where the majority of parents have college degrees. Written parent consent was obtained, and children provided assent. The young adults were college students recruited through participant pools on their college campuses. College students in the United States, but not in Korea, received credit in a psychology class for participating.

Participants were children aged 4–10 years and young adults grouped into four groups according to their ages. For simplicity's sake, the age groups are identified by the age of the majority of the children in each group, but see Table 1 for means and ranges showing that these labels are approximations. Children in the age group labeled 5 years ranged from 4.83 to 6.25 years, with a mean age of 5.67 (SD = 0.44). The age group labeled 7 years ranged from 6.50 to 8.25 years, with a mean age of 7.18 (SD = 0.51). The age group labeled 9 years ranged from 8.50 to 10.67 years, with a mean age of 9.39 (SD = 0.54). Finally, young adults ranged from 19.67 to 27.00 years, with a mean age of 22.18

Table 1	
Participants' mean ages (and standard deviations) and ranges in	years.

Age group	United States		Korea				
	Female	Male	Female	Male			
5 years	5.67 (0.48)	5.35 (0.53)	5.69 (0.28)	5.94 (0.53)			
•	4.92-6.25	4.83-6.25	5.17-6.25	5.50-6.25			
	n = 14	n = 12	n = 14	n = 13			
7 years	7.27 (0.70)	7.43 (0.53)	6.92 (0.26)	7.10 (0.30)			
•	6.50-8.25	6.50-8.17	6.58-7.33	6.67-7.50			
	n = 13	n = 12	n = 12	n = 12			
9 years							
•	9.30 (0.72)	9.27 (0.39)	9.40 (0.71)	9.62 (0.21)			
	8.50-10.67	8.67-10.25	8.75-9.83	9.25-9.92			
	n = 12	n = 13	n = 12	n = 12			
Adults	20.67 (0.78)	21.15 (0.91)	22.29 (0.78)	24.69 (1.51)			
	19.67–22.25	20.17–23.00	20.75–23.92	22.58-27.00			
	n = 12	n = 13	n = 12	n = 12			

(*SD* = 1.88). Table 1 also presents the number of participants in each age group by gender. These age groups were chosen because research indicates that inflexibility is at its height around 5–7 years. Within Korea, all participants were ethnic Koreans. Within the United States, participants were 81.1% White, 5.6% Asian, 3.5% Latinx, 2.8% African American; an additional 5.6% identified as mixed ethnicities, and 1.4% identified as an ethnicity not listed here.

Post hoc power analyses using G*Power showed that power was estimated to be between .85 and .99, depending on the analysis. Interactions with more between-participant levels require the largest sample sizes, so we demonstrate the case for our sample size with the largest number of between-participant levels in our analysis: the two-way between-participant interaction between age (4 levels) and country (2 levels). We examined an effect size (Cohen's f) of .25 in order to detect at least medium effect sizes, in a sample size of 200, with eight groups and two within-participant measurements and .50 correlations between measures. G*Power calculated the power to be .85 for this test. We did not test three-way interactions or above in our results.

Design, procedures, and coding

Participants were interviewed individually in a private space in Korean in Korea and in English in the United States. The interview was audio recorded and later transcribed for coding. Participants were told that they would hear stories and answer questions that do not have right or wrong answers. They were also told that the children in the stories were "about your age," whereas young adults were told that the children were in elementary school. All participants except for young adults completed warm-up questions to help them use the scales provided. They were asked whether it is OK or not OK to hit someone and to share a cookie with someone. They were also asked how they feel when they get ice cream, break a toy, and lose a sock. These questions were designed to allow children to practice using all parts of the scales (described below).

To assess judgments of gender norms, participants were presented with a series of hypothetical situations where they needed to judge which of two activities a child should choose. There were two prompts involving a girl who preferred a masculine activity (e.g., building a fort) and two prompts with a boy who preferred a feminine activity (e.g., making a bracelet), for a total of four prompts that were always gender non-normative. The prompts were guided by one of the authors, who is a native Korean and educated in the United States. She also translated the interview from English to Korean. See Table 2 for a list of all the activities.

Knowledge of gender norms

To ensure that participants judged the activities to be gender related as we expected in both countries, we assessed their judgments of the gendered nature of the activities. At the end of the interview, participants judged each activity in terms of whether boys or girls usually like it more. This was coded as follows. Girls like it a lot more (shown with a picture of four girls) was coded as -2. Girls like it a little more (shown with a picture of three girls and one boy) was coded as -1. Girls and boys like it the same

Table 2
Mean ratings (and standard deviations) of items

		Korea	United States	Combined
Feminine	Ballet	-1.25* (0.91)	-1.15* (0.97)	-1.19* (0.94)
	Bracelets+	-1.32* (0.84)	-0.90* (0.91)	-1.07* (0.91)
	Fashion	-1.18* (0.87)	-1.10* (1.00)	-1.14* (0.95)
	Coloring princesses	-1.17* (0.99)	-1.26* (0.95)	-1.22* (0.96)
Masculine	Trucks+	1.08* (1.12)	0.76* (1.06)	0.89* (1.10)
	Building forts+	1.19* (1.04)	0.47* (0.90)	0.76* (1.02)
	Baseball+	1.30* (0.87)	0.96* (0.95)	1.10* (0.93)
	Coloring soldiers	1.15* (1.00)	1.02* (0.99)	1.07* (0.99)

Note. An asterisk (*) indicates that the mean was significantly different from 0.00 at p < .001. A plus sign (+) indicates that the mean differed by country at p < .05.

(shown with a picture of two girls and two boys) was coded as 0. *Boys like it a little more* (shown with a picture of three boys and one girl) was coded as 1. *Boys like it a lot more* (shown with a picture of four boys) was coded as 2.

Means indicate that all the items were judged to be preferred primarily by the expected sex (significantly different from 0.00, which was gender neutral), even when testing the two countries separately, within each age group and within each gender. Means (and standard deviations) for each activity are presented in Table 2.

