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“Boys Don’t Cry”—or Do They? Adult Attitudes Toward and Beliefs About Transgender Youth

Holger B. Elischberger¹ · Jessica J. Glazier¹ · Eric D. Hill¹ · Lynn Verduzco-Baker²

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Abstract The present survey study examined the attitudes of U.S. adults toward transgender children and adolescents, as well as their behavioral intentions, in two hypothetical scenarios involving gender variant youth. Participants recruited online ($N=281$) reported generally favorable attitudes toward transgender minors, but expressed some hesitation to allow a transgender child to use the restroom aligned with their gender as opposed to their birth sex or to share a room with same gender peers on a school trip, possibly due to conflating gender identity with sexual orientation in these situations. Attitudes were less positive in respondents who reported a religious affiliation, conservative social political views, and stronger conformity to certain traditional gender norms—particularly in men. Even after controlling for these factors, stronger belief in environmental versus biological causes of transgender identity was linked to more negative attitudes. Participants’ behavioral intentions were driven partly by their attitudes and causal attributions, but also by their age and, at least for women, personal connections to the transgender

community. We discuss implications for the discourse surrounding transgender youth and the need for educating the public on the development of gender identity as well as the difference between gender identity and sexual orientation.

Keywords Transgender · Gender variant · Gender atypical · Child · Adolescent · Attitude · Prejudice

Biologist Milton Diamond observed that nature loves diversity, but society hates it (mentioned in Abraham and Thomas 2005). Indeed, contemporary U.S. society struggles with accepting diversity in various human characteristics, but deviations from the norm in terms of sexuality and gender tend to incite particularly strong and persistent negative reactions. Although there has been an undeniable shift in public opinion as well as legislation in favor of gay rights (Andersen and Fetner 2008; Brewer 2014; Gallup 2015), the heated wrangling over gay marriage and anti-discrimination protections shows that there is still considerable opposition in some quarters. Progress on transgender issues lags farther behind, perhaps owing to the smaller number of transgendered people, which has translated into less visibility and advocacy, at least up until very recently. Although it is difficult to establish how many people are transgender—estimates vary widely from .01 % of the general population (Harris 2015) up to .5 % (Conron et al. 2012), it is clear that they are a minority compared to the 2.6 % U.S. Americans who identify as gay, lesbian, or bisexual (Ward et al. 2014).

Nevertheless, the national spotlight has in the last few years increasingly turned to transgender issues. Even before the highly publicized coming out of transgender woman Caitlyn Jenner in early 2015 (Steel 2015), the media began to pay attention particularly to transgender children and adolescents (Drescher and Byne 2012). Many of the news reports

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emphasized controversy; one particularly contentious issue is whether transgender youth should be allowed to use the restroom consistent with their subjective gender as opposed to their assigned birth sex (Payne and Fantz 2013; Portnoy 2015; Tan 2015). In at least one case, parents reportedly threatened to pull their own child out of the school if a transgender classmate were allowed to use the restroom that is appropriate to their gender (Beeby 2015). This reaction is perhaps not entirely surprising considering that a national poll conducted by CBS (2014) found that, overall, 59 % of Americans thought transgender children should use the restroom and locker room of their birth sex, not their gender identity.

Although the relationship between attitudes and behavior is complex, specific attitudes do tend to predict specific actions quite well (Ajzen and Fishbein 2005), making it likely that those educators, school administrators, parents of peers, policymakers, and other adults who play a role in a transgendered child's life may act in ways that can be viewed as discriminatory if they hold negative attitudes toward the child's gender identity and/or expression. A correlation between prejudice and discrimination has certainly been established in the case of sexual minorities (Herek 2000). Despite the potential importance of people's attitudes toward transgendered youth, however, there is not much empirical evidence on the subject. The primary goal of the present study was therefore to assess the general public's attitudes toward children whose behavior and/or subjective identity is atypical for their assigned birth sex. We also examined participants' behavioral intentions in hypothetical scenarios that mirror those encountered in a school context, such as decisions about restroom use, from the perspective of a teacher or school administrator of a transgendered child or a parent of that child's classmate. We included a range of demographic and individual difference measures as potential predictors of people's attitudes and intentions; we grounded our selection of measures in the literature on prejudice against adult gender and sexual minorities.

Attitudes Toward Transgender Youth

In one of the few and early studies on the topic, Feinman (1974) asked undergraduate sociology students to indicate their level of (dis)approval of a series of child cross-gender-role behaviors, such as a boy wearing girl's clothes. He found that boys' gender role violations were viewed considerably more negatively than girls' and that male participants expressed more negative attitudes than did women. Rates of disapproval were moderate with an overall average of 37.89 on a scale from 10 to 70 (highest disapproval). A follow-up study suggested that gender role-violating boys are judged more harshly because they are forsaking a role with higher

social prestige for a lesser one (Feinman 1984). Martin (1990) similarly found that undergraduate psychology students viewed cross-gender behavior, toys, and personality characteristics in boys less acceptable than in girls (approximately 2.6 versus 4.9 on a scale from 1 to 7 with lower numbers indicating lower acceptability) and that male participants were more disapproving. Her findings also offered a contrasting explanation for the more negative attitudes toward gender-atypical boys: participants predicted that neither the gender-atypical boys nor girls would completely outgrow their gender atypicality in adulthood, but believed the boys to be at much higher "risk" to become homosexual adults. This pattern is consistent with McCreary's (1994) finding that girls and women who deviate from gender roles were less likely to be deemed homosexual than their male counterparts. It is interesting to note that the presumed link between childhood gender nonconformity and adult homosexuality is, in fact, supported by research and does appear to be stronger for boys (see Bailey and Zucker's 1995, meta-analysis), although not all studies find pronounced gender differences (Rieger et al. 2008).

Most of the recent empirical literature on attitudes toward and beliefs about transgender children has focused on the children's parents, who are central socializing agents especially in early childhood and who directly influence their child's gender expression (Lytton and Romney 1991; Maccoby 1998). Kane (2006) interviewed parents of preschoolers about their perceptions of and reactions to their children's gender typical and atypical attributes, preferences, and activities. Like the student participants in earlier studies, parents generally reacted more negatively to gender nonconformity in boys than in girls, with heterosexual fathers expressing the strongest desire to curb or redirect their son's atypical gender expression. Particularly an interest in "icons of femininity," such as Barbie dolls, wearing pink or frilly clothing, skirts, dresses, or nail polish was viewed as problematic, as were excessive emotionality, passivity, and crying; the father of a 5-year-old commented: "I want to see him strong, proud, not crying like a sissy" (Kane 2006, p. 161). Parents were motivated to discourage such unwanted behaviors because they held themselves accountable for achieving normative masculine gender development in their son (see also Meadow 2011) and because they believed that society at large (including extended family, teachers, parents of peers) would hold them accountable as well. They also worried about how a gender-atypical son would be treated by his peers and were especially concerned that their son might be, or perceived to be, gay.

Interviews of parents who eventually became supportive of their child's gender atypicality suggest that concerns about the child's sexual orientation and fears about their safety and happiness are common in this group of mothers and fathers (Hill and Menvielle 2009). Following the realization that the gender nonconforming behavior was not merely a passing phase,

many tried to “police” their child’s gender expression. In addition to being ineffective, however, these attempts to encourage gender typical and discourage atypical behaviors often occurred at the expense of the child’s emotional well-being and put a strain on the parent–child relationship. For many parents, acceptance was the result of considerable effort involving education, contemplation, and/or empathy with their child’s experience.

Transgender Youths’ Victimization

The accounts of transgender youth themselves offer an important complementary viewpoint. One such study using a convenience sample of adolescents and young adults between the ages of 15 and 21 suggests that negative parental attitudes toward their gender expression and identity are quite common (Grossman et al. 2005). Fully 54 % of mothers and 63 % of fathers who learned about or discovered their child’s gender identity initially reacted negatively or very negatively, although parental attitudes tended to improve in subsequent years. Close to 80 % of male-to-female transgender youth recalled being called “sissy” by their parents in their early teens, and 75 % reported being told by their parents to stop acting like a sissy. Similarly, almost all female-to-male transgender youth recalled being called a tomboy, and about two thirds were told to stop acting like one. The more gender conforming these children were, the more verbal and physical abuse they recalled receiving from their parents, which is consistent with the accounts reported in other studies (Rieger et al. 2008).

Indirect evidence on attitudes toward transgender children and adolescents also comes from a large-scale survey study on the nation’s school climate for lesbian, gay, bisexual, transgender, and queer (LGBTQ) youth (Kosciw et al. 2012). More than 8500 self-identified LGBTQ K–12 students between the ages of 13 and 20 from all of the 50 U.S. states answered questions about hearing comments related to someone not acting “masculine” or “feminine” enough. A summary of the key findings paints a bleak picture: 61 % of students heard negative remarks about gender expression from their peers frequently or often, 44 % felt unsafe at school, and 12 % were physically assaulted in the past year because of their gender expression. Victimization not only occurred at the hands of peers, but was also tolerated and even perpetrated by school staff: 57 % of students reported hearing negative remarks about gender expression directly from teachers or other staff, and only 11 % reported that school personnel intervened most of the time or always when negative remarks about gender expression were made in their presence (compared to 34 % when peers used sexist language; 55 % for racist language use). It is therefore not surprising that 60 % of students who were verbally or physically attacked did not report the incident

to school staff, and 37 % of those who did make a report said that staff did nothing in response. The negative short- and long-term impact on the psychosocial well-being, physical health, and academic achievement of the targets of such abuse are well documented (D’Augelli et al. 2002, 2006; Russell et al. 2011).