To further ensure validity of the activities in the interview, we examined whether there were age, sex, or culture differences in judgments of the activities. Two repeated-measures analyses of variance (ANOVAs) were conducted: one for masculine items and one for feminine items (because they were coded differently). Korean participants judged the activities as more gendered than U.S. participants, but only for masculine items, F(3, 184) = 15.50, p < .001, $\eta_p^2 = .08$. There was also an Age × Sex interaction, indicating that within female participants an age effect, F(3, 92) = 6.31, p = .001, $\eta_p^2 = .17$, showed that 5-year-old girls judged feminine activities to be usually for girls more than any other age group (p < .025, Bonferroni-corrected level). Overall, we found these differences to be minor and the chosen activities to be judged adequately masculine or feminine across cultures, ages, and genders.

The interview began with a description of a child alone in his or her bedroom choosing an activity (e.g., "A boy is alone in his room coloring. His coloring book has pictures of princesses on some pages and soldiers on others."). Drawings accompanied the description of the room as well as each of the activities. The child was described as liking a counter-gender norm activity better than the norm-consistent alternative (e.g., "The boy wants to color the princess page because he likes it better.") A drawing of the child engaging in the preferred activity was shown at this point. As a manipulation check, participants were asked which one the child liked better. Only children who passed this manipulation check for all activities were included in the final sample. In total, 11 U.S. participants were excluded because they did not pass this manipulation check (including primarily younger participants but also 1 young adult and 2 9-year-olds), and 1 Korean 5-year-old did not pass the manipulation check and was excluded.

All the evaluation judgments were indicated by participants, who pointed to the scale or verbalized their responses. Interviewers noted participants' responses at the time of the interview. The two violations of feminine norms (a girl who likes reading about trucks and building forts) were combined for analysis, and the two violations of masculine norms (a boy who likes reading about ballet and coloring princesses) were combined for analysis.

Judgments of non-normative preferences in private

To assess participants' judgments of non-normative preferences in private, participants were asked to judge a child with a counter-norm choice without the influence of others' responses to that choice. Participants were asked which activity the child should choose when alone (e.g., "Which page should he choose to do in his room by himself?"), coded as 1, based on preference, and coded as 0, based on norm. Participants were then asked for their reasons or justifications ("Why?").

Judgments of non-normative preferences in public

Next, judgments of non-normative preferences in public were assessed. Here, the child was described as needing to choose the activity that will be shown in public (e.g., "At school, the teacher asks the children to share their pictures. Should the boy bring the picture of a princess or a soldier to school to share with the class?"), accompanied by a drawing of a chair in front of a group of about 10 children, also coded as 1, based on preference, and coded as 0, based on norm. This question was also followed by a request for justifications.

Judgments of rule legitimacy

To assess rule legitimacy, participants judged an authority's rule enforcing gender norms (e.g., "The teacher says there is a rule that only girls can color princesses. Is that rule OK or not OK?"). This was coded on a 5-point scale (practiced in the warm-up) where 0 was definitely not OK, 1 was a little not OK, 2 was both, 3 was a little OK, and 4 was definitely OK. More acceptable judgments were described next

to bigger smiles, and more unacceptable judgments were described next to bigger frowns. This question was also followed by a justification request.

Judgments of the child's response to a restrictive rule

Finally, to assess participants' judgments of the child's response to a restrictive rule, participants were asked about the effect on the child of not being able to present the preferred item (e.g., "How will the boy feel if he can't present his princess coloring page? Why?"). This was practiced in the warm-up and coded as 2 (*very happy*), 1 (*a little happy*), 0 (*neither*), –1 (*a little sad*), and –2 (*very sad*). Pictures of smiling or frowning faces accompanied each description, with bigger smiles or frowns for each label.

Justifications

The reasons given for judgments were coded from transcriptions of audio recordings of the interviews. Justification categories were developed from past research and from a sample of the current study (see Table 3). Justifications used by at least 10% of participants within at least one country for the assessment in question were included in analyses of that assessment. These included references to personal preference, gender norms, and practical issues such as the work involved and the difficulty of transporting a project to school. Issues of teasing and embarrassment were combined. Moral issues related to unfairness and rights were also combined. Concerns with authority were used

Table 3 Justification categories and examples.

Justification	Description	Examples					
Personal preference	References to what a child likes.	"Because it's okay for a girl to like baseball and a boy to like ballet." "Because he wants to do it and in coloring books, you can color any page you want."					
		"She wants to do it better because it's cooler and she looks at it and thinks. 'Oh I like that one. I want to do that one'!"					
Gender norms	Expectations about how girls	"A boy should choose the picture of soldier."					
	and boys should act.	"Because most girls like ballerina."					
	References to how most boys	"Because girls don't like boys' stuff."					
	or girls act.	"Because maybe some boys don't like princesses and					
	Must be consistent with traditional roles.	probably all the girls like princesses."					
Teasing/	Concern about negative	"Because I might be humiliated if I show it to friends."					
embarrassment	treatment for an unusual choice. Concern for how a child will	"Because his friends may laugh at him if he brings the princess."					
	feel breaking norms.						
Practical issues	Effort went into the task.	"Because the picture was colored by him."					
	Clean-up, ease of task.	"It's easy to make one."					
Unfairness (moral)	Comparisons that are unequal. Restrictions on rights or	"It is not fair that girls color the picture of princess, and boys color the picture of soldier."					
	freedoms.	"It is not fair that only the girls can bring it in."					
	References to what the child should be able do, implying a	"It's not fair to girls because some girls like stuff and some boys like that stuff too, but not all boys like that same stuff					
	right.	and not all girls like fashion stuff."					
		"Because he should be able to pick what book he wants to					
		bring. The teacher doesn't get to pick for him."					
		"Because girls can read that book too. You don't have to be any gender to read whatever you want."					
Authority	Obedience to authority is	"Because the teacher has set the rule."					
Authority	required.	"Because students should obey the teacher."					
	requireu.	"Because she knows better."					
		"Because the teacher says you can't bring forts."					
Uncodable	Question is answered, but code	"The fort may get wrecked on the way to school."					
	for it is not on this list.	"Her mom lets her read about trucks."					

too rarely (<1%) to be included. In evaluations of rule legitimacy, the gender norm justification was dropped because of low use (6% in each country). Justifications were coded as 1 when a justification was used and were coded as 0 when the category was not used. Up to two justifications were coded for each response; when participants used multiple justifications, proportional coding was used (i.e., each of the two justifications was coded as 0.5) so that those who gave more than one justification would not be oversampled.

Reliability was calculated from a sample of 15% of interviews. Coding was conducted by two trained research assistants: one from Korea and one from the United States. Both were fluent in English, and so Korean interviews used in reliability coding were translated into English, resulting in acceptable reliability with a Cohen's kappa of .78. Once reliability was achieved, coding from the Korean research assistant was used for the Korean sample and coding from the American research assistant was used for the U.S. sample, and coding continued in English in the United States and in Korean in Korea.

Results

For each assessment, a 2 (Participant Gender) \times 4 (Age Group: 5 years, 7 years, 9 years, or young adults) \times 2 (Country) \times 2 (Protagonist Gender) repeated-measures ANOVA was conducted with protagonist gender as a repeated measure. Bonferroni-corrected alpha levels were used in follow-up analyses. Table 4 presents means and standard deviations for judgments. Justifications were also analyzed with a 2 (Participant Gender) \times 4 (Age Group: 5 years, 7 years, 9 years, or young adults) \times 2 (Country) \times 2 (Protagonist Gender) repeated-measures ANOVA with protagonist gender as a repeated measure. Each justification was analyzed separately because of concerns about a lack of independence, with Bonferroni corrections for multiple comparisons. Justification means and standard deviations are presented in Table 5.

Judgments of non-normative preferences in private

Judgments of non-normative preferences in private were assessed to determine whether age or country was associated with judgments of whether individuals should make non-normative personal

Table 4Means (and standard deviations) of judgments by age group and country.

		Age group	All age groups			
		5 years	7 years	9 years	Adults	
Choice in private	Korea	.91 (.24)	.95 (.16)	.99 (.05)	1.00 (.00)	.96 (.15)
-	United States	$.61_{a,b}(.33)$	$.51_a$ (.38)	$.79_{b.c}(.37)$	$.93_{c}(.14)$.72 (.36)
	Combined	$.76_{a,b}(.32)$	$.72_{a,b}(.37)$	$.89_{b,c}$ (.28)	$.96_{c}$ (.10)	.82 (.32)
Choice in public	Korea	.77 (.36)	.73 (.37)	.79 (.34)	.88 (.24)	.79 (.33)
-	United States	.48 (.37)	.47 (.36)	.68 (.39)	.89 (.19)	.65 (.36)
	Combined	$.63_a$ (.39)	$.60_a$ (.38)	$.73_{a,b}(.36)$.88 _b (.22)	.71 (.36)
Private-public difference	Korea	.14 (.31)	.22 (.33)	.20 (.32)	.13 (.24)	.17 (.30)
-	United States	.13 (.28)	.04 (.45)	.15 (.25)	.04 (.14)	.07 (.30)
	Combined	.13 (.29)	.13 (.41)	.17 (.29)	.08 (.20)	.11 (.30)
Rule legitimacy	Korea	1.05 (1.19)	.60 (.48)	.63 (.88)	.33 (.35)	.66 (.84)
	United States	1.05 (1.12)	.77 (1.00)	.40 (.81)	.35 (.63)	.61 (.93)
	Combined	1.05_a (1.15)	$.69_{a,b}(.78)$.51 _b (.85)	$.34_{b}(.50)$.63 (.89)
Response	Korea	-1.49(.84)	-1.26(.74)	-1.38(.63)	-1.43(.39)	-1.39(.67)
_	United States	-1.60(.66)	-1.40(.65)	-1.57(.61)	-1.48(.49)	-1.49(.64)
	Combined	-1.54(.75)	-1.33(.69)	-1.47(.62)	-1.45(.44)	-1.45 (.65)

Note. Choices in private and public are responses to which activity the child should choose alone and in front of the class, respectively, coded as 1, based on preference, or coded as 0, based on gender norm. Rule legitimacy indicates mean evaluations of an authority's rule enforcing gender norms, coded as 0 (definitely not OK), 1 (a little not OK), 2 (both), 3 (a little OK), or 4 (definitely OK). Response indicates judgments of how the child would feel if he or she were unable to present the preferred activity, coded as 2 (very happy), 1 (a little happy), 0 (neither), -1 (a little sad), or -2 (very sad). Subscripts that differ indicate that means significantly differ at p < .01.

Table 5Mean proportions (and standard deviations) of participants who used each justification by age group and country.