Unlike parents whose negative attitudes toward their son’s or daughter’s gender nonconformity may in part stem from worries about what it suggests about their success as parents (Kane 2006; Meadow 2011), presumably neither a transgender child’s peers nor school staff feel accountable for their “appropriate” gender expression, which raises the question of what motivates their discrimination. The fact that discrimination is so prevalent suggests that people’s negative attitudes are directed at the atypical gender expression in general, rather than being fueled by just one specific issue (e.g., the unfounded concern that gender-congruent restroom use is really about sexual motives; Steinmetz 2015). Unfortunately, however, the small body of research on attitudes toward transgender youth is virtually silent on the question of causes or even correlates of negative sentiments.

Predictors of Transphobia

Several studies have examined the predictors of negative attitudes toward transgendered adults, often referred to as *transphobia* (i.e., revulsion to masculine women, feminine men, cross-dressers, and others who violate gender norms; Hill and Willoughby 2005). In line with research on gender norm-violating children, these studies also show that men are more transphobic than are women, on average (Hill and Willoughby 2005; Nagoshi et al. 2008; Norton and Herek 2013). This difference may reflect a male view of masculinity that requires an avoidance of stereotypically feminine characteristics and also includes a strong emphasis on heterosexual orientation (Herek 1986). In general, both men and women tend to be more prejudiced toward transgender individuals if they hold traditional views of gender, such as believing in a strict male/female binary, endorsing conservative political ideology with an emphasis on obedience and respect for authority, and holding conservative religious beliefs (Nagoshi et al. 2008; Norton and Herek 2013). Lacking prior personal contact with gender or sexual minority individuals is also associated with higher levels of transphobia (Norton and Herek 2013). In addition, the more negative attitudes toward transgender individuals a person expresses, the more homophobic they also tend to be (Hill and Willoughby 2005; Nagoshi et al. 2008; Norton and Herek 2013), which is not surprising given that many of the factors that predict transphobia also predict homophobia (Herek 2000; Herek and Glunt 1993).

Hill and Willoughby’s (2005) work on transphobia is of particular interest in this context because one of their studies

(Study 2) involved assessing attitudes toward gender-atypical children. These researchers asked a small sample of parents to read the description of a gender nonconforming boy or girl and pretend the child was their 6-year-old son or daughter. The results showed that more than half of the variance in the negative attitudes these parents expressed about their fictitious child was accounted for by a combination of their transphobic, homophobic, and conservative gender-related views, suggesting that the factors associated with prejudice against transgender children may at least in part be the same as those associated with prejudice against transgender adults.

Finally, one additional factor that deserves consideration is the question of whether a person's minority status is a matter of choice. We are not aware of any studies to date addressing this issue with respect to transphobia, but the literature on homophobia has shown it to be an important aspect (Herek and Capitano 1995). Using Pew Research Center poll data from approximately 1500 U.S. adults, Haider-Markel and Joslyn (2008) documented that when respondents were asked to choose among three options (homosexuality is innate, is the result of a person's upbringing, or is a personal choice), almost 47 % believed it to be a choice. (Similarly, according to a 2013 Pew Research Center study, 42 % of Americans believe that being gay or lesbian is a matter of choice; Masci 2015). Echoing the research on trans- and homophobia, being male, politically and/or religiously conservative, and being less educated were all associated with greater endorsement of non-biological causes. Crucially, those who favored upbringing or choice as explanations for homosexuality showed less positive affect towards gays and lesbians, and they were less supportive of gay civil rights. In fact, respondents' causal attribution of homosexuality trumped other key predictors of attitudes toward gays and lesbians, such as personal contact with someone from that minority group or political and religious ideology. A recent interview study of undergraduate psychology students with negative attitudes and/or behavioral tendencies toward gay men suggests that people may use their belief that sexual orientation is a choice (a choice that offends their sense of morality and religious beliefs) to rationalize their homophobia (Jewell and Morrison 2012). Given the theoretical and empirical connections between trans- and homophobia, it appears likely that negative attitudes toward transgender individuals will similarly vary with people's beliefs about the causes of transgender behavior and/or identity so we also tested this possibility in the current study.

The Present Study

The primary goal of our survey-based study was to examine the extent to which the U.S. public holds negative attitudes toward gender-atypical youth. Each participant read a short description of a gender norm-violating child or adolescent

followed by a series of questions about their attitudes. We varied the child's birth sex and age between participants to assess the potential impact of those two characteristics. In addition to participants' attitudes we also assessed their behavioral intentions in two hypothetical situations designed to mirror those encountered in a school context, such as decisions about whether transgender youth should be allowed to use the restroom appropriate to their gender identity as opposed to their assigned birth sex. Finally, we examined the extent to which we could predict both attitudes and behavioral intentions through factors associated with adult-directed transphobia, such as adherence to traditional gender roles, religious beliefs, political views, personal connections to gender or sexual minority individuals, and beliefs about the causality of gender-atypical behavior.

Method

Participants

Participants were recruited using Amazon MTurk and surveys were administered through SurveyMonkey in June of 2014. A total of 281 individuals (128 male, 152 female, 1 missing information) between the ages of 18 and 82 ($M=32.96$, $SD=11.70$, $mdn=29$) completed the survey and were compensated \$1.50. The majority of the sample ($n=212$ or 75 %) identified as non-Hispanic White, followed by Asian or Asian American ($n=22$ or 8 %), African American ($n=21$ or 7 %), and Hispanic or Latino/a ($n=12$ or 4 %); the remaining participants were evenly distributed across a range of other ethnic groups or combination of groups (e.g., Hispanic & non-Hispanic White). Participants resided in 41 different U.S. states and Puerto Rico. We asked whether or not the participants themselves or a close friend or relative identified as lesbian, gay, or bisexual; 167 (59 %) responded "yes" (1 did not respond). In addition, 40 (14 %) participants responded affirmatively to the same question about transgender (1 did not respond). Given our focus on transgender youth, we also asked participants whether they were parents of at least one child under the age of 18 and, if so, whether any of their children were transgender or gender atypical; 96 (34 %) participants were parents of an underage child (1 did not respond), two of them of a gender-atypical child. For 109 (39 %) participants, a high school diploma or GED was the highest degree; 30 (11 %) held an Associate's; 106 (38 %) a Bachelor's; and 33 (12 %) a Master's or professional degree (3 did not respond). Finally, we measured 2013 household income in \$10 k increments (starting with \$0–9999 and ending with \$100 k or more); each of the seven income brackets from \$0 to \$69 k included between 20 and 40 participants accounting for a combined total of 215 (77 %) participants, 27 participants (10 %) reported between \$70 k and \$89 k, and 38

(14 %) an income of \$90 k or more (1 participant did not report their income).

Materials

Vignettes

Each participant was asked to read a description of a child or adolescent approximately 130 words long that clearly stated their birth sex and name (Emma and Ethan, respectively) as well as the fact that they identified with the other gender and preferred to be called by a gender-appropriate name (Ethan and Emma, respectively). Each vignette provided a general description of the child, listing things such as their clothing preferences (e.g., skirts and dresses vs. t-shirts and cargo pants), how they wear their hair (e.g., long vs. short), and the activities they like to do (e.g., jump rope vs. capture the flag). These descriptions differed between participants along two dimensions: the birth sex and age (8 vs. 16 years) of the child. SurveyMonkey randomly assigned participants to one of the four resulting vignettes. For instance, the vignette describing an 8-year old male-to-female transgender child read as follows:

Emma is an 8 year-old girl in 2nd grade. She was born a male called Ethan, but feels that she is a girl and prefers to be called Emma. When Emma goes to school, she often likes to wear skirts and dresses in colors like pink and purple. She has long hair that goes past her shoulders and has her nails painted a new color every week. Most of Emma's friends at school are girls. Her favorite games to play with her friends at school are jump rope and hopscotch. When she plays with her toys at home, her favorite things to do are to play mom with her baby dolls and to cook in her play kitchen. In short, Emma is a stereotypical girl through and through.

The vignette describing a 16-year-old female-to-male transgender adolescent read:

Ethan is a 16 year-old boy in 10th grade. He was born a female called Emma, but feels that he is a boy and prefers to be called Ethan. When Ethan goes to school, he often likes to wear t-shirts and cargo pants in colors like blue and green. He has short hair, and when he is outside he gets dirt on himself and on his clothes frequently. Most of Ethan's friends at school are boys. His favorite things to do with his friends are to skateboard and go hunting. When he spends time at home, his favorite things to do are playing video games and listening to music. In short, Ethan is a stereotypical boy through and through.

We varied assigned birth sex to account for the fact that gender-atypical boys are commonly judged more negatively

than are girls (Feinman 1974, 1984; Kane 2006; Martin 1990). The manipulation of age was based on the assumption that the question of sexual orientation may be less salient in 8-year-old children, who have not yet reached sexual maturity, relative to 16-year-old adolescents who have. In line with this hypothesis, some of the fathers interviewed by Kane (2006) reported that they would be more worried about feminine behavior in an older than in a younger child, although it is also clear that parents of even very young gender nonconforming boys already worry about their future sexual orientation. McCreary (1994) found that 30-year-olds were judged more likely to be homosexual than 8-year-olds for the same cross-gender behavior.