	Korea				United States			Age group				Country		
Justification category	5 years	7 years	9 years	Adults	5 years	7 years	9 years	Adults	5 years	7 years	9 years	Adults	Korea	United States
Choice in private														
Personal preference	.91 (.24)	.96 (.16)	.90 (.22)	1.00 (.00)	.45 _a (.35)	.25 _a (.32)	.61 _b (.41)	.85 _b (.23)	.71 _a (.37)	.63 _{a,b} (.43)	.77 _{a,b} (.34)	.94 _b (.17)	.93* (.19)	.52* (.40)
Gender norms	.09 (.24)	.03 (.15)	.02 (.07)	.00 (.00)	.14 (.25)	.24 (.32)	.13 (.25)	.06 (.14)	.11 (.24)	.13 (.26)	.07 (.18)	.02 (.09)	.04* (.15)	.15* (.26)
Practical issues	.00 (.00)	.00 (.00)	.00 (.00)	.00 (.00)	.15 (.19)	.19 (.24)	.06 (.11)	.03 (.08)	.06 _{a,b} (.14)	.09 _b (.19)	.02 _{a,b} (.07)	.01 _a (.05)	.00* (.00)	.11* (.18)
Choice in public														
Personal preference	.56 (.42)	.59 (.35)	.53 (.36)	.70 (.32)	.49 (.33)	.24 (31)	.43 (.32)	.71 (.26)	.53 _{a,b} (.38)	.43 _b (.37)	.49 _{a,b} (.34)	.70 _a (.29)	.59 (.37)	.46 (.35)
Gender norms	.15	.06	.06	.00 (.00)	.15	.16 (.30)	.08	.02 (.08)	.15 _a (.26)	.10 _{a,b} (.23)	.07 _{a,b} (.17)	.01 _b (.04)	.07	.10 (.23)
Teasing/ embarrassment	.08	.21 (.34)	.16 (.27)	.13 (.24)	.01	.17	.08	.06 (.14)	.05 _a (.17)	.19 _b (.30)	.13 _{a,b} (.22)	.10 _{a,b} (.21)	.14	.08 (.17)
Practical issues	.21 (.32)	.14 (.26)	.26 (.30)	.18 (.28)	.14 (.19)	.27	.24 (.28)	.15 (.23)	.18 (.27)	.20 (.28)	.25 (.29)	.17 (.27)	.20 (.29)	.20 (.25)
Rule legitimacy														
Unfairness	.77 (.35)	.97 (.08)	.92 (.24)	.99 (.04)	.56 (.35)	.67 (.30)	.58 (.40)	.82 (.21)	.68 _a (.36)	.83 _{a,b} (.26)	.77 _{a,b} (.36)	.92 _b (.16)	.91* (.23)	.66* (.33)
Personal preference	.00	.00	.00	.00 (.00)	.15 (.29)	.08	.14 (.23)	.07	.06 (.20)	.04 (.15)	.06 (.16)	.03 (.08)	.00* (.00)	.11* (.22)

Note. Means might not add to 1.00 because justifications under 10% in both countries and uncodable/missing justifications were not included. Subscripts that differ indicate that means differ by age group at p < .025. An asterisk (*) indicates that countries differ at p < .025.

choices related to gender norms in private. In the room alone, where the child had a choice between an item that is atypical but that the child preferred and a gender-typical item, nearly everyone at all ages in Korea said that the child should choose the atypical item that the child preferred. A Country \times Age Group effect, F(3, 184) = 5.44, p = .001, $\eta_p^2 = .08$, indicated that in the United States, but not in Korea, F(3, 93) = 10.16, p < .001, $\eta_p^2 = .25$, the oldest participants—the 9-year-olds and young adults—judged that the preferred item should be chosen more than the younger children, who were more likely to endorse choosing the gender-typical item. These means are presented in Table 4. There were no gender or protagonist gender effects.

Justifications

The justifications provided for the judgments were analyzed to ascertain how participants reasoned about their choices in private settings. As shown in Table 5, the most frequently used justification category was personal preference, with some use of gender norms (see Table 3 for definitions of the justification categories).

Overall, the personal preference justification was used less for a female protagonist (M=.72, SD=.40) than for a male protagonist (M=.78, SD=.39), F(1,159)=10.98, p=.001, $\eta_p^2=.07$. Table 5 shows that use of the personal preference justification differed by age and country. An unexpected main effect for country, F(1,159)=98.25, p<.001, $\eta_p^2=.38$, indicated that participants in Korea used this justification nearly exclusively, whereas participants in the United States used the personal choice justification less than Korean participants. A main effect for age, F(3,159)=11.88, p<.001, $\eta_p^2=.18$, indicated that young adults used this justification more than 5- and 7-year-olds, but these effects were qualified by an Age \times Country interaction, F(3,159)=9.37, p<.001, $\eta_p^2=.15$, indicating that age differences occurred only within the United States. Follow-up tests indicated that within the United States, 5-year-olds (M=.45, SD=.35) and 7-year-olds (M=.25, SD=.32) were less likely to use the personal preference justification than 9-year-olds (M=.61, SD=.41) and young adults (M=.85, SD=.23). See Table 5 for all comparisons. Thus, nearly all participants in Korea used the personal choice justification for this assessment, but younger children in the United States were less focused on personal choice.

Practical issues justifications varied by age and by protagonist gender in different countries. A main effect for age, F(3, 159) = 5.14, p = .002, $\eta_p^2 = .09$, indicated that young adults used this justification more than 7-year-olds. A main effect for country, F(1, 159) = 38.55, p < .001, $\eta_p^2 = .20$, indicated that participants in the United States used this justification more than participants in Korea. A main effect for protagonist gender, F(1, 159) = 22.45, p < .001, $\eta_p^2 = .12$, indicated that participants in the United States used this justification more than participants in Korea. These were qualified by a Protagonist Gender \times Country interaction, F(1, 159) = 22.45, p < .001, $\eta_p^2 = .12$, which was followed up, indicating that within the United States, F(1, 68) = 16.89, p < .001, $\eta_p^2 = .20$, the practical issues justification was also used more for a female protagonist (M = .18, SD = .28) than for a male protagonist (M = .05, SD = .15).

The gender norms justification was used infrequently. Age and country differences were expected in the use of gender-related justifications; however, only country differences were found. U.S. participants were more likely than Korean participants, F(3, 159) = 11.51, p = .001, $\eta_p^2 = .07$, to use the gender norms justification in private.

Judgments of non-normative preferences in public

Judgments of non-normative preferences in public were assessed to determine whether participants' judgments differed by age or country (see Table 4). Judgments of which item should be presented in public included a main effect for age, F(3, 182) = 7.51, p < .001, $\eta_p^2 = .11$, as expected, indicating that 5- and 7-year-olds were significantly less likely to endorse presenting a genderatypical item in public than young adults (p = .001 and p < .001, respectively). A main effect for country, F(3, 182) = 11.49, p = .001, $\eta_p^2 = .06$, showed that Korean participants again endorsed personal choice more than in the United States even when the choice was counter to traditional norms.

There was also an interaction between age group and the gender of the child protagonist, F(3, 182) = 2.96, .034, $\eta_p^2 = .05$, indicating that young adults, F(1, 45) = 10.80, p = .002, $\eta_p^2 = .19$, recom-

mended that a female protagonist present her preferred item in public (M = .95, SD = .18) significantly more than a male protagonist (M = .82, SD = .32), whereas participants at other ages did not distinguish between male and female protagonists. There were no participant gender effects.