Attitudes

Following presentation of the vignette, we asked participants to use a 10-point Likert-type scale to indicate how strongly they agreed from 1 (*completely disagree*) to 10 (*completely agree*) with a series of attitude statements prefaced by the stem, "Personally, I view this gender atypical behavior as a problem because ..." Six of these statements were provided that differed in terms of the reason cited for the disapproval: "...it is against my morals," "...it contradicts my religious views," "...it will hurt the child's [teenager's] current relationships with their peers," "...it will be a bad influence on other children [teenagers]," "...it may have an effect on the child's [teenager's] sexual orientation," "...it goes against nature." A seventh option, "...the child's behavior is not wrong for any one specific reason, it is just inappropriate," allowed participants to express their attitude without endorsing a specific reason. We also gave participants the option to write in their own reason for any potential disapproval; we did not analyze these open-ended responses further because 52 of the 64 comments merely reiterated one of our statements and 8 were not specific enough to be coded (e.g., "It can cause some mixed emotions"); the remaining 4 participants stated that it creates confusion for others. Framing the attitude items in terms of disapproval was driven in part by the fact that transphobia appears to be a rather prevalent phenomenon, and it also allowed us ask respondents about the reasons for any negative attitudes they might harbor. It is important to note, however, that participants could nevertheless express neutral or positive attitudes by indicating low levels of agreement with these seven items and by more strongly endorsing the eighth attitude statement, "I do not find the behavior to be a problem" (ultimately reverse coded).

Behavioral Intentions

We included two sets of questions to assess how participants might act in two hypothetical situations involving the gender nonconforming child. The first scenario explained that the

child no longer wanted to use the restroom corresponding to their birth sex, but instead would like to begin using the one aligned with their gender. Participants were asked to imagine themselves in various roles (i.e., the parent of the gender nonconforming child, the parent of one of the child's peers, the teacher, and the school principal) and in each capacity indicate the extent to which they would support or oppose the child's wish to use the bathroom of their choice (using the same 10-point Likert-type scale as before). The second scenario was similar but described an overnight class trip during which the gender-variant child would like to sleep in the same room as other children of the gender with which they identify. Again, participants were asked to put themselves into the position of the same adult figures and indicate the extent to which they would support or oppose the child's wish to sleep in the room of their choice. Responses were scored such that higher scores indicated stronger opposition to the wishes of the gender-atypical child.

Predictors

Several predictor variables were part of our demographic assessment, namely questions about religion, political views, and personal connections to the LGB (lesbian, gay, bisexual) and TG (transgender) communities. To assess religious beliefs, we simply asked participants to indicate to which religious group they belonged (Protestant, Catholic, Jewish, Muslim, Hindu, Buddhist, or Other) or whether they considered themselves not religious or agnostic. We focused our assessment of political views on social politics and asked participants to indicate whether they considered themselves to be socially conservative, moderate, or liberal. Our decision to favor these single-item measures was largely driven by concern about the length of our survey because many established measures of religiosity and political conservatism exceed ten items each even in their short forms (Altemeyer and Hunsberger 1992, 2004).

Given our focus on gender roles and role violations, we did use extensive measures of traditional masculinity and femininity that allowed us to differentiate between facets of each. For male participants, masculinity was assessed using the 46-item Conformity to Masculine Norms Inventory (CMNI-46; Parent and Moradi 2009) with its nine subscales: winning, emotional control, risk-taking, violence, power over women, playboy, self-reliance, primacy of work, and heterosexual self-presentation. Female participants were instead asked to complete the 45-item Conformity to Feminine Norms Inventory (CFNI-45; Parent and Moradi 2010) with its nine subscales: thinness, domesticity, investment in appearance, modesty, relational, involvement with children, sexual fidelity, romantic relationship, and sweet and nice. Both surveys used a 4-point Likert-type scale from 0 (*strongly disagree*) to 3 (*strongly*

agree). Higher averaged scores thus indicate stronger adherence to traditional gender norms.

In order to examine beliefs about the causes of gender-atypical behavior, we asked participants to rate how likely they saw each of seven factors in causing gender nonconformity: genetics, hormones, brain development, parenting of the mother, parenting of the father, media (such as TV magazines and news), and other environmental factors (such as pollution and genetically modified food). Each of these items used the same 10-point Likert-type scale from the attitude assessment, which ranged from 1 (*completely disagree*) to 10 (*completely agree*).

Procedure

Signing the electronic consent form allowed participants to advance to the first section of the survey, which asked about their age, gender, state of residence, ethnicity, education, income, religious affiliation, views on social politics, personal ties to the LGB/TG communities, and parental status. Next, they read one of the four vignettes about a gender-atypical youth followed by questions about their attitudes toward this youth, beliefs about the causes of gender-atypical behavior, and their hypothetical behavioral intentions. The final portion of the survey was the gender-specific measure of conformity to traditional gender norms, which was followed by a debriefing form.

Results

Scale Dimensionality and Reliability Analyses

Attitudes

Endorsement of each of the seven reasons for potential disapproval of gender-atypical behavior listed on the survey (six specific plus the general "inappropriate") ranged from the lowest possible score (1) to the highest (10). As can be seen in the leftmost panel of Table 1, averages varied somewhat across items, but they were generally low; consistent with this pattern, participants expressed the highest average level of endorsement with the statement, "I do not find the behavior to be a problem." Participants' responses correlated strongly across the eight items (six specific reasons plus the general "inappropriate" and the reverse scored "no problem") with r values ranging from .61 to .88 (all $ps < .001$). A principal components analysis showed that these eight items loaded onto one component (initial eigenvalues indicated that the first component explained 76.68 % of the variability; the remaining components explained only between 1.84 and 5.89 % each); the component loadings for each item are shown in Table 1. We therefore combined all eight items into one attitude scale for further analysis, with higher averaged scores

Table 1 Descriptive statistics, dimensionality, and reliability analyses for scales

Attitudes ^a			Behavioral intentions ^b			Presumed causes of gender atypicality			
Item	<i>M</i> (<i>SD</i>)	Loading	Item	<i>M</i> (<i>SD</i>)	Loading	Item	<i>M</i> (<i>SD</i>)	Nature loading	Nurture loading
			Restroom Scenario						
Morals	2.73 (2.78)	.943	Parent of TG child	4.61 (3.27)	.864	Genetics	6.33 (2.78)	.806	-.275
Religion	2.65 (2.86)	.868	Parent of classmate	5.14 (3.39)	.902	Brain development	6.79 (2.44)	.806	-.110
Peer problems	3.81 (2.92)	.818	Teacher	5.09 (3.34)	.913	Hormones	6.68 (2.47)	.831	-.174
Sexual orientation	3.47 (3.07)	.850	Admin.	5.54 (3.37)	.907	Scale	6.59 (2.16)	.79 ^d	
Bad influence	2.60 (2.46)	.915	Room Sharing Scenario						
Against nature	3.04 (3.05)	.932	Parent of TG child	4.47 (3.21)	.879	Mother	3.51 (2.71)	.154	.927
Inappropriate	2.64 (2.55)	.860	Parent of classmate	5.38 (3.35)	.898	Father	3.49 (2.68)	.153	.923
Not a problem	7.34 (3.34)	.809 ^c	Teacher	5.52 (3.25)	.894	Media	3.45 (2.80)	-.044	.846
			Admin.	5.43 (3.31)	.904	Other envir.	2.75 (2.31)	.332	.626
Scale	3.08 (2.52)	.95 ^d	Scale	5.15 (2.97)	.97 ^d	Scale	3.31 (2.24)		.87 ^d

^a Larger values indicate less favorable attitudes

^b Larger values indicate stronger intent to limit gender expression in each scenario

^c Reverse scored variable

^d Cronbach's α

indicating less favorable attitudes ($M=3.08$, $SD=2.52$; Cronbach's $\alpha=.95$). The distribution of scores on this scale showed considerable positive skew (only about 20 % of participants scored at or above the mid-point), so we conducted all subsequent analyses twice: once with the non-transformed score (possible range from 1 to 10) and then with the log(10)-transformed score (possible range from 0 to 1). When differences emerged between these two sets of analyses, we describe them in the text; when no differences emerged, we report only the results for the non-transformed scores.

Behavioral Intentions

We asked participants about the decisions they would make in two hypothetical scenarios involving the gender-atypical child/adolescent: (a) using the restroom appropriate for their gender (as opposed to birth sex) and (b) sharing a cabin/room on a school trip with peers of the same gender. For both scenarios, participants were asked to put themselves in the position of (a) the parent of the gender nonconforming child, (b) the parent of one of the child's peers, (c) the child's teacher, and (d) a school administrator. Responses on these eight items were scored (half of them reverse scored) such that higher averaged values indicated greater intent to limit the child's gender expression in these situations (e.g., to prohibit them from using the gender-appropriate restroom). Responses on each of these items ranged from the lowest (1) to highest (10) possible score, and as can be seen in the middle panel of Table 1, there was little variation in averages. Responses across the eight items correlated strongly, with r values ranging between .65 and .92 (all $ps<.001$). A principal

components analysis showed that these eight items loaded onto one component (initial eigenvalues indicated that the first component explained 80.16 % of the variability; the remaining components explained only between .54 and 8.13 % each); the component loadings for each item are also shown in Table 1. We therefore combined all 8 items into one behavioral intentions scale for further analysis, with higher averaged scores indicating greater intent to limit the child's restroom and bedroom sharing choices ($M=5.15$, $SD=2.97$; $\alpha=.97$).

Presumed Causes of Gender Atypicality

Participants were asked to indicate how strongly they believed each of seven different factors to be the cause of gender-atypical behavior. Endorsement for each of these potential causes ranged from the lowest possible (1) to highest possible score (10), although as can be seen in the rightmost panel of Table 1, average levels varied considerably. Pearson correlation analyses showed that responses correlated strongly across the three biological (nature) causes: genetics, hormones, and brain development (r s from .53 to .59, all $ps<.001$); similarly, responses correlated strongly across the four environmental (nurture) causes: mother, father, media, and other environment (r s from .46 to .98, all $ps<.001$), but weakly or not at all across the nature/nurture distinction (r s from .01 to $-.28$). A principal components analysis showed that the seven causes could be grouped into two different components, nature and nurture, respectively (initial eigenvalues showed that the nature component explained 41.97 % of the variability, and the nurture component 30.71 %; the remaining components explained only between .29 % and 9.19 % each); the

component loadings for each item are also shown in Table 1. We therefore combined the first three items into a nature/biological causes scale ($\alpha = .79$), and the remaining four items into a nurture/environmental causes scale ($\alpha = .87$). The two components were independent of one another, $r(274) = -.06$, $p = .288$, and a paired-samples t -test showed that endorsement of biological causes ($M = 6.59$, $SD = 2.16$) significantly exceeded that of environmental causes ($M = 3.31$, $SD = 2.24$), $t(275) = 16.99$, $p < .001$, $d = 1.49$.

Correlates of Attitudes and Behavioral Intentions

Participant Gender, Child Gender, and Child Age

In order to test whether attitudes varied with gender of participant and/or gender and age of the child/adolescent (8 vs. 16 years-old), we conducted an analysis of variance with these three dichotomous between-subjects factors. For the non-transformed average scores, neither one of the main effects nor their interaction was significant (all $F_s \leq 3.12$). For the log-transformed scores, there was a main effect of child gender, $F(1, 272) = 4.50$, $p = .035$, $\eta^2 = .016$, indicating that attitudes were less favorable for male-to-female ($M = .40$, $SD = .34$) than for female-to-male ($M = .31$, $SD = .32$) youths (all other $F_s \leq 2.37$). Concerns about homosexuality play an important role in people's attitudes towards transgender children of male birth sex; we therefore also examined the effects of participant and child gender as well as child age on participants' endorsement of homosexual orientation as a specific reason for disapproval. An ANOVA showed that endorsement of homosexual orientation as a reason for disapproval was significantly stronger for the male-to-female ($M = 3.83$, $SD = 3.07$) than for the female-to-male child/adolescent ($M = 3.07$, $SD = 3.03$), $F(1, 272) = 4.31$, $p = .039$, $\eta^2 = .016$; no other effects were significant ($F_s \leq 1.02$). An analogous ANOVA with behavioral intentions as the dependent variable yielded no significant effects (all $F_s \leq 1.16$).

Because we measured attitudes and behavioral intentions along the same scale, we were able to directly compare the two; a paired-samples t -test showed that participants favored limiting the child/adolescent's gender expression in terms of restroom and bedroom choice more strongly ($M = 5.15$, $SD = 2.97$) than they disapproved of gender atypicality per se ($M = 3.08$, $SD = 2.52$), $t(279) = 14.39$, $p < .001$, $d = .75$. Not surprisingly, less favorable attitudes strongly predicted less supportive behavioral intentions [$r(279) = .63$, $p < .001$, $r^2 = .40$].

Continuous Correlates

Given the strong link between the two outcome variables, we expected similarities in the pattern of correlations. First, we used correlation analyses to assess the extent to which participants' beliefs about the causes of gender atypicality, as well

as their adherence to traditional gender norms, predicted their attitudes toward gender variance and behavioral intentions; we also explored the effects of age, education, and income. Group differences in terms of religious affiliation, social political views, and personal connections to the LGB/TG communities are presented in the following section.

As can be seen in Table 2, the more strongly participants assumed biological factors to be the cause of gender atypicality, the more favorable their attitudes were. Conversely, the more they saw environmental causes to be at work, the more they disapproved; the same pattern held true for decisions concerning the child/adolescent's choice of restroom and bedroom. Male participants with more pronounced conformity to the masculine gender norms of heterosexual self-presentation and power over women were more disapproving and more inclined to want to limit gender expression; the correlation with winning was only significant when using the log-transformed scores. The analogous analyses for female participants yielded significant correlations for the feminine gender roles of sexual fidelity and involvement with children. Neither age, education, nor income predicted participants' attitudes, but older as well as less educated participants indicated greater intent to limit gender-based restroom and bedroom choice. The associations with age held even when using log-transformed scores to address the positively skewed distribution.

Categorical Comparisons

We used a series of independent-samples t -tests and one-way ANOVAs to evaluate group differences in attitudes and behavioral intentions (see Table 3). The majority of participants described themselves as not religious ($n = 106$, 38 %) or agnostic ($n = 51$, 18 %). The largest of the denominations was Protestant ($n = 57$, 20 %), followed by Catholic ($n = 32$, 11 %), Jewish ($n = 6$, 2 %), Muslim ($n = 3$, 1 %), Hindu and Buddhist ($n = 2$ each, < 1 %); 21 (7 %) participants listed other religions, such as non-denominational Christian. We found that religious affiliation played a role in that those who identified as either atheist or agnostic were both more favorable and less likely to restrict the two gender-based choices than those who identified with a particular religious denomination. It should be noted that there were also considerable differences between denominations (e.g., participants of Jewish faith expressed the least and those of Muslim faith the most negative attitudes), but the small numbers of participants subscribing to some of these faiths precluded their formal assessment.

In order to assess differences in attitudes between those who identified their views on social politics as liberal, moderate, or conservative, we used a one-way ANOVA, which showed a significant effect of political views, $F(1, 271) = 50.12$, $p < .001$, $\eta^2 = .270$ (see Table 3). Bonferroni-adjusted post-hoc tests showed that socially liberal participants held significantly more favorable attitudes than did both

Table 2 Pearson correlations of predictors with attitudes and behavioral intentions

Predictor	Attitudes		Behavioral Intentions				
	Non-transformed	Log-transformed	Non-transformed	Log-transformed			
Full-sample Data							
Biological causes	-.255***	-.239***	-.262***	-.262***			
Environmental causes	.599***	.582***	.421***	.421***			
Age	.109	.096	.221***	.221***			
Education	-.106	-.058	-.130*	-.130*			
Income	-.097	-.044	-.028	-.028			
Data Separated by Participants' Gender and Gender Roles							
Male gender roles	Attitudes Non-transformed		Attitudes Log-transformed		Behavioral Intentions		Female gender roles
	Men, Male Roles	Women, Female Roles	Men, Male Roles	Women, Female Roles	Men, Male Roles	Women, Female Roles	
Winning	.116	.72	.174*	.090	.083	-.005	Thinness
Emotional control	.121	.106	.114	.089	.147	.066	Domesticity
Risk-taking	-.010	.108	.014	.133	.013	.118	Investment in appearance
Violence	.070	.125	.127	.117	.171	.140	Modesty
Power over women	.467***	-.097	.476***	-.110	.361***	-.038	Relational
Playboy	-.149	.207*	-.106	.226**	.008	.180*	Involvement with children
Self-reliance	.034	.393***	.067	.395***	-.001	.359***	Sexual fidelity
Primacy of work	.069	.094	.120	.140	-.048	.146	Romantic relationship
Heterosexual self-presentation	.623***	-.062	.591***	-.064	.475***	-.083	Sweet and nice

Data separated by participants' gender and gender roles displays correlations for men's attitudes and behavioral intentions with each of the nine dimensions of male gender roles; for women, with the nine dimensions of female gender roles

* $p < .05$. ** $p < .01$. *** $p < .001$

moderates and conservatives, who did not statistically differ from one another. The same pattern emerged in an ANOVA to assess the effect of political views on behavioral intentions, $F(1, 271) = 25.14, p < .001, \eta^2 = .156$.

Participants with a personal connection to a lesbian, gay, or bisexual person reported significantly more positive attitudes than those without such a connection, as was true for the comparison of those with a personal connection to the transgender community relative to those without (see Table 3). The same patterns were replicated for behavioral intentions. A nuanced exploration of racial group differences was hampered by the very uneven distribution in our sample. We did find, however, that Participants of Color were more disapproving of gender atypicality than non-Hispanic White participants, but no differences emerged in their behavioral intentions. A final exploratory set of analyses found no differences in either outcome by whether participants were parents of minor children or not.

Predicting Attitudes and Behavioral Intentions

Both of the major outcome variables in our study, attitudes toward gender atypical youth and behavioral intentions regarding

the transgender youth's choice of restroom and bedroom, were predicted by several factors. These factors were, in turn, not independent of one another. For instance, the vast majority of participants identifying as politically liberal had some personal connection to the LGB/TG communities and also declared themselves to be agnostic or atheist (see Table 4 for complete results). In a final set of analyses, we therefore used hierarchical multiple linear regression to assess the relationship between each predictor and each respective outcome while taking into account the relationships among the predictors.