Justifications

The justifications used for the judgments about choices in a public setting are also presented in Table 5. As can be seen in this table, four justification categories were used: personal preference, gender norms, practical issues, and teasing/embarrassment. Personal preference was the most frequently used justification for which item should be presented in front of the class.

References to personal preference were more likely to be used for a female protagonist (M = .57, SD = .42) than for a male protagonist (M = .49, SD = .40), F(1, 159) = 9.41, p = .003, η_p^2 = .06. As expected, the personal preference justification was also used less by children, specifically at 7 years of age, F(3, 159) = 5.22, p = .002, η_p^2 = .09, than by young adults, p < .001. Also as expected, a main effect for age group, F(3, 159) = 3.80, p = .011, η_p^2 = .07, indicated that 5-year-olds used the gender norms justification more than young adults, p = .007.

References to teasing/embarrassment were less likely for a female protagonist (M = .08, SD = .25) than for a male protagonist (M = .15, SD = .28), F(1, 159) = 12.98, p < .001, η_p^2 = .08. Age was a marginal effect, given Bonferroni corrections for four analyses with an alpha of .013, F(1, 159) = 9.41, p = .027, η_p^2 = .06, indicating that 5-year-olds were least likely to refer to teasing/embarrassment, which differed from 7-year-olds, who were most likely to mention it, p = .019.

Non-normative choices: Public/private differences

To examine whether there were differences in judgments in private and public, these judgments were included in a 2 (Setting: public or private) \times 2 (Participant Gender) \times 4 (Age Group: 5 years, 7 years, 9 years, or young adults) \times 2 (Country) \times 2 (Protagonist Gender) repeated-measures ANOVA with setting and protagonist gender as repeated measures. There was a main effect for setting, F(1, 182) = 35.91, p < .001, $\eta_p^2 = .17$, indicating that when the setting was private, participants endorsed personal preference more (M = .83, SD = .30) than when the setting was public (M = .71, SD = .36). There was also a Setting \times Protagonist Gender interaction, F(1, 182) = 3.98, p = .048, $\eta_p^2 = .02$, showing that when the protagonist was a boy, F(1, 183) = 33.87, p < .001, $\eta_p^2 = .16$, there was a larger difference in endorsement of the preferred activity in private (M = .83, SD = .33) compared with in public (M = .69, SD = .40). When the protagonist was a girl, F(1, 198) = 15.87, p < .001, $\eta_p^2 = .07$, there was a smaller drop in endorsement of the preferred activity from private (M = .83, SD = .33) to public (M = .74, SD = .74), There was also a Setting \times Country interaction, F(1, 182) = 3.92, p = .049, $\eta_p^2 = .02$, such that in Korea, F(1, 182) = 3.92, p = .049, $\eta_p^2 = .02$, such that in Korea, F(1, 182) = 3.92, p = .049, $q_p^2 = .02$, such that in Korea, P(1, 182) = 3.92, P(1, 182) = 3(1,91) = 31.24, p < .001, $\eta_p^2 = .26$, the average drop from private to public was larger than that in the United States, F(1, 91) = 8.19, p = .005, $\eta_p^2 = .08$, indicating that participants in Korea made more of a distinction between atypical choices in private and in public. See Fig. 1 for a visual display of these data. There were no participant gender or age effects.

Judgments of rule legitimacy

Judgments about a school rule that enforced gender norms were primarily negative, with most participants stating that it was a little not OK or definitely not OK, indicating that authorities are not seen as legitimately regulating rules about gender norm-related choices even when they enforce traditional gender norms (see Table 4). A main effect for age, F(3, 182) = 6.69, p < .001, $\eta_p^2 = .10$, indicated that 5-year-olds saw the rule as more acceptable than 9-year-olds or young adults. There was also a main effect for the gender of the protagonist, F(1, 182) = 7.36, p = .007, $\eta_p^2 = .04$, indicating that a rule was seen as more acceptable when it affected a boy protagonist (M = .73, SD = 1.03) than a girl protagonist (M = .58, SD = .92). A Country × Sex interaction, F(1, 182) = 9.81, p = .002, $\eta_p^2 = .05$, indicated that male participants in the United States approved of the rule more (M = .92, SD = 1.06) than male participants in Korea (M = .56, SD = .70), p = .002, although both groups generally disapproved of the rule. No differences were found between female participants in the two countries.

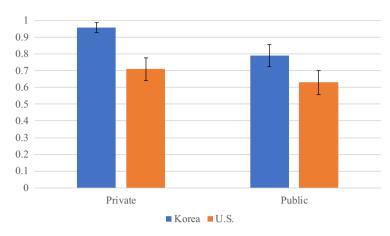


Fig. 1. Proportions of judgments endorsing personal preferences in private and public by country. Error bars represent 95% confidence intervals.

Justifications

Table 5 shows that mainly two justification categories were used as reasons for judgments about rule legitimacy: unfairness (in the moral domain) and personal preference. A main effect for age, F(3, 159) = 5.74, p = .001, $\eta_p^2 = .11$, indicated that 5-year-olds used moral justifications less frequently than young adults, p = .001. A main effect for country, F(1, 159) = 36.81, p < .001, $\eta_p^2 = .19$, indicated that the moral justification was also used more in Korea than in the United States, p = .002. The personal preference justification was not used by Korean participants and was not frequently used (11%) by U.S. participants. However, the country difference was significant, F(2, 159) = 24.76, p < .001, $\eta_p^2 = .14$. No differences were found in use of the practical issues justification.

Judgments of the child's response to a restrictive rule

Most participants responded that a child who was not able to present his or her preferred item would feel sad (see Table 4). There was a main effect for the gender of the protagonist, F(1, 182) = 8.28, p = .004, $\eta_p^2 = .04$, indicating that a boy protagonist was expected to feel less sad (M = -1.35, SD = .82) than a girl protagonist (M = -1.46, SD = .78). No other effects were found.