The first set of regression analyses focused on participants' attitudes. We based our statistical model on Nagoshi et al.'s (2008) work, according to which transphobia arises from general social conventionalism (which they measured as religious fundamentalism and political authoritarianism), which shapes conservative views of gender norms (e.g., benevolent sexism); both general and gender-specific conservatism are also associated with fears about the loss of social power that could result from violations of gender and sexual norms. Based on our analyses of individual predictors, the first step in our model thus included religious affiliation (*Yes* = 1 or *No* = 0) and social political views (liberal: *Yes* = 1 or *No* = 0) as basic

Table 3 Descriptive statistics for attitudes and behavioral intentions

Variables		Attitudes		Behavioral
		Non-transformed <i>M (SD)</i>	Log-transformed <i>M (SD)</i>	Intentions <i>M (SD)</i>
Religious affiliation	No (<i>n</i> = 157)	2.18 (1.74) ^{***}	.24 (.26) ^{***}	4.36 (2.81) ^{***}
	Yes (<i>n</i> = 124)	4.22 (2.88)	.50 (.35)	6.15 (2.87)
Social political views	Liberal (<i>n</i> = 150)	1.91 (1.45) ^{a***}	.20 (.24) ^{a***}	4.09 (2.71) ^{a***}
	Moderate (<i>n</i> = 76)	4.32 (2.80) ^b	.53 (.33) ^b	6.18 (2.90) ^b
	Conservative (<i>n</i> = 48)	4.82 (2.79) ^b	.59 (.31) ^b	6.85 (2.41) ^b
LGB connection	No (<i>n</i> = 113)	3.93 (2.61) ^{***}	.48 (.32) ^{***}	6.06 (2.79) ^{***}
	Yes (<i>n</i> = 167)	2.51 (2.30)	.27 (.31)	4.53 (2.94)
TG connection	No (<i>n</i> = 240)	3.27 (2.59) ^{***}	.39 (.33) ^{***}	5.44 (2.91) ^{***}
	Yes (<i>n</i> = 40)	2.00 (1.72)	.20 (.27)	3.40 (2.79)
Parent of child < 18 years	No (<i>n</i> = 184)	2.87 (2.31)	.34 (.32)	4.92 (2.84)
	Yes, incl. transgender child ^a (<i>n</i> = 96)	3.49 (2.85)	.41 (.35)	5.52 (3.16)
	Yes, excl. transgender child ^a (<i>n</i> = 94)	3.55 (2.86)	.41 (.35)	5.52 (3.13)
Race	Non-Hispanic White (<i>n</i> = 212)	2.74 (2.28) ^{**}	.32 (.31) ^{**}	5.02 (2.99)
	Other (<i>n</i> = 69)	4.12 (2.93)	.49 (.35)	5.54 (2.89)

For variables with three categories, significant (Bonferroni adjusted) mean differences are indicated by different subscripts within a column

^a In- and exclusion of data of two parents of a transgender child

p* < .01. *p* < .001

measures of participants' general social conservatism; participant race (non-Hispanic White: *Yes* = 1 or *No* = 0) was included as well. We also entered personal connections to the

LGB and/or TG community (*Yes* = 1 or *No* = 0 for each) in this step as an indirect indicator of conservatism because just as one's beliefs and views can make it more or less likely that

Table 4 Relationships among predictor variables in regression analyses

	1	2	3	4	5	6	7	8	9	10	11	12
1. Age	–	.13	.09	.13	.00	.02	–.09	.02	–.22*	.03	–.12	–.13
2. Education	.04	–	.01	.14	.06	–.01	–.07	–.08	–.09	–.07	–.07	.07
3. Race ^a	.04	–.04	–	.58	.58	.20	.12	.09	–.14	–.21*	–.33*	–.11
4. Religious affiliation ^b	.25*	–.14	4.31*	–	8.15*	.09	.00	–.20*	.03	.20*	.18*	.13
5. Social political views ^c	–.18*	.06	.73	36.63*	–	6.87*	.58	.11	–.26*	–.40*	–.27*	–.21*
6. LGB connection ^b	–.03	–.04	.00	1.38	6.13*	–	9.60*	–.05	–.27*	–.27*	–.18*	–.07
7. TG connection ^b	–.10	.08	.17	1.77	1.43	17.69*	–	–.03	–.10	–.22*	–.07	–.02
8. Biological causes	.03	.19*	.04	–.14	.22*	.05	–.04	–	.10	–.18*	–.02	.08
9. Environmental causes	.03	–.10	–.34*	.32*	–.40*	–.15	–.12	–.17*	–	.31*	.35*	.16
10. Heterosexual self-presentation	–	–	–	–	–	–	–	–	–	–	.45*	.18*
11. Power over women	–	–	–	–	–	–	–	–	–	–	–	.12
12. Winning	–	–	–	–	–	–	–	–	–	–	–	–
13. Sexual fidelity	.06	–.16	–.07	.30*	–.37*	–.29*	–.21*	–.10	.25*	–	–	–
14. Involvement with children	.13	–.29*	–.09	.36*	–.29*	–.07	–.08	–.20*	.13	–	–	–

Values in bold cells are χ^2 , all others Pearson correlations. Statistics above the diagonal are for male, below for female participants

**p* < .05

^a Non-Hispanic White: *Yes* = 1, *No* = 0

^b *Yes* = 1, *No* = 0

^c Liberal: *Yes* = 1, *No* = 0

they establish close personal relationships to gender and sexual minorities, such personal relationships can also impact their views and beliefs (Herek and Capitanio 1996; Herek and Glunt 1993).

In the second step of the model, we included endorsement of those traditional gender norms that had shown significant associations with attitudes toward transgender youth in our initial analyses. In the third and final step, we included endorsement of both biological and environmental causes of gender variance, which allowed us to conduct a stringent test of the impact of people's causal attributions above and beyond the factors that have been shown to be important predictors of transphobia in previous work. We conducted these analyses separately for male (see Table 5) and female (see Table 6) participants to account for the differences in traditional gender roles, as well as first with non-transformed attitude scores and then with their log-transformed counterpart as the outcome. Finally, as reported earlier, child gender in the vignette had shown a significant but small effect on log-transformed attitude scores, so we included this variable (1 = male-to-female, 2 = female-to-male) in the relevant regression models.

In the first step, religious affiliation, conservative social political views, lacking personal connections to the LGB community, and, for women only, belonging to a racial minority were all associated with less favorable attitudes, and collectively they accounted for between 32 and 46 % of the variability in participants' attitudes. Considerable gender differences emerged in the second step: endorsement of traditional male gender roles, especially of heterosexual self-

presentation, predicted the attitudes of men above and beyond the other factors, whereas female gender role beliefs made no discernible difference for women. The final models showed that participants' beliefs about the causes of transgender identity in youths were significantly related with their attitudes, even after controlling for all other variables. Stronger belief in environmental causes predicted less favorable attitudes in both men and women, and stronger endorsement of biological causes predicted more positive attitudes, but only in women. It is worth noting that religious affiliation and social political views generally remained significantly associated with attitudes even when accounting for causal attributions, suggesting that the impact of participants' overarching views and beliefs on their attitudes toward youth gender variance was not simply mediated by their beliefs about its causes.

The second set of hierarchical multiple linear regression analyses focused on participants' intent to support or limit the gender-based choices of a transgender child/adolescent in terms of which restroom to use and with whom to share a room on a school trip. The first three steps in the model were virtually identical to the models predicting attitudes, except for excluding race but including participants' age and education in the first step, based on our earlier analyses of bivariate relationships. In addition, based on the strong link between participants' attitudes and behavioral intentions, we added attitudes toward transgender youth in a fourth and final step.

As can be seen in Tables 7 (for men) and 8 (for women), older participants reported more hesitation to allow transgender youth's gender-based choices (even when using log-

Table 5 Hierarchical multiple regression predicting attitudes of male participants

Model	Predictors	Non-transformed Attitude Scores				Log-transformed Attitude Scores			
		β^a	<i>t</i>	Model R^2	R^2 change	β^a	<i>t</i>	Model R^2	R^2 change
Step 1	Child gender ^c	–	–			–.086	–1.35		
	Race	.071	1.12			.048	.74		
	Religious affiliation ^{b, c, d, e}	.197	3.15**			.192	2.99**		
	Social political views ^{b, c, d, e}	–.122	–1.82			–.159	–2.26*		
	LGB connection ^{b, d, e}	–.084	–1.29			–.115	–1.73		
	TG connection	.001	.01	.323***	.323***	–.026	–.41	.375***	.375***
Step 2	Heterosexual self-presentation ^{c, e}	.359	4.87***			.291	3.84***		
	Power over women ^{c, e}	.123	1.74	.512***	.189***	.159	2.16*	.529***	.154***
	Winning	–	–			–.010	–.16		
Step 3	Biological causes	–.029	–.47			–.021	–.32		
	Environmental causes	.337	5.08***	.602***	.090***	.283	4.08***	.589***	.061***

* $p < .05$. ** $p < .01$. *** $p < .001$

^a Beta for final equation

^b Predictor significant at .05 or below in Step 1 of model for non-transformed scores

^c Predictor significant at .05 or below in Step 2 of model for non-transformed scores

^d Predictor significant at .05 or below in Step 1 of model for log-transformed scores

^e Predictor significant at .05 or below in Step 2 of model for log-transformed scores

Table 6 Hierarchical multiple regression predicting attitudes of female participants

Model	Predictors	Non-transformed Attitude Scores				Log-transformed Attitude Scores			
		β^a	<i>t</i>	Model R^2	R^2 change	β^a	<i>t</i>	Model R^2	R^2 change
Step 1	Child gender	–	–			–.052	–.95		
	Race ^{b, c, d, e}	–.131	–2.31*			–.114	–1.92		
	Religious affiliation ^{b, c, d, e}	.131	2.06*			.108	1.64		
	Social political views ^{b, c, d, e}	–.225	–3.42**			–.250	–3.63***		
	LGB connection ^d	–.054	–.92			–.086	–1.42		
	TG connection	–.106	–1.87	.456***	.456***	–.117	–2.00*	.462***	.462***
Step 2	Sexual fidelity	.114	1.88			.092	1.46		
	Involvement with children	–.048	–.83	.470***	.014	–.016	–.26	.472***	.010
Step 3	Biological causes	–.246	–4.44***			–.211	–3.68***		
	Environmental causes	.383	6.11***	.650***	.180***	.370	5.69***	.626***	.155***

* $p < .05$. ** $p < .01$. *** $p < .001$

^a Beta for final equation

^b Predictor significant at .05 or below in Step 1 of model for non-transformed scores

^c Predictor significant at .05 or below in Step 2 of model for non-transformed scores

^d Predictor significant at .05 or below in Step 1 of model for log-transformed scores

^e Predictor significant at .05 or below in Step 2 of model for log-transformed scores

transformed age to address the skewed age distribution), as did participants reporting more conservative social political views. For female participants only, religious affiliation was associated with greater intent to limit free

gender expression in the two scenarios, but personal connections with the transgender community had the opposite effect. Paralleling the analyses of attitudes, adding endorsement of traditional gender roles in the

Table 7 Hierarchical multiple regression predicting behavioral intentions of male participants

Model	Predictors	Non-transformed Attitude Scores				Log-transformed Attitude Scores			
		β^a	<i>t</i>	Model R^2	R^2 change	β^a	<i>t</i>	Model R^2	R^2 change
Step 1	Participant age ^{b, c, d, e, f, g}	.224	2.79**			.230	2.87**		
	Education	–.069	–.88			–.074	–.96		
	Religious affiliation	–.032	–.38			–.036	–.43		
	Social political views ^{b, c}	–.067	–.76			–.052	–.59		
	LGB connection	–.036	–.43			–.025	–.30		
	TG connection	–.100	–1.24	.191***	.191***	–.097	–1.21	.191***	.191***
Step 2	Heterosexual self-presentation ^{c, d, f, g}	.163	1.57	.316***	.125***	.170	1.74	.316***	.125***
	Power over women ^{c, d, f, g}	.154	1.72	.316***	.125***	.145	1.62	.316***	.125***
Step 3	Biological causes	–.121	–1.52			–.122	–1.53		
	Environmental causes	.052	.55	.339***	.023	.055	.59	.339***	.023
Step 4	Attitudes	.216	1.82	.358***	.019	.237	2.04*	.363***	.023*

* $p < .05$; ** $p < .01$; *** $p < .001$

^a Beta for final equation

^b Predictor significant at .05 or below in Step 1 of model using non-transformed attitude scores in Step 4

^c Predictor significant at .05 or below in Step 2 of model using non-transformed attitude scores in Step 4

^d Predictor significant at .05 or below in Step 3 of model using non-transformed attitude scores in Step 4

^e Predictor significant at .05 or below in Step 1 of model using log-transformed attitude scores in Step 4

^f Predictor significant at .05 or below in Step 2 of model using log-transformed attitude scores in Step 4

^g Predictor significant at .05 or below in Step 3 of model using log-transformed attitude scores in Step 4

Table 8 Hierarchical multiple regression predicting behavioral intentions of female participants

Model	Predictors	Non-transformed Attitude Scores				Log-transformed Attitude Scores			
		β^a	<i>t</i>	Model R^2	R^2 change	β^a	<i>t</i>	Model R^2	R^2 change
Step 1	Participant age ^{b, c, d, e, f, g}	.189	3.24**			.190	3.32**		
	Education	-.038	-.64			-.078	-1.33		
	Religious affiliation ^{b, c, e, f}	.088	1.28			.091	1.35		
	Social political views ^{b, c, e, f}	-.020	-.28			-.008	-.12		
	LGB connection	-.050	-.81			-.033	-.54		
Step 2	TG connection ^{b, d, e, g}	-.123	-2.01*	.357***	.357***	-.112	-1.86	.357***	.357***
	Sexual fidelity	.065	1.00			.067	1.06		
Step 3	Involvement with children	-.076	-1.19	.374***	.017	-.099	-1.59	.374***	.017
	Biological causes ^{d, g}	-.145	-2.29*			-.147	-2.39*		
Step 4	Environmental causes ^{d, g}	.160	2.13*	.545***	.172***	.157	2.18*	.545***	.172***
	Attitudes	.432	4.68***	.613***	.068***	.462	5.26***	.628***	.082***

* $p < .05$; ** $p < .01$; *** $p < .001$

^a Beta for final equation

^b Predictor significant at .05 or below in Step 1 of model using non-transformed attitude scores in Step 4

^c Predictor significant at .05 or below in Step 2 of model using non-transformed attitude scores in Step 4

^d Predictor significant at .05 or below in Step 3 of model using non-transformed attitude scores in Step 4

^e Predictor significant at .05 or below in Step 1 of model using log-transformed attitude scores in Step 4

^f Predictor significant at .05 or below in Step 2 of model using log-transformed attitude scores in Step 4

^g Predictor significant at .05 or below in Step 3 of model using log-transformed attitude scores in Step 4

second step significantly enhanced prediction of the behavioral intentions of male, but not female, respondents. In contrast, adding beliefs about the causes of gender atypicality in the third step significantly enhanced prediction of the behavioral intentions of female, but not male, respondents. Both stronger endorsement of environmental and weaker endorsement of biological causes were associated with increased intention to limit gender expression (the associations with religious affiliation and political views were rendered non-significant at this step).

Adding male participants' attitudes toward transgender youth to the model in the final step rendered the association with traditional gender role beliefs nonsignificant, suggesting that gender role views predicted behavioral intentions largely due to their association with attitudes toward gender atypicality per se (although attitudes only predicted behavioral intentions in the model using log-transformed scores). For female respondents, less favorable attitudes did predict greater intent to limit gender expression above and beyond the other factors, and the final model suggested that women's causal attributions informed their behavioral intentions not only through their impact on attitudes. It is interesting to note that the final model accounted for about 61 % of the variability in the behavioral intentions of female, but only 35 % in those of male respondents.

Discussion

In contrast to recent studies that have shown pronounced negative attitudes toward transgender men and women (Norton and Herek 2013), U.S. participants in the current study expressed very little disapproval of transgender youths, on average. In line with research on adult-directed transphobia (Nagoshi et al. 2008), attitudes were less positive in participants claiming a religious affiliation and conservative social political views. Conservative views of gender roles predicted the attitudes of male participants above and beyond religion and politics; in fact, placing emphasis on being perceived as heterosexual by others was the best predictor of less favorable attitudes in men. In contrast, gender norms played virtually no role for female respondents. An important novel finding of our study is that people's beliefs about the causes of gender-atypical behavior predicted their attitudes even after taking into account the effects of religion, politics, and gender norms. Stronger belief in environmental causes (e.g., parents, media) predicted stronger disapproval, and conversely, stronger belief in biological causes (e.g., genes, hormones) predicted more favorable attitudes, but only in women. This pattern is consistent with the finding that favoring biological causes of homosexuality generally predicts less homonegativity (Haider-Markel and Joslyn 2008; Haslam and Levi 2006).

Despite largely favorable attitudes, participants reported some hesitation to allow a transgender youth to use the

restroom appropriate to their gender, as opposed to their assigned birth sex, or share a room with peers of the same gender on a school trip, and this hesitation increased with participant age. For male participants, the only other factors of relevance were their traditional gender role beliefs and, to some extent, their attitude toward gender atypicality, although the effect of gender roles appeared to be largely mediated by attitudes. Women's behavioral intentions were associated with a more complex pattern of factors beyond age, namely personal connections with the transgender community and beliefs about the causes of transgender identity; even after accounting for all of these factors, their attitudes toward gender variance proved to be the best predictor of their behavioral intentions.

Despite the passage of more than two decades since some of the earlier studies on attitudes toward transgender children (Feinman 1974, 1984; Martin 1990), our results mirror those early data more so than recent findings in the adult literature. Norton and Herek (2013), for instance, found feelings toward transgender individuals to be very cold, with an average of around 32 on a scale from 1 to 100 where higher scores indicated warmer feelings. Similarly, the average transphobia score in Nagoshi et al.'s (2008) study was 4.25 on a scale from 1 to 7. One obvious explanation for this pattern is the fact that we asked people to make judgments about gender-atypical children and adolescents, as opposed to adults. Maybe minors are not judged as harshly because they are potentially not held responsible for their gender nonconformity to the same extent as their adult counterparts.

However, the generally positive attitudes we found also appear to be at odds with the prevalence of victimization of children and adolescents who are not "masculine" or "feminine enough" in the schools, even at the hands of adult perpetrators (Kosciw et al. 2012). That discrepancy could, of course, be due at least in part to the fact that behavior, including discriminatory actions, is influenced not only by personal characteristics and attitudes, but also by a range of situational factors. By the same token, survey responses are subject to socially desirable responding, and it is possible that this type of bias is magnified when asking adult participants to express their opinions about minors, as opposed to about other adults. Finally, characteristics of our non-probability sample likely also played a role in that socially liberal participants were over-represented, as is often the case with MTurk samples (Bohannon 2011)—although it is also the case that even the attitudes of socio-politically moderate and conservative participants were, on average, not nearly as disapproving as those seen in recent studies on adult-directed transphobia.

Ours is, to our knowledge, the first study to examine a broad range of predictors of attitudes toward gender nonconforming children and adolescents. Despite the striking differences in average levels of negative attitudes toward gender-variant individuals between our study and the adult literature, there were remarkable similarities in the patterns

of factors that accounted for individual differences. The fact that the need to be perceived as heterosexual played a central role in male respondents' attitudes, even after controlling for religious affiliation and political conservatism, is consistent with Nagoshi et al. (2008) findings and likely reflects what Herek (1986) described as "heterosexual masculinity," a form of gender identity that includes not only heterosexual orientation and a devaluation of femininity, but also hostility toward sexual minorities, especially gay men. Our results suggest that negativity toward transgender individuals (even minors) plays a similar role in this respect.

Although its impact was not as strong, male participants' endorsement of power over women was associated with more negative attitudes as well; given its similarities to Glick and Fiske's (1996) concept of hostile sexism, that link echoes the finding that men higher in hostile sexism are more transphobic (Nagoshi et al. 2008). It should be noted that of the nine different aspects of traditional masculine gender roles we assessed, it was by and large only the ones related to heterosexuality and dominance over women that were associated with male participants' attitudes. The overall pattern that emerges suggests a worldview that is characterized by a desire to maintain a hierarchically structured social order in which (heterosexual and cisgender) men take a dominant position that could be undermined by deviations from strict gender and sexual boundaries (see Nagoshi et al. 2008.; Norton and Herek 2013).