Discussion

Gender-related norms were found to be influenced by the social setting, indicating that they were not seen as universally applicable across different contexts as they would be if they were judged to be moral. Instead, gender norms were influenced to different degrees by concerns with personal choice in public and private settings. In public settings, concerns with adhering to conventional norms related to gender and concerns with consequences for defying norms, including teasing and feelings of embarrassment, were mentioned. Despite participants' concerns with conventions in public, the majority highlighted justifications related to personal preference in both public and private, and they also judged that an authority figure did not have jurisdiction over gender-norm-related choices. These results indicate that in both cultures and in all age groups, participants did not judge gender norms to be moral. Instead, they judged gender norm violation as a matter of personal choice, with different levels of concerns for conventional considerations depending on setting, culture, and age.

Cultural similarities and differences

Some research has found that Korea is more traditional in regard to gender norms (Conry-Murray et al., 2015), and indeed in this sample Korean participants judged our masculine activities to be more

strongly gendered, whereas feminine activities were judged to be strongly gendered in both cultures. We examined whether gender norms are judged to be so strong in Korea as to be treated as moral. Extensive research across many cultures (see Smetana, 2013; Turiel, 2015, for overviews; in Korea, see Kim. 1998; Kim & Turiel. 1996) indicates that children and adults judge that moral issues are distinct from conventions. Moral principles are judged to be universally applicable, whereas conventional issues can differ by contexts. In the current research, both Koreans and Americans distinguished between the two settings in their judgments, indicating that neither group judged gender norm violations to be universally wrong. Instead, the context of the violation was relevant, and justifications indicated that conventional and personal concerns were part of participants' judgments. Furthermore, both Koreans and Americans endorsed personal preferences in the vast majority of their judgments, indicating that adherence to gender norms is often judged to be a matter of personal choice. These findings are consistent with past research in Korea showing that violating gender norms is deemed to be acceptable under some circumstances (Conry-Murray et al., 2015) and that unfair treatment based on gender is judged to be wrong (Park et al., 2012). In fact, many children judged that violating the right to choose was unfair. One child suggested, "Because, um, people like what they like, and it is not fair if the teacher is like no," suggesting that the personal concern was closely tied to the moral

However, the current research also shows that the prerogative to make a choice based on personal preferences was affected by the setting as public or private, making it distinct from moral issues that are judged to be generalizable (Turiel, 1983). Similar to the findings of research in the United States (Conry-Murray, 2013a, 2017), children and young adults in Korea feel more pressured to adhere to gender norms in public settings than in private settings.

Participants in both countries indicated that an authority figure did not have jurisdiction over gender-related choices and that a rule enforcing gender norms would be unacceptable, further indicating that gender norms are not seen as moral or even under the auspices of an authority, as are some conventions (Smetana, 2013; Turiel, 2015). Overall, these findings are consistent with the notion that both Koreans and Americans view gender norms primarily as a matter of personal choice, although conventional concerns may lead to increased conformity to norms in public.

Nevertheless, it is important to note that there are negative consequences to defying gender norms. Justifications showed that children in both cultures mentioned a concern with teasing or embarrassment in public—which increased between 5 and 7 years of age, with 9-year-olds also sensitive to this possibility. It appears, therefore, that although children judge that adherence to gender norms should be a personal choice, they also recognize that there can be consequences to defying gender norms. Given that teasing and embarrassment are often done by peers, who are also often responsible for exclusion (Mulvey and Killen, 2015), it may be that peers enforce gender norms more than adult authorities; however, we did not assess this possibility in the current study.

The current study provided participants with a clear statement of the atypical preferences of the protagonists. Some research shows that children are not always sensitive to the possibility that others may have preferences that are not consistent with gender norms (Conry-Murray & Turiel, 2012). If children assume that preferences tend to be consistent with gender norms, thinking about gender norms as matters of personal choice would not necessarily increase flexibility. In fact, there is evidence that children aged 5–8 years who view gender as fixed or inflexible are likely to have preferences themselves that are consistent with gender norms (Meyer & Gelman, 2016). Other research shows that children at these ages also assume that others' preferences are consistent with gender norms (Conry-Murray, 2019). Our findings suggest that children think about gender norms as matters of personal choice given a stated preference, but our findings do not address whether what has been referred to as children's descriptive stereotypes prevent children from predicting that others can have atypical preferences.

Despite the overall similar patterns in the two cultures, there were some differences. It was found that Korean participants consistently endorsed personal choice in private more than U.S participants, who were more likely to mention gender norms even in private, and Korean participants' justifications were nearly exclusively references to personal choice. Thus, our findings indicate that individual personal preferences are important to Koreans. These findings are inconsistent with the propositions that in non-Western cultures the self is not differentiated from others and that non-Westerners view

individual choices as inconsequential (e.g., Markus & Kitayama, 1991). Our interpretation of the differences in judgments about private and public contexts among Koreans is that the strong gender norms in Korea (Conry-Murray et al., 2015) would result in pressure to conform to norms in public that, in turn, would result in an emphasis on the expression of atypical preferences in private spaces. By contrast, the lesser strength of gender norms in the United States yields a smaller distinction between the acceptability of violating gender norms in public and private settings. Of course, these interpretations need to be explored in further research.

Despite the larger distinction between public and private settings, both Koreans and Americans judged that not being able to express themselves would lead to negative feelings. This finding is an indication that restrictions on the expression of personal preferences, even preferences that are contrary to the dominant norms in the culture, have implications for individuals across cultures. Some suggest that Americans have more self-knowledge than Asians (Asai & Barnlund, 1998) and that individuals from supposedly interdependent cultures are less likely to feel "inauthentic" than those from supposedly independent cultures (Lenton, Slabu, Bruder, & Sedikides, 2014). Our data are not consistent with the interpretation that people in non-Western cultures have no need to express views contrary to the dominant cultural orientation. Instead, consistent with the idea that the individual self also has primacy in non-Western cultures (Zhu, Wu, Yang, & Gu, 2016), our findings indicate that expressions of preferences are judged to be important for individuals in both cultures.

The development of flexibility about gender norms

Consistent with past research (e.g., Taylor et al., 2009), there was some evidence that the youngest participants, at 5 and 7 years, were less flexible about gender norms in the sense that they endorsed gender norms more than the older groups. In public and in private, 5- and 7-year-olds were less likely to endorse the preferred activity than most other age groups, and in the United States they were less likely to use the personal preference justification than older participants. In addition, judgments of the authority's rule enforcing norms were also judged more positively by 5-year-olds than other groups. Together these findings indicate that children at 5 and 7 years of age were less flexible about gender norms than older children and young adults, especially in the United States. However, it is important to note that majorities of children, even at 5 and 7 years of age, endorsed personal choice and rejected authority mandates to adhere to gender norms.

Past research (Conry-Murray et al., 2015; Rhodes & Gelman, 2009) found that children in traditional cultures are inflexible about gender for a longer period into middle childhood or even into adolescence. However, the current research found few interactions between age and culture. The one exception was in the judgments of a choice in private, where younger children in the United States were less flexible than children in Korea. As discussed above, the distinctions between public and private spheres appears to be stronger in Korea than in the United States, and this was also true for the younger participants. It may be that greater public expectations regarding gender norms lead individuals to accept, to a greater extent, the expression of personal choices in private settings.

Gender of the protagonist

No differences were found in reasoning about one's own gender compared with reasoning about another gender. Female participants did not judge girls differently than boys, and male participants did not judge boys differently than girls, indicating that the "black sheep effect," where in-group members are judged more severely for violating group norms compared with out-group members (Pinto et al., 2010), was not evident in our data. However, we did find evidence that gender norms may be stronger for boys, similar to other research showing that boys are subject to stronger penalties for defying gender norms (Lee & Troop-Gordon, 2011; Wilbourn & Kee, 2010). There was a larger drop in endorsements of preferences from private to public for boy protagonists than for girl protagonists. This difference may be explained by participants who also made judgments that a boy would feel less sad if he was unable to present his preferred but atypical activity in front of the class. Although we made clear that boys preferred the feminine activity, some children may have believed that the boys were less attached to their activities than the girls. However, given the gender differences in displays

of emotion, including sadness (Cattaneo, Veroni, Boria, Tassinari, & Turella, 2018), it is difficult to interpret this finding.

Participants in both cultures and all ages mentioned practical issues that could affect choices in private and especially in public when an activity needed to be presented in front of the class. These justifications were unexpected, and they included concerns such as that a child who had already put work into an activity might not have time to produce another product. The use of this justification may indicate that some participants endorsed a preferred activity because of concerns unrelated to either gender norms or preferences. However, the practical issues justification was used equally in the United States and Korea.

Future research should continue to examine whether cultures with strong gender norms also have stronger distinctions between private and public spheres. It may be that some cultures that have strong conventions also have more elaborated rules about where those norms apply and where they do not apply or about where and how authorities can exercise their jurisdiction. For example, in some cultures parents may have more or less authority in common spaces than in bedrooms at home. There could also be developmental differences in when and how children learn about norms. Future research could measure gender inflexibility directly to see whether children who endorse gender inflexibility more respond differently to the right to choose related to gender.

We chose to examine norms related to crafts and books, which are relatively inconsequential choices. Future research should examine how children judge issues with stronger norms such as those related to dress (Blakemore, 2003; but see Conry-Murray & Turiel, 2012) and, more permanently, gender identity. Some research (Gülgöz, Gomez, DeMeules, & Olson, 2018) indicates that children consider gender identity when choosing friends, with children showing a preference for cisgender over transgender friends, depending on their beliefs about gender and sex. Future research should examine stricter norms and also how beliefs about gender may also affect judgments of gender norm violations.

The current study is limited by the fact that we examined reasoning and not behavior. Future research should examine how reasoning and behavior related to gender are linked. An additional limitation includes that the meaning of our prompts could differ in different cultures despite our attempts to develop equivalent activities and to measure any differences. Furthermore, only one person translated and back-translated the interviews, and this is also a limitation. Gender may also affect reasoning more than is shown here, but we might not have had the power to detect these effects. Although past work (Conry-Murray et al., 2015) has also not found gender differences, larger sample sizes may be needed to detect gender differences if they are small. Finally, we were unable to examine how reasoning may differ for different judgments because of a lack of power and balance in the judgments in our sample, but this relationship should also be explored in future research. In general, future research should aim for larger and more representative samples.

Overall, Koreans and Americans exhibited similarities in social cognition, reasoning about violations of gender norms primarily as matters of personal choice, with some conventional considerations in public settings. In both cultures, participants rejected the idea that an authority could have jurisdiction over gender-norm-related choices. Furthermore, both groups suggested that being unable to express those preferences in public has a negative impact on individuals. These findings suggest that across two different cultural settings, choices related to gender norms were seen as decisions that should be left to the individual to decide.

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References

Asai, A., & Barnlund, D. C. (1998). Boundaries of the unconscious, private, and public self in Japanese and Americans: A cross-cultural comparison. *International Journal of Intercultural Relations*, 22, 431–452.

Blakemore, J. E. (2003). Children's beliefs about violating gender norms: Boys shouldn't look like girls, and girls shouldn't act like boys. Sex Roles, 48, 411–419.

Cattaneo, L., Veroni, V., Boria, S., Tassinari, G., & Turella, L. (2018). Sex differences in affective facial reactions are present in childhood. Frontiers in Integrative Neuroscience, 12. https://doi.org/10.3389/fnint.2018.00019.