Participants were more disapproving of gender-atypical behavior in minors if they saw environmental factors as the underlying cause; in fact, endorsement of nurture was one of the best predictors of disapproval of all of the measures included in our study, even after controlling for religious affiliation, political views, and beliefs about gender roles (a set of factors that feature prominently in the literature on prejudice). It is interesting to note that for male participants, it was only the extent to which they saw the child's environment to be responsible for their gender variance that mattered, whereas the endorsement of both types of causes correlated with female respondents' attitudes. The reasons for this gender difference are unclear, but it might reflect a tendency for men to focus narrowly on assigning blame for the child's transgender identity to their mother, father, and the media without also considering the "extenuating circumstance" of biology. We do not know on what basis people judged to what extent nature and nurture are responsible for gender atypicality, but previous research suggests that for some, the source is religious teachings, at least where same-sex attraction is concerned (Jewell and Morrison 2012). In line with this point, the causal attributions of our participants were related to their religious affiliation as well. It must be noted, however, that participants clearly favored biological over environmental causes, overall, which might be partially responsible for the generally favorable attitudes we observed.

The fact that participants' hesitation to allow transgender youth to make gender-based choices regarding restroom use or bedroom sharing was more pronounced than any unfavorable attitudes brings that aspect of our data a bit closer into alignment with other indicators of prejudice and discrimination against transgender youth (e.g., school victimization), and also with the strong negativity toward transgender adults. The finding that older participants reported increased intentions to limit gender expression in these situations might be indicative of broader cohort differences in attitudes on a range of social issues, including sexual orientation (Andersen and Fetner 2008). The reason this age effect did not also materialize for attitudes may be that participants were asked about their views immediately following the description of the child or adolescent, which focused on fairly innocuous toy, play, clothing, and friend preferences. In contrast, the scenarios may have highlighted the intersection of gender and sexuality that often appears to be at the root of controversy in real-life decisions about restroom use and the like. It is also possible that the "higher stakes" of making decisions, even hypothetical ones, as opposed to merely reporting attitudes, magnified latent cohort differences. Looking beyond participants' age, the marked gender differences in factors associated with behavioral intentions suggest that when faced with making decisions about a transgender youth's freedom to express their identity, even in potentially delicate situations, female respondents—unlike their male counterparts—were less concerned with their personal views of gender norms, but focused instead on the phenomenon of transgender identity itself.

Limitations and Future Directions

The majority of studies on attitudes toward transgender youth to date have either focused on parents of gender nonconforming children or relied on college students. Samples recruited through Amazon MTurk are considerably more diverse than student samples (Buhrmester et al. 2011), although it has been noted that liberal participants tend to be overrepresented (Bohannon 2011). This overrepresentation was certainly the case in the present study and has to be considered when interpreting our findings, particularly the generally positive attitudes toward transgender youth. Differences in sample characteristics are also one potential explanation for the unexpected lack of participant gender effects in the present study; in much of the relevant research, men express significantly more negative attitudes than do women. Future research should strive for samples that are more representative of the general population; Norton and Herek's (2013) recent study is an excellent example. This might be challenging to do using internet-based data collection, but it would allow us to more conclusively evaluate the impact of demographic factors, such as the cohort effect we found for behavioral intentions.

In interpreting our findings it is also important to keep in mind that we cannot determine causal relationships without incorporating different study designs. Longitudinal studies, for instance, have shown that contact with members of minority groups can influence attitudes, just as attitudes can make us more or less open for contact with minority group members (Herek and Capitanio 1996), and qualitative studies suggest that religious teachings can influence one's attitudes toward and beliefs about minority groups (Jewell and Morrison 2012). Utilizing a broad set of methodological tools will allow us to develop a more nuanced understanding of the factors that promote or diminish prejudice.

On a related note, our use of single items to measure religious and political views presents a limitation, although doing so allowed us to include multidimensional measures of gender roles. Future research would benefit from the inclusion of multi-item measures of key variables whenever possible. We should point out, however, that previous work on transgender attitudes using similar single-item measures to ours has replicated the pattern of associations found with their lengthier counterparts (Norton and Herek 2013), and the same was clearly true in the current study.

Although we asked participants not only about their attitudes, but also about their behavioral intentions in two hypothetical scenarios, this is still a far cry from studying actual behavior. As several researchers have pointed out, we know considerably more about prejudice than we do about discrimination or the link between the two (Fiske 2000; Herek 2004; Whitley and Kite 2010). Future research should place a particular emphasis on studying the individual and situational factors associated with discriminatory behavior against transgender youth and what can be done to reduce it. Considering the important role of participants' beliefs about the causes of transgender identity in the current study, we think it would be promising to explore the effect of modifying those beliefs through education on attitudes toward transgender individuals.

Practice Implications

Education has been shown to increase tolerance toward minority groups (Ohlander et al. 2005). Although experimental studies are needed to establish potential causal relationships, as previously stated, our findings suggest that education about the likely involvement of genetic factors in the development of gender identity (Knafo et al. 2005) might promote more positive attitudes toward transgender youth.

Despite their generally favorable attitudes toward gender variance per se, participants were somewhat reluctant to allow a transgender child to use the gender-appropriate restroom and bedroom. These two scenarios shared some common features related to privacy and to children or adolescents undressing themselves, which provide fertile ground for fears about

sexual motives on the part of transgender youth, unfounded as they are. The public controversies about transgendered children's restroom use in schools we mentioned previously as well as the defeat of Houston's Equal Rights Ordinance, which is largely attributed to misinformation conflating gender, sex, and sexuality (Moyer 2015), serve as recent examples. This suggests that education should clearly highlight the differences between gender and sex, as well as between gender identity and sexual orientation. Because school is an important developmental context for children and adolescents (and, unfortunately, an often very hostile one for those who are gender nonconforming), education should be broadly targeted at peers, parents of peers, teachers, staff, and administrators of transgender youth in the school context and should include curriculum and policymakers as well (Grossman et al. 2009; Kosciw et al. 2012; Kosciw et al. 2009; Wernick et al. 2014).

Finally, given the well-established role of religious beliefs and political convictions in the formation and/or justification of prejudice that was also echoed in our findings, religious and political leaders are called upon to model civic discourse based on facts about transgender children and adolescents. Sensitive reporting about these youth and their families (for example, NBC's recent *Transgender Kids* series) may also play an important role in improving both knowledge and attitudes, especially for those who lack personal connections to gender minority individuals (see Schiappa et al. 2006).

Conclusion

The somewhat unexpected largely favorable attitudes toward transgender youth we found warrant replication, preferably using a large probability sample of the U.S. general population. Nevertheless, we view them as reason for cautious optimism, even if certain misconceptions about gender identity persist and likely contribute to prejudice. According to the Pew Research Center (2015), the percentage of U.S. Americans who would *not* be upset if their child came out to them as gay or lesbian has increased from 36 % as recently as 2004 to 57 % in 2015. If attitudes toward same-sex attraction are anything to go by (and the research presented in this paper provides ample reason to believe that they are), attitudes toward transgender children and adolescents are likely to become more accepting as well. Research can play an important role in identifying the factors that would promote such change.

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Participants gave voluntary informed consent to participate and were debriefed at the conclusion of the study.

Compliance with Ethical Standards

Conflict of Interest The authors declare that they have no conflict of interest.

References

- Abraham, N. (Producer), & Thomas, A. (Director). (2005). *Middle sexes: Redefining he and she* [DVD]. USA: HBO Documentary Films.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173–221). Mahwah: Lawrence Erlbaum.
- Altemeyer, B., & Hunsberger, B. (1992). Authoritarianism, religious fundamentalism, quest, and prejudice. *The International Journal for the Psychology of Religion, 2*, 113–133.
- Altemeyer, B., & Hunsberger, B. (2004). A revised religious fundamentalism scale: The short and sweet of it. *The International Journal for the Psychology of Religion, 14*, 47–54.
- Andersen, R., & Fetner, T. (2008). Cohort differences in tolerance of homosexuality attitudinal change in Canada and the United States, 1981–2000. *Public Opinion Quarterly, 72*, 311–330. doi:10.1093/poq/nfn017.
- Bailey, J. M., & Zucker, K. J. (1995). Childhood sex-typed behavior and sexual orientation: A conceptual analysis and quantitative review. *Developmental Psychology, 31*, 43–55.
- Beeby, G. (2015, March 18). Parents pull child from school over transgender bathroom choice. *KBOI TV*. Retrieved from www.kboi2.com.
- Bohannon, J. (2011). Social science for pennies. *Science, 334*, 307.
- Brewer, P. R. (2014). Public opinion about gay rights and gay marriage. *International Journal of Public Opinion Research, 26*, 279–282. doi:10.1093/ijpor/edu029.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*, 3–5. doi:10.1177/1745691610393980.
- CBS. (2014, June 8). *Transgendered students and school bathrooms*. Retrieved from http://www.cbsnews.com/htdocs/pdf/CBSNewsPoll_Mar2014b_Transgender.pdf.
- Conron, K. J., Scott, G., Stowell, G. S., & Landers, S. (2012). Transgender health in Massachusetts: Results from a household probability sample of adults. *American Journal of Public Health, 102*, 118–122.
- D'Augelli, A. R., Pilkington, N. W., & Hershberger, S. L. (2002). Incidence and mental health impact of sexual orientation victimization of lesbian, gay, and bisexual youths in high school. *School Psychology Quarterly, 17*, 148–167.
- D'Augelli, A. R., Grossman, A. H., & Starks, M. T. (2006). Childhood gender atypicality, victimization, and PTSD among lesbian, gay, and bisexual youth. *Journal of Interpersonal Violence, 21*, 1462–1482. doi:10.1177/0886260506293482.
- Drescher, J., & Byne, W. (2012). Gender dysphoric/gender variant (GD/GV) children and adolescents: Summarizing what we know and what we have yet to learn. *Journal of Homosexuality, 59*, 501–510. doi:10.1080/00918369.2012.653317.
- Feinman, S. (1974). Approval of cross-sex-role behavior. *Psychological Reports, 35*, 643–648.