- Cho, G. H. (2007). The Confucian origin of the East Asian collectivism. *Korean Journal of Social and Personality Psychology*, 21, 21–53.
- Conry-Murray, C. (2013a). Children's reasoning about gender-atypical preferences in different settings. *Journal of Experimental Child Psychology*, 115, 210–217.
- Conry-Murray, C. (2013b). Young children's understanding of beliefs about moral and conventional rule violations. *Merrill-Palmer Quarterly*, 59, 489–510.
- Conry-Murray, C. (2017). Children's distributive justice: The role of gender norms in different settings. *European Journal of Developmental Psychology*, 14, 62–74.
- Conry-Murray, C. (2019). Children's reasoning about unequal gender-based distributions. Social Development, 28, 465-481.
- Conry-Murray, C., Kim, J. M., & Turiel, E. (2015). Judgments of gender norm violations in children from the United States and Korea. *Cognitive Development*, 35, 122–136.
- Conry-Murray, C., & Turiel, E. (2012). Jimmy's baby doll and Jenny's truck: Young children's reasoning about gender norms. *Child Development*, 83, 146–158.
- Gülgöz, S., Gomez, E. M., DeMeules, M. R., & Olson, K. R. (2018). Children's evaluation and categorization of transgender children. *Journal of Cognition and Development*, 19, 325–344.
- Hoffman, A. J., Dumas, F., Loose, F., Smeding, A., Kurtz-Costes, B., & Régner, I. (2019). Development of gender typicality and felt pressure in European French and North African French adolescents. *Child Development*, 90, e306–e321.
- Killen, M., Elenbaas, L., & Rizzo, M. T. (2018). Young children's ability to recognize and challenge unfair treatment of others in group contexts. *Human Development*, 61, 281–296.
- Kim, J. M. (1998). Korean children's concepts of adult and peer authority and moral reasoning. Developmental Psychology, 34, 947–955.
- Kim, J. M., & Turiel, E. (1996). Korean and American children's concepts of adult and peer authority. *Social Development*, 5, 310–329.
- Laupa, M., & Turiel, E. (1993). Children's concepts of authority and social contexts. Journal of Educational Psychology, 85, 191–197.
- Lee, E. E., & Troop-Gordon, W. (2011). Peer socialization of masculinity and femininity: Differential effects of overt and relational forms of peer victimization. *British Journal of Developmental Psychology*, 29, 197–213.
- Lenton, A. P., Slabu, L., Bruder, M., & Sedikides, C. (2014). Identifying differences in the experience of (in)authenticity: A latent class analysis approach. Frontiers In Psychology, 5. https://doi.org/10.3389/fpsyg.2014.00770.
- Levy, G. D., Taylor, M. G., & Gelman, S. A. (1995). Traditional and evaluative aspects of flexibility in gender roles, social conventions, moral rules, and physical laws. *Child Development*, 66, 515–531.
- Lobel, T., Gruber, R., Govrin, N., & Mashraki-Pedhatzur, S. (2001). Children's gender-related inferences and judgments: A cross-cultural study. *Developmental Psychology*, 37, 839–846.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Meyer, M., & Gelman, S. A. (2016). Gender essentialism in children and parents: Implications for the development of gender stereotyping and gender-typed preferences. Sex Roles, 75, 409–421.
- Mulvey, K. L., & Killen, M. (2015). Challenging gender stereotypes: Resistance and exclusion. *Child Development*, 86(3), 681–694. Mulvey, K. L., Hitti, A., Rutland, A., Abrams, D., & Killen, M. (2014). Context differences in children's ingroup preferences. *Developmental Psychology*, 50, 1507–1519.
- Nucci, L. (1981). Conceptions of personal issues: A domain distinct from moral or societal concepts. *Child Development*, 52,
- Park, Y., Lee-Kim, J., Killen, M., Park, K., & Kim, J. (2012). Korean children's evaluation of parental restrictions regarding genderstereotypic peer activities. *Social Development*, 21, 577–591.
- Pinto, I. R., Marques, J. M., Levine, J. M., & Abrams, D. (2010). Membership status and subjective group dynamics: Who triggers the black sheep effect? *Journal of Personality and Social Psychology*, 99, 107–119.
- Rhodes, M., & Gelman, S. (2009). A developmental examination of the conceptual structure of animal, artifact, and human social categories across two cultural contexts. *Cognitive Psychology*, 59, 244–274.
- Rutland, A., & Killen, M. (2015). A developmental science approach to reducing prejudice and social exclusion: Intergroup processes, social-cognitive development, and moral reasoning. Social Issues and Policy Review, 9, 121–154.
- Smetana, J. (2013). Moral development: The social domain theory view. In P. Zelazo (Ed.), Oxford handbook of developmental psychology (pp. 832–863). New York: Oxford University Press.
- Stoddart, T., & Turiel, E. (1985). Children's conceptions of cross-gender activities. Child Development, 56, 1241–1252.
- Taylor, M. (1996). The development of children's beliefs about social and biological aspects of gender differences. *Child Development*, 67, 1555–1571.
- Taylor, M. G., Rhodes, M., & Gelman, S. A. (2009). Boys will be boys, cows will be cows: Children's essentialist reasoning about gender and animal development. *Child Development*, *80*, 461–481.
- Turiel, E. (1983). The development of social knowledge: Morality and convention. New York: Cambridge University Press.
- Turiel, E. (2002). The culture of morality: Social development, context, and conflict. New York: Cambridge University Press.
- Turiel, E. (2015). Morality and prosocial judgments and behavior. In D. A. Schroeder & W. G. Graziano (Eds.), *The Oxford handbook of prosocial behavior* (pp. 137–152). New York: Oxford University Press.
- Turiel, E., & Wainryb, C. (1994). Social reasoning and the varieties of social experiences in cultural contexts. In H. W. Reese (Ed.). *Advances in child development and behavior* (Vol. 25, pp. 289–326). San Diego: Academic Press.
- United Nations (2017). Gender Development Index. New York: Author.
- Wilbourn, M. P., & Kee, D. W. (2010). Henry the nurse is a doctor too: Examining children's gender stereotypes for male and female occupational roles. Sex Roles, 62, 670–683.
- Yunger, J. L., Carver, P. R., & Perry, D. G. (2004). Does gender identity influence children's psychological well-being? Developmental Psychology, 40, 572–582.
- Zhu, X., Wu, H., Yang, S., & Gu, R. (2016). Motivational hierarchy in the Chinese brain: Primacy of the individual self, relational self, or collective self?. Frontiers in Psychology, 7. https://doi.org/10.3389/fpsyg.2016.00877.