- Feinman, S. (1984). A status theory of the evaluation of sex-role and age-role behavior. *Sex Roles, 10*, 445–456.
- Fiske, S. T. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries: Evolution, culture, mind, and brain. *European Journal of Social Psychology, 30*, 299–322.
- Gallup. (2015). *Marriage: Gay and lesbian rights [Graph]*. Retrieved from <http://www.gallup.com/poll/1651/gay-lesbian-rights.aspx>.
- Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491–512.
- Grossman, A. H., D'Augelli, A. R., Howell, T. J., & Hubbard, S. (2005). Parents' reactions to transgender youths' gender nonconforming expression and identity. *Journal of Gay & Lesbian Social Services, 18*, 3–16. doi:10.1300/J041v18n01_02.
- Grossman, A. H., Haney, A. P., Edwards, P., Alessi, E. J., Ardon, M., & Howell, T. J. (2009). Lesbian, gay, bisexual and transgender youth talk about experiencing and coping with school violence: A qualitative study. *Journal of LGBT Youth, 6*, 24–46. doi:10.1080/19361650802379748.
- Haider-Markel, D. P., & Joslyn, M. R. (2008). Beliefs about the origins of homosexuality and support for gay rights: An empirical test of attribution theory. *Public Opinion Quarterly, 72*, 291–310. doi:10.1093/poq/nfn015.
- Harris, B. C. (2015). *Likely transgender individuals in U.S. federal administrative records and the 2010 Census* (CARRA Working Paper Series, Working Paper #2015-03). Washington, DC: U. S. Census Bureau, Center for Administrative Records Research and Applications.
- Haslam, N., & Levi, S. R. (2006). Essentialist beliefs about homosexuality: Structure and implications for prejudice. *Personality and Social Psychology Bulletin, 32*, 471–485. doi:10.1177/0146167205276516.
- Herek, G. M. (1986). On heterosexual masculinity: Some psychical consequences of the social construction of gender and sexuality. In L. D. Garnetts & D. C. Kimmel (Eds.), *Psychological perspectives on lesbian and gay male experiences* (pp. 316–330). New York: Columbia University Press.
- Herek, G. M. (2000). The psychology of sexual prejudice. *Current Directions in Psychological Science, 9*, 19–22.
- Herek, G. M. (2004). Beyond “homophobia”: Thinking about sexual prejudice and stigma in the twenty-first century. *Sexuality Research & Social Policy, 1*, 6–24.
- Herek, G. M., & Capitanio, J. P. (1995). Black heterosexuals' attitudes toward lesbians and gay men in the United States. *Journal of Sex Research, 32*, 95–105.
- Herek, G. M., & Capitanio, J. P. (1996). “Some of my best friends”: Intergroup contact, concealable stigma, and heterosexuals' attitudes toward gay men and lesbians. *Personality and Social Psychology Bulletin, 22*, 412–424.
- Herek, G. M., & Glunt, E. K. (1993). Interpersonal contact and heterosexuals' attitudes toward gay men: Results from a national survey. *Journal of Sex Research, 30*, 239–244. doi:10.1080/00224499309551707.
- Hill, D. B., & Menvielle, E. (2009). “You have to give them a place where they feel protected and safe and loved”: The views of parents who have gender-variant children and adolescents. *Journal of LGBT Youth, 6*, 243–271. doi:10.1080/19361650903013527.
- Hill, D. B., & Willoughby, B. L. B. (2005). The development and validation of the Genderism and Transphobia Scale. *Sex Roles, 53*, 531–544. doi:10.1007/s11199-005-7140-x.
- Jewell, L. M., & Morrison, M. A. (2012). Making sense of homonegativity: Heterosexual men and women's understanding of their own prejudice and discrimination toward gay men. *Qualitative Research in Psychology, 9*, 351–370. doi:10.1080/14780887.2011.586098.
- Kane, E. W. (2006). “No way my boys are going to be like that!” Parents' responses to children's gender nonconformity. *Gender and Society, 20*, 149–176. doi:10.1177/0891243205284276.
- Knafo, A., Iervolino, A. C., & Plomin, R. (2005). Masculine girls and feminine boys: Genetic and environmental contributions to atypical gender development in early childhood. *Journal of Personality and Social Psychology, 88*, 400–412. doi:10.1037/0022-3514.88.2.400.
- Kosciw, J. G., Greytak, E. A., & Diaz, E. M. (2009). Who, what, where, when, and why: Demographic and ecological factors contributing to hostile school climate for lesbian, gay, bisexual, and transgender youth. *Journal of Youth and Adolescence, 38*, 976–988. doi:10.1007/s10964-009-9412-1.
- Kosciw, J. G., Greytak, E. A., Bartkiewicz, M. J., Boesen, M. J., & Palmer, N. A. (2012). *The 2011 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. New York: GLSEN.
- Lytton, H., & Romney, D. M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin, 2*, 267–296.
- Maccoby, E. E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge: Harvard University Press.
- Martin, C. L. (1990). Attitudes and expectations about children with nontraditional and traditional gender roles. *Sex Roles, 22*, 151–165.
- Masci, D. (2015, March 6). *Americans are still divided on why people are gay*. Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2015/03/06/americans-are-still-divided-on-why-people-are-gay/>.
- McCreary, D. R. (1994). The male role and avoiding femininity. *Sex Roles, 31*, 517–531.
- Meadow, T. (2011). “Deep down where the music plays”: How parents account for child gender variance. *Sexualities, 14*, 725–747. doi:10.1177/0891243205284276.
- Moyer, J. W. (2015, November 4). Why Houston's gay rights ordinance failed: Fear of men in women's bathrooms. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/>.
- Nagoshi, J. L., Adams, K. A., Terrell, H. K., Hill, E. D., Brzuzy, S., & Nagoshi, C. T. (2008). Gender differences in correlates of homophobia and transphobia. *Sex Roles, 59*, 521–531. doi:10.1007/s11199-008-9458-7.
- Norton, A. T., & Herek, G. M. (2013). Heterosexuals' attitudes toward transgender people: Findings from a national probability sample of US adults. *Sex Roles, 68*, 738–753. doi:10.1007/s11199-011-0110-6.
- Ohlander, J., Batalova, J., & Treas, J. (2005). Explaining educational influences on attitudes toward homosexual relations. *Social Science Research, 34*, 781–799.
- Parent, M. C., & Moradi, B. (2009). Confirmatory factor analysis of the Conformity to Masculine Norms Inventory and development of the Conformity to Masculine Norms Inventory-46. *Psychology of Men & Masculinity, 10*, 175–189. doi:10.1037/a0015481.
- Parent, M. C., & Moradi, B. (2010). Confirmatory factor analysis of the Conformity to Feminine Norms Inventory and development of an abbreviated version: The CFNI-45. *Psychology of Women Quarterly, 34*, 97–109.
- Payne, E., & Fantz, A. (2013, February 28). Parents of transgender first-grader file discrimination complaint. *CNN*. Retrieved from <http://www.cnn.com>.
- Pew Research Center. (2015). *Changing reactions to a gay child [graph]*. Retrieved from http://www.pewresearch.org/fact-tank/2015/06/29/most-americans-now-say-learning-their-child-is-gay-wouldnt-upset-them/ft_16-06-26_gaychild/.
- Portnoy, J. (2015, April 6). Debate rages on over transgender elementary school student in Stafford. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/>.
- Rieger, G., Linsenmeier, J. A. W., Gygax, L., & Bailey, J. M. (2008). Sexual orientation and childhood gender nonconformity: Evidence from home videos. *Developmental Psychology, 44*, 46–58. doi:10.1037/0012-1649.44.1.46.
- Russell, S. T., Ryan, C., Toomey, R. B., Diaz, R. M., & Sanchez, J. (2011). Lesbian, gay, bisexual, and transgender adolescent school

- victimization: Implications for young adult health and adjustment. *Journal of School Health*, 81, 223–230.
- Schiappa, E., Gregg, P. B., & Hewes, D. E. (2006). Can one TV show make a difference? Will & Grace and the parasocial contact hypothesis. *Journal of Homosexuality*, 51, 15–37. doi:10.1300/J082v51n04_02.
- Steel, E. (2015, April 25). Bruce Jenner's transgender announcement draws 16.8 million on ABC news. *New York Times*. Retrieved from www.nytimes.com.
- Steinmetz, K. (2015, March 6). States battle over bathroom access for transgender people. *Time*. Retrieved from time.com.
- Tan, A. (2015, June 11). Transgender teen sues Virginia school board for allegedly not allowing him to use boys room. *ABC News*. Retrieved from <http://abcnews.go.com/>.
- Ward, B. W., Dahlhamer, J. M., Galinsky, A. M., & Joestl, S. S. (2014). *Sexual orientation and health among U.S. adults: National Health Interview Survey, 2013 (National health statistics reports #77)*. Hyattsville: National Center for Health Statistics.
- Wernick, L. J., Kulick, A., & Inglehart, M. H. (2014). Influences of peers, teachers, and climate on students' willingness to intervene when witnessing anti-transgender harassment. *Journal of Adolescence*, 37, 927–935. doi:10.1016/j.adolescence.2014.06.008.
- Whitley, B., & Kite, M. (2010). *The psychology of prejudice and discrimination* (2nd ed.). Belmont: Wadsworth/Cengage Learning.